



**Department of  
Design and  
Construction**

**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

30-30 THOMSON AVENUE  
LONG ISLAND CITY, NEW YORK 11101-3045  
TELEPHONE (718) 391-1000  
WEBSITE [www1.nyc.gov/site/ddc/index.page](http://www1.nyc.gov/site/ddc/index.page)

**LAW**

**VOLUME 1 OF 3**

**BID BOOKLET**

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND  
REQUIRED FOR:

**PROJECT ID: P-1STARLP**

**BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II, STAGE 2  
BRIDGE THE CRITICAL SOUTH BRONX GAP**

**BETWEEN WESTCHESTER AVENUE AND EAST 174TH STREET**

**INCLUDING CONSTRUCTION OF EAST 172ND STREET PEDESTRIAN  
BRIDGE OVER AMTRAK (BIN#: 2-24124-0), SOUTH GREENWAY  
PEDESTRIAN BRIDGE OVER THE BRONX RIVER (BIN#: 2-26990-0),  
DRAINAGE, RETAINING STRUCTURES, GREENWAY, STREET  
LIGHTING, LANDSCAPING AND TRAFFIC WORK**

Together With All Work Incidental Thereto

**BOROUGH OF THE BRONX  
CITY OF NEW YORK**

FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY

*THE RBA GROUP DESIGN*

**MAY 22, 2017**

NYS DOT PIN X027.08  
Fed. Aid Project No. \_\_\_\_\_



**8-065**



August 03, 2018

**CERTIFIED MAIL - RETURN RECEIPT REQUEST**

**MLJ CONTRACTING CORP.**  
1720 WHITESTONE EXPRESSWAY  
WHITESTONE, NY 11357

RE: FMS ID: P-1STARLP  
E-PIN: 85017B0106001  
DDC PIN: 8502017HW0048C  
BRONX RIVER GREENWAY: STARLIGHT  
PARK  
**NOTICE OF AWARD**

Dear Contractor:

You are hereby awarded the above referenced contract based upon your bid in the amount of \$29,715,031.00 submitted at the bid opening on May 31, 2018. Within ten (10) days of your receipt of this notice of award, you are required to take the actions set forth in Paragraphs (1) through (3) below. For your convenience, attached please find a copy of Schedule A of the General Conditions to the Contract, which sets forth the types and amounts of insurance coverage required for this contract.

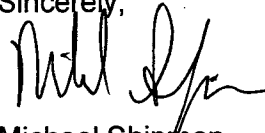
- (1) Execute two copies of the Agreement in the Contracts Unit, 30-30 Thomson Avenue, 1<sup>st</sup> Floor, Long Island City, New York (IDCNY Building). A Commissioner of Deeds will be available to witness and notarize your signature. The Agreement must be signed by an officer of the corporation or a partner of the firm.
- (2) Submit to the Contracts Unit two properly executed performance and payment bonds. If required for this contract, copies of performance and payment bonds are attached.
- (3) Submit to the Contracts Unit the following insurance documentation: (a) original certificate of insurance for general liability in the amount required by Schedule A, and (b) original certificates of insurance or other proof of coverage for workers' compensation and disability benefits, as required by New York State Law. The insurance documentation specified in this paragraph is required for registration of the contract with the Comptroller's Office.



On or before the contract commencement date, you are required to submit all other certificates of insurance and/or policies in the types and amounts required by Schedule A. Such certificates of Insurance and/or policies must be submitted to the Agency Chief Contracting Office, Attention: Risk Manager, Fourth Floor at the above indicated department address.

Your attention is directed to the section of the Information for Bidders entitled "Failure to Execute Contract". As indicated in this section, in the event you fail to execute the contract and furnish the required bonds within the (10) days of your receipt of this notice of award, your bid security will be retained by the City and you will be liable for the difference between your bid price and the price for which the contract is subsequently awarded, less the amount of the bid security retained.

Sincerely,



Michael Shipman  
Director of Contracts

# Notices to Bidders

## **Pre-Bid Questions (PBQs)**

Please be advised that PBQs should be submitted to the Agency Contact Person (CSB\_projectinquiries@ddc.nyc.gov) at least five (5) business days (by 5:00 PM EST) prior to the bid opening date as indicated in ATTACHMENT 1 - BID INFORMATION, page A-1 and SCHEDULE B, page 13, VOLUME 1 OF 3 of this BID BOOKLET.

All PBQs must reference the Project ID. If a Bidder has multiple PBQs for the same Project ID, the PBQs must be numbered sequentially, even if they are submitted separately.

## **Apprenticeship Program**

*If Apprenticeship Program is required as noted on Page 19 of this BID BOOKLET, the following notice applies:*

Please be advised that, pursuant to the authority granted to the City under Labor Law §816-b, the New York City Department of Design and Construction hereby requires that the contractor awarded a contract as a result of this solicitation, and any of its subcontractors with subcontracts worth two million dollars or over, have, prior to entering into such contract or subcontract, apprenticeship agreements appropriate for the type and scope of work to be performed that have been registered with, and approved by, the New York State Commissioner of Labor. In addition, the contractor and its subcontractors will be required to show that such apprenticeship program/s have successfully passed the two year Probation period following the initial registration date of such program/s with the New York State Department of Labor.

The failure to prove, upon request, that these requirements have been met shall result in the contract not being awarded to the contractor or the subcontractor not being approved.

Please be further advised that, pursuant to Labor Law §220, the allowable ratio of apprentices to journeypersons in any craft classification shall not be greater than the ratio permitted to the contractor as to its workforce on any job under the registered apprenticeship program.

# Notices to Bidders

## PASSPort Disclosure Filing

All vendors that intend to do business with the City of New York must complete a disclosure process in order to be considered for a contract. This disclosure process was formerly completed using Vendor Information Exchange System (VENDEX) paper-based forms. The City of New York has moved collection of vendor disclosure information online. In early August 2017, the New York City Mayor's Office of Contract Services (MOCS) launched the **Procurement and Sourcing Solutions Portal (PASSPort)**, a new online procurement system that replaced the paper-VENDEX process. In anticipation of awards, all bidders must create online accounts in the new PASSPort system, and file all disclosure information using PASSPort. **Paper submissions, including certifications of no changes to existing VENDEX packages will not be accepted in lieu of complete online filings.**

All vendors that intend to do business with the City, but specifically those that fall into any of the following categories, are required to enroll:

- Have a pending award with a City Agency; or
- Hold a current contract with a City Agency and have either an expiring VENDEX or expiring Certificate of No Change.

The Department of Design and Construction (DDC) and MOCS hereby notifies all proposers that the PASSPort system is available, and that disclosure filing completion is required prior to any award through this competitive bid.

To enroll in PASSPort and to access the PASSPort website (including online training), please visit [www.nyc.gov/passport](http://www.nyc.gov/passport). Contact MOCS at [passport@mocs.nyc.gov](mailto:passport@mocs.nyc.gov) for additional information and technical support.

# Notices to Bidders

## NYC Construction Loan Pilot Program

The New York City Department of Small Business Services (SBS), in conjunction with the New York Business Development Corporation (NYBDC), have established a **NYC Construction Loan** pilot program to provide prime contractors and subcontractors financing for mobilization costs on certain City construction projects.

Under this initiative, loans are available for early stage mobilization needs such as insurance, labor, supplies and equipment. Bidders are strongly encouraged to visit "Growing Your Business" at [www.nyc.gov/nycbusiness](http://www.nyc.gov/nycbusiness) to learn more about the loan or contact [constructionloan@sbs.nyc.gov](mailto:constructionloan@sbs.nyc.gov) / (212) 513-6444 to obtain details and to determine preliminary eligibility.

A successful loan applicant will be required to make an assignment of its contract (or subcontract) payments to the lender NYBDC until the loan is repaid. If the loan is to a subcontractor, a prime contractor must honor the terms of such an assignment.

A prime contractor may not discriminate against a subcontractor or potential subcontractor by reason of the subcontractor's participation, or nonparticipation, in the NYC Construction loan program.

**(NO TEXT THIS PAGE)**

# **NOTICE TO BIDDERS:**

## **NEW NOISE REQUIREMENTS**

The bidder is notified that conformance with NYC City Council Introduction 1653-2017 (<https://laws.council.nyc.gov/legislation/int-1653-2017/>) is required for all work to be performed under this contract.

No separate payment will be made for conformance with this requirement, and the costs thereof must be included in the prices bid for all items of work.

**(NO TEXT THIS PAGE)**

# **FHWA FUNDED PROJECT**

## **NOTICE TO BIDDERS**

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**AS INDICATED ON THE SPECIAL NOTICE TO BIDDERS (BID BOOKLET PAGE 2), BIDS MUST BE SUBMITTED WITH:**

- **DEBARMENT HISTORY CERTIFICATION**
- **DBE SCHEDULE OF UTILIZATION**

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A template for the DBE Schedule of Utilization is provided on the next page.



**(NO TEXT ON THIS PAGE)**

# AAP19

**Please signify in the Work Category if the DBE is a Subcontractor or Material Supplier.**

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

**P-1STARLP**

**DB Name**



June 6, 2018

**ATTACHMENT "J"**

MA 2A (03-09-33)  
NYCDOT

**NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DEBARMENT HISTORY CERTIFICATION  
CONTRACT NO. P-1STARLP**

I, Richard Ocken, being duly sworn, certifies that,  
(PRESIDENT OF AUTHORIZED OFFICIAL)  
except as noted herein, MLJ Contracting Corp or any person  
(THE COMPANY)

associated therewith in the capacity of owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of Federally Aided Projects:

is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any governmental entity;

has not been suspended, debarred, voluntarily excluded or determined ineligible by any governmental entity within the past three (3) years;

does not have a proposed debarment pending; and

has not been indicted, convicted, or had a civil judgement rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years.

**(INSERT EXCEPTIONS HERE. ATTACH SUPPLEMENTAL SHEETS AS NECESSARY)**

Exceptions will not necessarily result in denial of approval, but will be considered in determining responsibility. For any exception noted herein, indicate to whom it applies, initiating governmental entity and dates of action. A material false statement willfully or fraudulently made in connection with this certification may result in rendering the company not responsible for the project and any future projects, and in addition may subject the person making the false statement to criminal charges.

Richard Ocken

(PRINT NAME)

President

(TITLE)



(SIGNATURE)

6-1-2018

(DATE)

Subscribed and sworn to before me this 1st day of June, 20 18.



**JAMIE LOPRINZI  
NOTARY PUBLIC, STATE OF NEW YORK  
QUEENS COUNTY  
LIC # 01LO8138413  
COMM. EXP. 3/25/2022**

**ATTACHMENT "J"**

MA 2A (03-09-33)  
NYCDOT

**NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DEBARMENT HISTORY CERTIFICATION  
CONTRACT NO. P-1STARLP**

**GOVERNMENTAL ENTITY:**

Governmental Entities shall include any/all city, state and federal public agencies, quasi-public agencies, authorities and corporations, public development corporations, and local development corporations.

**COMPANY:**

Companies shall include the persons or affiliates for which a suspension or debarment decision has been rendered, and shall include all subsidiaries, divisions and other organizational elements thereof unless said decision is limited by its terms to one or more specifically identified individuals or organizational elements or to specific types of transactions.

**PERSON:**

Persons shall include any individual, corporation, partnership, association or legal entity however organized, including any subsidiary of the foregoing.

**SUBSIDIARY:**

Subsidiaries shall include any corporation, partnership, association or legal entity however organized, which is owned or controlled by another person.

**AFFILIATE:**

Persons are affiliates of one another if, directly or indirectly, one owns, controls, or has the power to control the other, or a third person owns, controls, or has the power to control both.

**CONTROL:**

Control shall be taken to mean the power to exercise, either directly or indirectly, a controlling influence over management, policies or activities of a person, whether through ownership of voting securities, through one or more intermediary persons, or otherwise. Indications of control shall include, but not be limited to: a person who owns or has the power to vote more than 25 percent of the voting securities of another person, or 25 percent of the total equity if the other person has no voting securities; interlocking management or ownership; identity of interests among family members; shared facilities and equipment; common use of employees; and establishment, following debarment, suspension or other exclusion decision, of any organization or entity which is to operate in the same business or activity and is to have substantially the same management, ownership or principal employees as the debarred, suspended or excluded person.

**CITY OF NEW YORK**

**DEPARTMENT OF  
DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

**BID BOOKLET**

FOR FURNISHING ALL LABOR AND MATERIALS  
NECESSARY AND REQUIRED FOR:

**PROJECT ID: P-1STARLP**

**BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II, STAGE 2  
BRIDGE THE CRITICAL SOUTH BRONX GAP**

**BETWEEN WESTCHESTER AVENUE AND EAST 174TH STREET**

**INCLUDING CONSTRUCTION OF EAST 172ND STREET PEDESTRIAN  
BRIDGE OVER AMTRAK (BIN#: 2-24124-0), SOUTH GREENWAY  
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**Together With All Work Incidental Thereto**

**BOROUGH OF THE BRONX  
CITY OF NEW YORK**

(NO TEXT ON THIS PAGE)

**PROJECT ID: P-1STARLP**

**CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

**BID BOOKLET**

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**CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

**SPECIAL NOTICE TO BIDDERS – FEDERALLY FUNDED CONTRACTS (Revised 04-2016)**

**BID SUBMISSION REQUIREMENTS**

**THE FOLLOWING DOCUMENTS ARE TO BE COMPLETED AND SUBMITTED WITH THE BID:**

1. Bid Schedule and Bid Form, including Affirmation
2. Bid Security (if required, see Attachment 1 on Page A-1)
3. Debarment History Certification (See Page TF-J6 in the TF-Pages)
4. Non-Collusive Bidding Certification (See Page TF-J3 in the TF-Pages)
5. DBE Utilization Schedule (See Page TF-D6 in the TF-Pages)

**FAILURE TO SUBMIT ITEMS (1) THROUGH (5)  
WILL RESULT IN THE DISQUALIFICATION OF THE BID.**

6. Safety Questionnaire
7. Construction Employment Report (if bid is \$1,000,000 or more)
8. Contract Certificate (if bid is less than \$1,000,000)
9. Confirmation of Vendex Compliance
10. Bidder's Certification of Compliance with Iran Divestment Act
11. Special Experience Requirements (if applicable)
12. Apprenticeship Program Questionnaire (if applicable)
13. Disclosure of Lobbying Activities (if applicable) (See Page TF-J9 in the TF-Pages)
14. Any addenda issued prior to the receipt of bids

**FAILURE TO SUBMIT ITEMS (5) THROUGH (14)  
MAY RESULT IN THE DISQUALIFICATION OF THE BID.**

**NOTES:**

- (1) All of the above referred to blank forms to be completed and submitted with the bid are included in the BID BOOKLET, except forms for items (3), (4), (5), and (13) which are in the TF-Pages as noted above.
- (2) If the bidder has any questions or requires additional information, please contact the Department of Design and Construction by phone (718-391- 2601) or by fax (718-391-2615).
- (3) **VENDEX QUESTIONNAIRES:** The Bidder is advised that Vendex Questionnaires and procedures have been changed. Vendex Questionnaires, as well as detailed instructions, may be obtained at [www.nyc.gov/vendex](http://www.nyc.gov/vendex). The bidder may also obtain Vendex forms and instructions by contacting the Agency Chief Contracting Officer or the contact person for this contract.
- (4) **SPECIAL EXPERIENCE REQUIREMENTS:** The Bidder is advised that Special Experience Requirements may apply to this contract. Such requirements are set forth on pages 3, 3a, 3b, and 4 of this Bid Booklet.

## SPECIAL NOTICE TO BIDDERS

### SPECIAL EXPERIENCE REQUIREMENTS (Revised 03/2014)

- (A) **SPECIAL EXPERIENCE REQUIREMENTS FOR THE BIDDER:** The Special Experience Requirements set forth below apply to the bidder. Compliance with such Special Experience Requirements will be determined solely by the City prior to an award of contract. Failure to comply with the Special Experience Requirements will result in rejection of the bid as non-responsive.

The requirements in this Section (A) apply to this contract where indicated by a blackened box (■).

- ☐ The bidder must, within the last seven (7) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least one (1) project similar in scope and type to the required work. Such prior project may have been performed as a prime contractor, subcontractor or sub-subcontractor.

The Special Experience Requirements next to the blackened box below apply to the bidder. If the bidder intends to perform such work itself, it must demonstrate compliance with the Special Experience Requirements. If the bidder intends to subcontract this work, the proposed subcontractor or sub-subcontractor must demonstrate compliance with the Special Experience Requirements. The contractor, subcontractor or sub-subcontractor (hereinafter referred to as the "entity") that will perform any specific area of work indicated by the blackened box below, may have performed the required prior project(s) as a prime contractor, subcontractor or sub-subcontractor. Once approved, no substitution will be permitted, unless the qualifications of the proposed replacement have been approved in writing in advance by the City.

- ☐ **Trunk Water Main Work:** The entity that will perform the trunk water main work must, within the last seven (7) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least one (1) project similar in scope and type to the required work.
- ☐ **Best Management Practice Work:** Best Management Practice ("BMP") Work is any item of work in the Bid Schedule that begins with the prefix "BMP". The entity that will perform any BMP Work must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work.

For professional services in connection with BMP Work, (i.e., monitoring and reporting services), the individual who will perform the required services must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work. Additional requirements are set forth below.

- ☐ The individual serving as the Restoration Specialist (Construction Monitor) must be a Registered Landscape Architect licensed by the state of New York, or must have equivalent professional experience.
- ☐ The individual serving as the Erosion and Sediment Control Licensed/Certified Professional must be a Certified Professional in Erosion and Sediment Control (CPESC), certified by CPESC, Inc.
- ☐ **Micro-Tunneling/Pipe Jacking Work:** The entity that will perform the micro-tunneling/pipe jacking work must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) projects similar in scope and type to the required work.

■ **OTHER:** The bidder must, within the last seven (7) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) bridge projects over rail tracks and waterways similar in scope and type to the required work. Such prior projects may have been performed as a prime contractor, subcontractor or sub-subcontractor, or joint venture.

(B) **SPECIAL EXPERIENCE REQUIREMENTS FOR SPECIFIC AREAS OF WORK (to be provided after an award of contract):**

The requirements in this Section (B) apply to this contract where indicated by a blackened box (■).

The Special Experience Requirements set forth below apply to the contractor, subcontractor or sub-subcontractor that will perform the specific area of work. **Compliance with such Special Experience Requirements will be determined solely by the City after an award of contract.** After an award of contract, when requested by the City, the contractor will be required to submit the qualifications of the contractor, subcontractor or sub-subcontractor that will perform the specific area of work. If the bidder intends to perform such work itself, it must demonstrate compliance with the Special Experience Requirements. If the bidder intends to subcontract this work, the proposed subcontractor or sub-subcontractor must demonstrate compliance with the Special Experience Requirements. Once approved, no substitution will be permitted, unless the qualifications of the proposed replacement have been approved in writing in advance by the City.

Special Experience Requirements apply to the contractor, subcontractor or sub-subcontractor (hereinafter referred to as the "entity") that will perform any specific area of work indicated by a blackened box. The entity may have performed the required prior project(s) as a prime contractor, subcontractor or sub-subcontractor.

■ **Hazmat Work:** Hazmat Work is any item of work in the Bid Schedule that begins with the prefix 8.01. The entity that will perform any Hazmat Work must, within the last three (3) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least five (5) projects similar in scope and type to the required work.

■ **Pile, CFA Pile, and/or Mini-Pile Work:** The entity that will perform the Pile, CFA Pile and/or Mini-Pile Work must, within the last three (3) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) projects similar in scope and type to the required work.

For professional services in connection with Pile Work, (i.e., engineering and inspection services), the individual who will perform the required services must be a Professional Engineer licensed by the state of New York. Such individual must also comply with the above requirements for prior projects.

□ **Construction Report, Monitoring And Post-Construction Report, and Continuous Real-Time Monitoring For Vibrations And Movements And Post-Construction Report Work:** The entity that will perform the Construction Report, Monitoring For Vibrations And Movements, and Post-Construction Report Work must, within the last three (3) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) projects similar in scope and type to the required work.

For professional services in connection with Reporting and Monitoring Work, (i.e., engineering and inspection services), the individual who will perform the required services must be a Professional Engineer licensed by the state of New York. Such individual must also comply with the above requirements for prior projects.

□ **OTHER:** \_\_\_\_\_

(C) **SPECIFICATIONS:** In the event of any conflict, omission or inconsistency between (1) the Specifications and/or Contract Drawings, and (2) the Special Experience Requirements in Section (B) of the Special Notice To Bidders, the special experience listed in the Specifications and/or Contract Drawings shall be controlling. The Special Experience Requirements in Section (B) of this Special Notice To Bidders are only for the convenience of the bidders.

(D) **SUBMISSION REQUIREMENTS:** For each project submitted to demonstrate compliance with the Special Experience Requirements, the bidder must complete and submit the Qualification Form included in the Bid Booklet. The City will only evaluate a project if the following criteria are met: (1) the project is described on the Qualification Form, and (2) all information on the Qualification Form is provided. The City will not evaluate any project which does not comply with the criteria set forth herein, including any project which is referred to only on the resume of an individual.

If Special Experience Requirements are indicated for any specific area of work, the submission requirement set forth above shall apply to the entity that will perform the specific area of work.

(E) **CONDITIONS:** In determining compliance with the Special Experience Requirements for the bidder set forth above, the City may consider prior projects completed by principal(s) or other employees of the bidder while affiliated with another entity, subject to the conditions set forth below.

- Any principal or other employee on whose prior experience the bidder is relying to demonstrate compliance with this special experience requirement must have held the following: (a) a significant management role in the prior entity with which he/she was affiliated, and (b) a significant management role in the entity submitting the bid for a period of six (6) months or more from the inception of the bidding entity.
- The bidder may not rely on the experience of its principals or other employees to demonstrate compliance with any other requirements, including without limitation, financial requirements or requirements for a specified minimum amount of annual gross revenues.

(F) **JOINT VENTURES:** In the event the bidder is a joint venture, at least one firm in the joint venture must meet the above described experience requirements.

### Qualification Form

List previous projects completed to meet the special experience requirements for this contract.  
Please photocopy this form for submission of all required projects.

Name of Contractor: MLJ Contracting Corp. \*

Name of Project: HBX1123 -Bruckner Expwy

Location of Project: Bruckner Expwy over Amtrak

Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed:

Name: Richard Solomon

Title: Project Manager Phone Number: Cell:646-879-4072 Office:  
212-839-6369

Brief description of the Project completed or the Project in progress:  
Design-Build reconstruction of Bruckner Expwy over Amtrak

**Jorge Silva was Project Manager on this project**

Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime\* (Judlau)

Amount of Contract, Subcontract or Sub-subcontract: \$59 Million

Start Date and Completion Date: 9/2010-01/2014

\*\*\*\*\*

Name of Contractor: MLJ Contracting Corp. \*

Name of Project: HH-80- Henry Hudson Bridge

Location of Project: Lower Level Henry Hudson Bridge (Henry Hudson Bridge crosses over Harlem River & Metro North)

Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed:

Name: Walter Hickey

Title: Deputy Chief Engineer Phone Number: whickey@mtabt.org

Brief description of the Project completed or the Project in progress:  
Reconstruction of Lower Level deck including steel repairs and deck replacement

**Jorge Silva was Project Manger on this project**

Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime\* (Judlau)

Amount of Contract, Subcontract or Sub-subcontract: \$90 Million

Start Date and Completion Date: 9/2006-6/2010

**\*NOTE: These projects were performed /completed by Judlau Contracting when Mr. Ocken was Vice President there, and Mr. Iovino was Owner/CEO.**

**Mr. Ocken was the Vice President responsible for these projects at Judlau**  
CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION

BID BOOKLET  
MARCH 2017

**ATTACHMENT 1 - BID INFORMATION**

**PROJECT ID: P-1STARLP**

**PIN: 8502017HW0048C**

**Description and Location of Work:**

**BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II, STAGE 2 BRIDGE THE CRITICAL  
SOUTH BRONX GAP**

**BETWEEN WESTCHESTER AVENUE AND EAST 174TH STREET**

**INCLUDING CONSTRUCTION OF EAST 172ND STREET PEDESTRIAN BRIDGE OVER AMTRAK (BIN#: 2-24124-0), SOUTH GREENWAY PEDESTRIAN BRIDGE OVER THE BRONX RIVER (BIN#: 2-26990-0), DRAINAGE, RETAINING STRUCTURES, GREENWAY, STREET LIGHTING, LANDSCAPING AND TRAFFIC WORK**

**Together With All Work Incidental Thereto**

**BOROUGH OF THE BRONX  
CITY OF NEW YORK**

**Documents Available At:**

30-30 Thomson Avenue  
First Floor Bid Procurement Room  
Long Island City, New York 11101  
8:30 A.M. to 4:00 P.M. – Monday through Friday

**Submission of Bids To:**

30-30 Thomson Avenue  
First Floor Bid Procurement Room  
Long Island City, New York 11101  
Before 11:00 A.M. on **MAY 31, 2018**

**Bid Opening:**

30-30 Thomson Avenue  
First Floor Bid Procurement Room  
Long Island City, New York 11101  
Time and Date: 11:00 A.M. on **MAY 31, 2018**

**Pre-Bid Conference:**

Yes	<u>  X  </u>	No	<u>          </u>
If Yes, Mandatory	<u>  X  </u>	Optional:	<u>          </u>
Time and Date:	<u>                  </u>	TBD	<u>                  </u>
Location:	<u>                  </u>		

**Bid Security:**

Bid Security is required in the amount set forth below; provided, however, bid security is not required if the TOTAL BID PRICE set forth on the Bid Form is less than \$ 1,000,000.00.

- (1) Bond in an amount not less than 10% of the TOTAL BID PRICE set forth on the Bid Form, OR
- (2) Certified Check in an amount not less than 5% of the TOTAL BID PRICE set forth on the Bid Form.

**Performance and Payment Security:** Required for contracts in the amount of \$1,000,000 or more. Performance Security and Payment Security shall each be in an amount equal to 100% of the Contract Price.

**Agency Contact Person:**

Lorraine Holley  
Phone: 718-391-2601                      FAX: 718-391-2615  
Email: CSB\_projectinquiries@ddc.nyc.gov

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## LIST OF STANDARDS AND DETAILS

THE LATEST PROVISIONS OF THE APPLICABLE REFERENCE STANDARDS THAT HAVE BEEN AUTHORIZED UP TO THE START OF CONSTRUCTION SHALL BE CONSIDERED AS PART OF THESE CONTRACT DOCUMENTS.

DWG. NO.	DRAWING TITLE	AGENCY
H-1009	CHAIN LINK FENCE DETAILS TENSION WIRES TOP AND/OR BOTTOM	NYCDOT -- HIGHWAY
H-1010	STEEL FACED CONCRETE CURB STEEL FACING TYPE D	NYCDOT -- HIGHWAY
H-1011	SIDEWALK PEDESTRIAN RAMPS	NYCDOT -- HIGHWAY
H-1021	CHAIN LINK FENCE. DETAILS (SH. 1 TO 4)	NYCDOT -- HIGHWAY
H-1022	BEAM BARRIER FOR DEAD END STREETS	NYCDOT -- HIGHWAY
H-1031	TYPICAL PAVEMENT KEY	NYCDOT -- HIGHWAY
H-1035	REINFORCED CONCRETE CURB AND DROP CURB	NYCDOT -- HIGHWAY
H-1042A	STANDARD TRENCH OR HOLE RESTORATION IN ACCORDANCE WITH LOCAL LAW NO. 14	NYCDOT -- HIGHWAY
H-1045	CONCRETE SIDEWALK	NYCDOT -- HIGHWAY
H-1049	PLASTIC BARREL	NYCDOT -- HIGHWAY
H-1054	LIMITS OF MEASUREMENT FOR PAYMENT OF TEMPORARY ASPHALT PAVEMENT	NYCDOT -- HIGHWAY
H-1057	TEMPORARY STORAGE AREA	NYCDOT -- HIGHWAY
MS-1000	NEW YORK CITY COMPARISON OF DATUM PLANES	NYCDOT -- HIGHWAY
TYLA/146-R8-2	CATCH BASIN C1	NYCDPR
TYLA/146-R8-27	1964 WORLD'S FAIR BENCH	NYCDPR
TCW-1	CROSSWALKS & STOP BARS	NYCDOT -- TRAFFIC
TBL-1	BIKE LANES & BUFFERED BIKE LANES	NYCDOT -- TRAFFIC
TBL-2	BIKE ROUTES	NYCDOT -- TRAFFIC
TBP-1	BIKE PATH CROSSINGS	NYCDOT -- TRAFFIC
TRS-1	RUMBLE STRIPS	NYCDOT -- TRAFFIC
TSC-1	STRIPING AND CROSS HATCHING	NYCDOT -- TRAFFIC
TWM-1	WORD MESSAGES	NYCDOT -- TRAFFIC
TAR-1	ARROWS AND SYMBOLS	NYCDOT -- TRAFFIC
611-01	NYSDOT STANDARD LANDSCAPE PLANTING DETAILS SHEET 1 & 2	NYSDOT
NOTE: OTHER AGENCY STANDARDS AND REFERENCE DRAWINGS TO BE USED WHERE APPLICABLE		



(NO TEXT ON THIS PAGE)

INDEX OF DRAWINGS		
DWG. SHEET NO.	DWG. NO.	DRAWING TITLE
1	G1	COVER SHEET
2	G2	INDEX OF DRAWINGS - 1
3	G3	INDEX OF DRAWINGS - 2
4	G4	LEGEND-1
5	G5	GENERAL NOTES - 1
6	G6	GENERAL NOTES - 2
7	G7	GENERAL NOTES - 3
8	G8	GENERAL NOTES - 4
9	G9	GENERAL NOTES - 5
10	G10	GENERAL NOTES - 6
11	G11	GENERAL NOTES - 7
12	G12	GENERAL NOTES - 8
13	G13	GENERAL NOTES - 9
14	V1	TRAVERSE PLAN
15	V2	TRAVERSE SKETCHES - 1
16	V3	TRAVERSE SKETCHES - 2
17	V4	BENCH MARK TIES
18	TS1	TYPICAL SECTION - 1
19	TS2	TYPICAL SECTION - 2
20	TS3	TYPICAL SECTION - 3
21	TS4	TYPICAL SECTION - 4
22	GD1	GENERAL DETAILS - 1
23	GD2	GENERAL DETAILS - 2
24	GD3	GENERAL DETAILS - 3
25	GD4	GENERAL DETAILS - 4
26	GD5	GENERAL DETAILS - 5
27	ECP1	EROSION AND SEDIMENT CONTROL NOTES
28	ECP2	EROSION AND SEDIMENT CONTROL OVERALL PLAN
29	ECP3	EROSION AND SEDIMENT CONTROL - 1
30	ECP4	EROSION AND SEDIMENT CONTROL - 2
31	ECP5	EROSION AND SEDIMENT CONTROL - 3
32	ECP6	EROSION AND SEDIMENT CONTROL - 4
33	ECP7	EROSION AND SEDIMENT CONTROL - 1
34	ECP8	EROSION AND SEDIMENT CONTROL - 2
35	ECP9	EROSION AND SEDIMENT CONTROL - 3
36	ECP10	EROSION AND SEDIMENT CONTROL - 4
37	ECD1	EROSION AND SEDIMENT CONTROL DETAIL - 1

DWG. SHEET NO.	DWG. NO.	DRAWING TITLE
38	ECD2	EROSION AND SEDIMENT CONTROL DETAIL - 2
39	ECD3	EROSION AND SEDIMENT CONTROL DETAIL - 3
40	ECD4	EROSION AND SEDIMENT CONTROL DETAIL - 4
41	MPT1	MAINTENANCE AND PROTECTION OF TRAFFIC - 1
42	MPT2	MAINTENANCE AND PROTECTION OF TRAFFIC - 2
43	MPT3	MAINTENANCE AND PROTECTION OF TRAFFIC - 3
44	TRN1	TREE REMOVAL NOTES
45	TRP1	TREE REMOVAL PROTECTION PLAN - 1
46	TRP2	TREE REMOVAL PROTECTION PLAN - 2
47	TRP3	TREE REMOVAL PROTECTION PLAN - 3
48	TMD1	TREE MITIGATION DETAIL - 1
49	TMD2	TREE MITIGATION DETAIL - 2
50	TMT1	TREE MITIGATION TABLE - 1
51	TMT2	TREE MITIGATION TABLE - 2
52	TMT3	TREE MITIGATION TABLE - 3
53	TMT4	TREE MITIGATION TABLE - 4
54	TMT5	TREE MITIGATION TABLE - 5
55	TMT6	TREE MITIGATION TABLE - 6
56	TMT7	TREE MITIGATION TABLE - 7
57	TMT8	TREE MITIGATION TABLE - 8
58	RMP1	REMOVAL NOTES
59	RMP2	REMOVALS AND PROTECTION PLAN - 1
60	RMP3	REMOVALS AND PROTECTION PLAN - 2
61	RMP4	REMOVALS AND PROTECTION PLAN - 3
62	RMP5	REMOVALS AND PROTECTION PLAN - 4
63	C1	CONSTRUCTION PLAN - 1
64	C2	CONSTRUCTION PLAN - 2
65	C3	CONSTRUCTION PLAN - 3
66	C4	CONSTRUCTION PLAN - 4
67	AL1	ALIGNMENT PLAN - 1
68	AL2	ALIGNMENT PLAN - 2
69	AL3	ALIGNMENT PLAN - 3
70	AL4	ALIGNMENT PLAN - 4
71	PRO1	MULTI-USE PATH PROFILE - 1
72	PRO2	MULTI-USE PATH PROFILE - 2
73	PRO3	MULTI-USE PATH PROFILE - 3
74	PRO4	MULTI-USE PATH PROFILE - 4
75	PRO5	MULTI-USE PATH PROFILE - 5

DWG. SHEET NO.	DWG. NO.	DRAWING TITLE
76	PRO6	MULTI-USE PATH PROFILE - 6
77	DRG1	DRAINAGE PLAN - 1
78	DRG2	DRAINAGE PLAN - 2
79	DRG3	DRAINAGE PLAN - 3
80	DRG4	DRAINAGE PLAN - 4
81	GRD1	GRADING PLAN - 1
82	GRD2	GRADING PLAN - 2
83	GRD3	GRADING PLAN - 3
84	GRD4	GRADING PLAN - 4
85	GDD1	GRADING AND DRAINAGE DETAILS - 1
86	GDD2	GRADING AND DRAINAGE DETAILS - 2
87	GDD3	GRADING AND DRAINAGE DETAILS - 3
88	GDD4	GRADING AND DRAINAGE DETAILS - 4
89	GDD5	GRADING AND DRAINAGE DETAILS - 5
90	GDD6	GRADING AND DRAINAGE DETAILS - 6
91	GDD7	GRADING AND DRAINAGE DETAILS - 7
92	GDD8	GRADING AND DRAINAGE DETAILS - 8
93	GDD9	GRADING AND DRAINAGE DETAILS - 9
94	PLMB1	PLUMBING PLANS - 1
95	PLMB2	PLUMBING PLANS - 2
96	PLMB3	PLUMBING PLANS - 3
97	PD1	PLUMBING DETAILS - 1
98	PD2	PLUMBING DETAILS - 2
99	PD3	PLUMBING DETAILS - 3
100	SMP1	SIGNING AND MARKING PLAN - 1
101	SMP2	SIGNING AND MARKING PLAN - 2
102	SMP3	SIGNING AND MARKING PLAN - 3
103	SMP4	SIGNING AND MARKING PLAN - 4
104	SMP5	SIGNING AND MARKING PLAN - 5
105	SMP6	SIGNING AND MARKING PLAN - 6
106	SMP7	SIGNING AND MARKING PLAN - 7
107	SDT1	SIGN DATA TEXT - 1
108	SDT2	SIGN DATA TEXT - 2 - SPECIAL
109	SLP1	LIGHTING PLAN - 1
110	SLP2	LIGHTING PLAN - 2
111	SLP3	LIGHTING PLAN - 3
112	SLP4	LIGHTING PLAN - 4
113	SLD1	LIGHTING DETAIL - 1
114	SLD2	LIGHTING DETAIL - 2

115	SLD3	LIGHTING DETAIL - 3
116	SLD4	LIGHTING DETAIL - 4
117	SLD5	LIGHTING DETAIL - 5
118	SLD6	LIGHTING DETAIL - 6
119	SLD7	LIGHTING DETAIL - 7
120	SLD8	LIGHTING DETAIL - 8
121	SLD9	LIGHTING DETAIL - 9
122	LPP1	PLANTING AND PLANT CARE PLAN - 1
123	LPP2	PLANTING AND PLANT CARE PLAN - 2
124	LPP3	PLANTING AND PLANT CARE PLAN - 3
125	LPP4	PLANTING AND PLANT CARE PLAN - 4
126	LT1	LANDSCAPE TABLE - 1
127	LT2	LANDSCAPE TABLE - 2
128	LT3	LANDSCAPE TABLE - 3
129	LT4	SOIL PROFILES
130	LD1	LANDSCAPE GENERAL DETAILS - 1
131	LD2	LANDSCAPE GENERAL DETAILS - 2
132	LD3	LANDSCAPE GENERAL DETAILS - 3
133	LD4	LANDSCAPE GENERAL DETAILS - 4
134	LD5	LANDSCAPE GENERAL DETAILS - 5
135	LD6	LANDSCAPE GENERAL DETAILS - 6
136	LD7	LANDSCAPE GENERAL DETAILS - 7
137	LD8	LANDSCAPE GENERAL DETAILS - 8
138	LD9	LANDSCAPE GENERAL DETAILS - 9
139	LD10	LANDSCAPE GENERAL DETAILS - 10
140	LD11	LANDSCAPE GENERAL DETAILS - 11
141	LD12	NYC PARKS DEPARTMENT STANDARD DETAIL - 1
142	LD13	NYC PARKS DEPARTMENT STANDARD DETAIL - 2
143	LA3-1	SITE AREA 3 - MATERIALS ENLARGEMENT PLAN-1
144	LA3-2	SITE AREA 3 - MATERIALS ENLARGEMENT PLAN-2
145	LA3-3	SITE AREA 3 - LAYOUT ENLARGEMENT PLAN-1
146	LA3-4	SITE AREA 3 - LAYOUT ENLARGEMENT PLAN-2
147	LA3-5	SITE AREA 3 - GRADING ENLARGEMENT PLAN-1
148	LA3-6	SITE AREA 3 - GRADING ENLARGEMENT PLAN-2
149	LD3-1	SITE AREA 3 - LANDSCAPE DETAILS - 1
150	LD3-2	SITE AREA 3 - LANDSCAPE DETAILS - 2
151	LD3-3	SITE AREA 3 - LANDSCAPE DETAILS - 3
152	LD3-4	SITE AREA 3 - LANDSCAPE DETAILS - 4
153	LD3-5	SITE AREA 3 - LANDSCAPE DETAILS - 5
154	LD3-6	SITE AREA 3 - LANDSCAPE DETAILS - 6

155	LA4-1	SITE AREA 4 - MATERIALS ENLARGEMENT PLAN
156	LA4-2	SITE AREA 4 - LAYOUT ENLARGEMENT PLAN
157	LA4-3	SITE AREA 4 - GRADING ENLARGEMENT PLAN
158	LD4-1	NYC PARKS DEPARTMENT STANDARD DETAIL - 3
159	LD4-2	NYC PARKS DEPARTMENT STANDARD DETAIL - 4
160	LD4-3	NYC PARKS DEPARTMENT STANDARD DETAIL - 5
161	LD4-4	SITE AREA 4 - LANDSCAPE DETAILS
162	LA5-1	SITE AREA 5 - MATERIALS & LAYOUT ENLARGEMENT PLAN
163	LA5-2	SITE AREA 5 - GRADING ENLARGEMENT PLAN
164	LD5-1	SITE AREA 5 - LANDSCAPE DETAILS - 1
165	LD5-2	SITE AREA 5 - LANDSCAPE DETAILS - 2
166	LA6-1	SITE AREA 6 - MATERIALS ENLARGEMENT PLAN
167	LA6-2	SITE AREA 6 - LAYOUT ENLARGEMENT PLAN
168	LA6-3	SITE AREA 6 - GRADING ENLARGEMENT PLAN
169	LD6-1	SITE AREA 6 - LANDSCAPE DETAILS - 1
170	LD6-2	SITE AREA 6 - LANDSCAPE DETAILS - 2
171	LD6-3	SITE AREA 6 - LANDSCAPE DETAILS - 3
172	LD6-4	SITE AREA 6 - LANDSCAPE DETAILS - 4
173	LA7-1	SITE AREA 7 - MATERIALS ENLARGEMENT PLAN
174	LA7-2	SITE AREA 7 - LAYOUT ENLARGEMENT PLAN
175	LA7-3	SITE AREA 7 - GRADING ENLARGEMENT PLAN
176	LD7-1	SITE AREA 7 - LANDSCAPE DETAILS - 1
177	RWLOC	RETAINING WALLS LOCATION PLAN
178	RWNOT	RETAINING WALLS NOTES
179	RWGEO	RETAINING WALL HORIZONTAL GEOMETRY
180	RW-D1	RETAINING WALLS STEEL ROD RAILING MOUNTING DETAILS
181	RW-D2	RETAINING WALLS WATERSTOP DETAILS
182	RW-D3	RETAINING WALLS ORNAMENTAL FENCE MOUNTING DETAILS
183	CW1-1	RETAINING WALL C1 PLAN AND ELEVATION 1
184	CW1-2	RETAINING WALL C1 PLAN AND ELEVATION 2
185	CW1-3	RETAINING WALL C1 EXCAVATION PLAN AND SECTIONS
186	CW1-4	RETAINING WALL C1 REINFORCEMENT FOOTING PLAN
187	CW1-5	RETAINING WALL C1 REINFORCEMENT STEM PLAN
188	CW1-6	RETAINING WALL C1 REINFORCEMENT SECTIONS
189	CW1-7	RETAINING WALL C1 BAR LIST
190	CW3-1	RETAINING WALL C3 PLAN AND ELEVATION
191	CW3-2	RETAINING WALL C3 EXCAVATION PLAN AND SECTIONS
192	CW3-3	RETAINING WALL C3 REINFORCEMENT FOOTING AND STEM PLAN
193	CW3-4	RETAINING WALL C3 REINFORCEMENT SECTIONS
194	CW3-5	RETAINING WALL C3 BAR LIST
195	CW4-1	RETAINING WALLS C4 AND C5 PLAN

196	CW4-2	RETAINING WALLS C4 AND C5 ELEVATION
197	CW4-3	RETAINING WALLS C4 AND C5 EXCAVATION PLAN
198	CW4-4	RETAINING WALLS C4 AND C5 EXCAVATION SECTIONS 1
199	CW4-5	RETAINING WALLS C4 AND C5 EXCAVATION SECTIONS 2
200	CW4-6	RETAINING WALLS C4 AND C5 REINFORCEMENT FOOTING PLAN
201	CW4-7	RETAINING WALLS C4 AND C5 REINFORCEMENT STEM PLAN
202	CW4-8	RETAINING WALLS C4 AND C5 STEM ELEVATIONS
203	CW4-9	RETAINING WALLS C4 AND C5 REINFORCEMENT SECTIONS 1
204	CW4-10	RETAINING WALLS C4 AND C5 REINFORCEMENT SECTIONS 2
205	CW4-11	RETAINING WALL C4 BAR LIST
206	CW4-12	RETAINING WALL C5 BAR LIST 1
207	CW4-13	RETAINING WALL C5 BAR LIST 2
208	PW3-1	PREFABRICATED RETAINING WALL P3 PLAN AND ELEVATION 1
209	PW3-2	PREFABRICATED RETAINING WALL P3 PLAN AND ELEVATION 2
210	PW3-3	PREFABRICATED RETAINING WALL P3 PLAN AND ELEVATION 3
211	PW3-4	PREFABRICATED RETAINING WALL P3 PLAN AND ELEVATION 4
212	PW3-5	PREFABRICATED RETAINING WALL P3 PLAN AND ELEVATION 5
213	PW3-6	PREFABRICATED RETAINING WALL P3 TYPICAL SECTIONS 1
214	PW3-7	PREFABRICATED RETAINING WALL P3 TYPICAL SECTIONS 2
215	PW6-1	PREFABRICATED RETAINING WALL P6 PLAN AND ELEVATION 1
216	PW6-2	PREFABRICATED RETAINING WALL P6 PLAN AND ELEVATION 2
217	PW6-3	PREFABRICATED RETAINING WALL P6 PLAN AND ELEVATION 3
218	PW6-4	PREFABRICATED RETAINING WALL P6 TYPICAL SECTIONS
219	PW7-1	PREFABRICATED RETAINING WALL P7 PLAN AND ELEVATION 1
220	PW7-2	PREFABRICATED RETAINING WALL P7 PLAN AND ELEVATION 2
221	PW7-3	PREFABRICATED RETAINING WALL P7 PLAN AND ELEVATION 3
222	PW7-4	PREFABRICATED RETAINING WALL P7 PLAN AND ELEVATION 4
223	PW7-5	PREFABRICATED RETAINING WALL P7 TYPICAL SECTIONS
224	PW7-6	PREFABRICATED RETAINING WALL P7 BAR LIST 1
225	PW7-7	PREFABRICATED RETAINING WALL P7 BAR LIST 2
226	PW8-1	PREFABRICATED RETAINING WALL P8 PLAN AND ELEVATION 1
227	PW8-2	PREFABRICATED RETAINING WALL P8 PLAN AND ELEVATION 2
228	PW8-3	PREFABRICATED RETAINING WALL P8 PLAN AND ELEVATION 3
229	PW8-4	PREFABRICATED RETAINING WALL P8 TYPICAL SECTIONS
230	PW8-5	PREFABRICATED RETAINING WALL P8 BAR LIST
231	SP2-1	SOLDIER PILE AND LAGGING WALLS WALL S2 PLAN AND ELEVATION
232	SP2-2	SOLDIER PILE AND LAGGING WALLS WALL S2 DETAILS 1
233	SP2-3	SOLDIER PILE AND LAGGING WALLS WALL S2 DETAILS 2
234	SP2-4	SOLDIER PILE AND LAGGING WALLS WALL S2 DETAILS 3
235	SP2-5	SOLDIER PILE AND LAGGING WALLS WALL S2 BAR LIST 1

236	SP2-6	SOLDIER PILE AND LAGGING WALLS WALL S2 BAR LIST 2
237	S172-1	RETAINING WALL CE172 PLAN
238	S172-1A	RETAINING WALL CE172 ELEVATION
239	S172-2	RETAINING WALL CE172 EXCAVATION PLAN
240	S172-3	RETAINING WALL CE172 EXCAVATION SECTIONS
241	S172-4	RETAINING WALL CE172 REINFORCEMENT FOOTING PLAN
242	S172-5	RETAINING WALL CE172 REINFORCEMENT STEM PLAN
243	S172-6	RETAINING WALL CE172 REINFORCEMENT SECTIONS
244	S172-7	RETAINING WALL CE172 GRADING AND LAYOUT PLAN
245	S172-8	RETAINING WALL CE172 RAILING LAYOUT PLAN
246	S172-9	RETAINING WALL CE172 STAIR DETAILS
247	S172-10	RETAINING WALL CE172 BAR LIST
248	ST1-1	COVER SHEET
249	ST1-2	QUANTITY ESTIMATE AND DRAWING INDEX
250	ST1-3	GENERAL NOTES
251	ST1-4	GENERAL NOTES
252	ST1-5	GENERAL PLAN AND ELEVATION
253	ST1-6	TYPICAL SECTIONS
254	ST1-7	PROPOSED GREENWAY PROFILE
255	ST1-8	EXCAVATION AND EMBANKMENT PLAN
256	ST1-9	EXCAVATION AND EMBANKMENT SECTIONS AND DETAILS
257	ST1-10	END ABUTMENT PLAN AND ELEVATION
258	ST1-11	END ABUTMENT PILE LAYOUT AND FOOTING REINFORCEMENT PLAN
259	ST1-12	END ABUTMENT REINFORCEMENT PLAN AND SECTIONS
260	ST1-13	MISCELLANEOUS DETAILS
261	ST1-14	NORTHWEST WINGWALL PLAN
262	ST1-15	NORTHEAST WINGWALL PLAN
263	ST1-16	NORTHEAST AND NORTHWEST WINGWALL PILE LAYOUT
264	ST1-17	NORTHEAST AND NORTHWEST WINGWALL-FOOTING REINFORCEMENT PLAN
265	ST1-18	NORTHEAST & NORTHWEST WINGWALL STEM REINFORCEMENT PLAN & SECTION
266	ST1-19	FRAMING PLAN AND ELEVATION
267	ST1-20	STRUCTURAL STEEL DETAILS 1
268	ST1-21	STRUCTURAL STEEL DETAILS 2
269	ST1-22	STRUCTURAL STEEL DETAILS 3
270	ST1-23	STRUCTURAL STEEL DETAILS 4
271	ST1-24	STRUCTURAL STEEL DETAILS 5
272	ST1-25	STRUCTURAL STEEL DETAILS 6
273	ST1-26	SUGGESTED CONSTRUCTION SEQUENCE
274	ST1-27	SLAB REINFORCEMENT TRANSVERSE SECTION & DETAILS
275	ST1-28	APPROACH SLAB PLAN AND DETAILS



276	ST1-29	ELASTOMERIC BEARING FIXED TYPE E.B.
277	ST1-30	ELASTOMERIC BEARING EXPANSION TYPE E.B.
278	ST1-31	ARMORLESS JOINT PARTIAL PLAN, SECTIONS AND DETAILS
279	ST1-32	BAR LIST ABUTMENT
280	ST1-33	BAR LIST WINGWALLS
281	ST1-34	BAR BENDING DIAGRAM
282	ST2-1	COVER SHEET
283	ST2-2	ESTIMATE OF QUANTITIES & INDEX OF DRAWINGS
284	ST2-3	GENERAL PLAN
285	ST2-4	TYPICAL SECTIONS
286	ST2-5	PROPOSED GREENWAY PROFILES
287	ST2-6	BEGIN ABUTMENT REMOVAL PLAN AND ELEVATION
288	ST2-7	BEGIN ABUTMENT CONSTRUCTION PLAN AND ELEVATION
289	ST2-8	BEGIN ABUTMENT REINFORCEMENT PLANS, SECTION AND DETAIL
290	ST2-9	END ABUTMENT REMOVAL PLAN AND ELEVATIONS
291	ST2-10	END ABUTMENT CONSTRUCTION PLAN AND ELEVATION
292	ST2-11	END ABUTMENT REINFORCEMENT PLANS, SECTION AND DETAILS
293	ST2-12A	MISCELLANEOUS DETAILS - 1
294	ST2-12B	MISCELLANEOUS DETAILS - 2
295	ST2-13	SUPERSTRUCTURE TRANSVERSE SECTION
296	ST2-14	FRAMING PLAN AND ELEVATION
297	ST2-15	STRUCTURAL STEEL DETAILS 1
298	ST2-16	STRUCTURAL STEEL DETAILS 2
299	ST2-17	SLAB REINFORCEMENT TRANSVERSE SECTION & DETAILS
300	ST2-18	APPROACH SLAB PLAN, SECTIONS AND DETAILS
301	ST2-19	ELASTOMERIC BEARING FIXED TYPE E.B.
302	ST2-20	ELASTOMERIC BEARING EXPANSION TYPE E.B.
303	ST2-21	BEARING AND MISCELLANEOUS DETAILS
304	ST2-22	ARMORLESS JOINT PARTIAL PLAN, SECTION AND DETAILS
305	ST2-23	BAR BENDING DIAGRAM
306	ST2-24	BAR LIST
307	ST3-1	COVER SHEET
308	ST3-2	INDEX AND ESTIMATE
309	ST3-3	GENERAL PLAN
310	ST3-4	EXCAVATION AND EMBANKMENT PLAN
311	ST3-5	BEGIN ABUTMENT PLAN AND ELEVATION
312	ST3-6	BEGIN ABUTMENT PILE AND FOOTING REINFORCEMENT PLAN
313	ST3-7	BEGIN ABUTMENT REINFORCEMENT DETAILS
314	ST3-8	MISCELLANEOUS DETAILS
315	ST3-9	BEGIN WINGWALLS PLAN AND ELEVATION
316	ST3-10	BEGIN WINGWALLS PILE LAYOUT 1

317	ST3-11	BEGIN WINGWALLS PILE LAYOUT 2
318	ST3-12	BEGIN WINGWALLS FOOTING REINFORCEMENT PLAN 1
319	ST3-13	BEGIN WINGWALLS FOOTING REINFORCEMENT PLAN 2
320	ST3-14	BEGIN WINGWALLS STEM REINFORCEMENT PLAN 1
321	ST3-15	BEGIN WINGWALLS STEM REINFORCEMENT PLAN 2
322	ST3-16	APPROACH SLAB PLAN, SECTIONS AND DETAILS
323	ST3-17	BAR BENDING DIAGRAM
324	ST3-18	BAR LIST ABUTMENT
325	ST3-19	BAR LIST SOUTHWEST WINGWALL
326	ST3-20	BAR LIST SOUTHEAST WINGWALL
327	B1	GEOTECHNICAL BORING LOCATION PLAN - 1
328	B2	GEOTECHNICAL BORING LOCATION PLAN - 2
329	B3	GEOTECHNICAL BORING LOCATION PLAN - 3
330	B4	GEOTECHNICAL BORING LOGS - 1
331	B5	GEOTECHNICAL BORING LOGS - 2
332	B6	GEOTECHNICAL BORING LOGS - 3
333	B7	ENVIRONMENTAL BORING LOCATION PLAN - 1
334	B8	ENVIRONMENTAL BORING LOCATION PLAN - 2
335	B9	ENVIRONMENTAL BORING EXCEEDANCES
336	GB1	GROUNDING AND BONDING PLAN
337	GB2	GROUNDING AND BONDING FOR PEDESTRIAN BRIDGE
338	GB3	ENVIRONMENTAL BORING PLAN FOR FENCE

**(NO TEXT ON THIS PAGE)**

# **BID SCHEDULE**

The following pages contain the Bid Schedule. Items listed in the Bid Schedule shall comply with the requirements of the corresponding sections of the specifications detailed in the table below. All references to the Standard Specifications, Details, Standards, and Drawings shall be to the version in effect at the time of bid.

## **NOTES:**

- "XXX" in the table below signifies any possible combination of characters and spaces.
- The table below may contain item formats which are not included in the Bid Schedule.
- ***Please refer to the Bid Schedule to determine which specifications apply.***

Item Number Format	Applicable Specifications
4.XXX 6.XXX 7.XXX 8.XXX <i>(Except 8.01 XXX; see below)</i> 9.XXX	NYC Department of Transportation ("DOT") Standard Highway Specifications, as amended in the R-Pages, located in Volume 3 of 3 herein;  <p style="text-align: center;"><b>AND</b></p> NYC DOT Standard Details of Construction;  <p style="text-align: center;"><b>OR,</b></p> <b><i>if the item is not contained within the Standard Specifications</i></b> , then see the applicable New Sections in the I-Pages, located in Volume 3 of 3 herein.
1.XXX 50.XXX through 55.XXX 60.XXX through 66.XXX 70.XXX through 79.XXX <i>(Except 79.11XXX; see below)</i> DSS XXX DSW XXX	NYC Department of Environmental Protection ("DEP") Standard Sewer and Water Main Specifications, as amended in the R-Pages and SW-Pages, located in Volume 3 of 3 herein;  <p style="text-align: center;"><b>AND</b></p> NYC DOT Specifications for Trunk Main Work;  <p style="text-align: center;"><b>AND</b></p> NYC DOT Sewer Design Standards;  <p style="text-align: center;"><b>AND</b></p> NYC DOT Water Main Standard Drawings;  <p style="text-align: center;"><b>OR,</b></p> <b><i>if the item is not contained within the Standard Specifications</i></b> , then see the Amendments to the Standard Sewer and Water Main Specifications in the SW-Pages, located in Volume 3 of 3 herein.
GI-XXX PM-XXX ROW XXX	New Sections in the I-Pages, located in Volume 3 of 3 herein  <p style="text-align: center;"><b>AND</b></p> NYC DEP Standards for Green Infrastructure.
UTL-XXX	Gas Cost Sharing Standard Specifications in the EP7-Pages, located in Volume 3 of 3 herein.

# **BID SCHEDULE**

Item Number Format	Applicable Specifications
83X.XXX HW-XXX MX.XXX MP XXX NYC-XXX NYCT-XXX NYPD-XXX P XXX PK-XXX	New Sections in the I-Pages, located in Volume 3 of 3 herein.
BMP-XXX	Specifications for Construction of Best Management Practice (BMP) and Mitigation Area in the BMP-Pages, located in Volume 3 of 3 herein.
E XXX ME XXX	Specifications for the Specialty Electrical Works in the EL-Pages, located in Volume 3 of 3 herein.
SL-XXX	NYC DOT Division of Street Lighting Specifications <b>AND</b> NYC Division of Street Lighting Standard Drawings.
T-XXX	NYC DOT Specifications for Traffic Signals and Intelligent Transportation Systems <b>AND</b> NYC DOT Traffic Signal Standard Drawings.
JB XXX	Joint Bid Specifications in the JB-Pages, located in Volume 3 of 3 herein.
8.01 XXX	Specifications for Handling, Transportation and Disposal of Nonhazardous and Potentially Hazardous Contaminated Materials in the HAZ-Pages, located in Volume 3 of 3 herein.
67.XXX	Specifications for Abatement of Coal Tar Wrap Asbestos Containing Materials in the ASB-Pages, located in Volume 3 of 3 herein.
79.11XXX	Specifications for Abatement of Transit Authority Duct Insulation Asbestos Containing Materials in the ASB-Pages, located in Volume 3 of 3 herein.
XXX.XXX <i>(Any number of digits after the decimal point)</i>	New York State Department of Transportation Standard Specifications <b>OR</b> New Sections in the I-Pages, located in Volume 3 of 3 herein.

## BID SCHEDULE

**NOTE:**

- (1) The Agency may reject a bid if it contains unbalanced bid prices. An unbalanced bid is considered to be one containing lump sum or unit items which do not reflect reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated for the performance of the items in question.
- (2) The following bid prices on Unit Price Contracts are to be paid for the actual quantities of the item numbers in the completed work or structure, and they cover the cost of all work, labor, material, tools, plant and appliances of every description necessary to complete the entire work, as specified, and the removal of all debris, temporary work and appliances.
- (3) PLEASE BE SURE A LEGIBLE BID IS ENTERED, IN INK, FOR EACH ITEM.  
Alterations must be initialed in ink by the bidder.
- (4) The Extended Amount entered in Column 6 shall be the product of the Estimated Quantity in Column 3 times the Unit Price Bid in Column 5.
- (5) Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished them. The pages of this Bid Schedule are numbered consecutively, as follows:  
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PLEASE BE SURE A LEGIBLE BID IS ENTERED FOR EACH ITEM.  
~~THE BIDDER SHALL INSERT THE TOTAL BID PRICE IN~~  
~~THE BID FORM ON PAGE C-4 OF THIS BID BOOKLET.~~

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## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
001	201.07 CLEARING AND GRUBBING	1.00	ACRE	200,000	00	200,000	00
002	203.02 UNCLASSIFIED EXCAVATION AND DISPOSAL	3,105.00	C.Y.	75	00	232,875	00
003	203.02990006 PAVEMENT EXCAVATION	681.00	S.F.	10	00	6,810	00
004	203.03 EMBANKMENT IN PLACE	23,394.00	C.Y.	50	00	1,169,700	00
005	203.07 SELECT GRANULAR FILL	547.00	C.Y.	100	00	54,700	00
006	203.21 SELECT STRUCTURAL FILL	2,937.00	C.Y.	100	00	293,700	00
007	203.25 SAND BACKFILL	661.00	C.Y.	100	00	66,100	00
008	203.30020063 EXCAVATION AND DISPOSAL OF ROCK, EMERGENCY CONTRACT STANDBY WORK, QUANTITY RANGE 2 (131 to 650)	500.00	C.Y.	100	00	50,000	00

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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

PROJECT ID: P-1STARLP  
CONTRACT PIN: 8502017HW0048C

## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
009	205.0201 SEGREGATION AND STORAGE OF CONTAMINATED SOIL	1.00	L.S.	100,000	00	100,000	00
010	205.050101 DISPOSAL OF CONTAMINATED HAZARDOUS WASTE SOIL	105.00	TONS	200	00	21,000	00
011	205.050201 DISPOSAL OF CONTAMINATED NON-HAZARDOUS SOIL	36.00	TONS	100	00	3,600	00
012	206.01 STRUCTURE EXCAVATION	10,091.00	C.Y.	50	00	504,550	00
013	206.0201 TRENCH AND CULVERT EXCAVATION	3,176.00	C.Y.	50	00	158,800	00
014	206.04010011 PNEUMATIC EXCAVATION AND BACKFILL OF TRENCHES	1,172.00	L.F.	100	00	117,200	00
015	206.05 TEST PIT EXCAVATION	2.00	EACH	1,000	00	2,000	00
016	207.20 GEOTEXTILE BEDDING	1,439.00	S.Y.	15	00	21,585	00



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# BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
017	207.21 GEOTEXTILE SEPARATION	467.00	S.Y.	15	00	7,005	00
018	207.22 GEOTEXTILE DRAINAGE	26,785.00	S.Y.	5	00	133,925	00
019	207.26 PREFABRICATED COMPOSITE STRUCTURAL DRAIN	1,178.00	S.Y.	15	00	17,670	00
020	207.96000017 GEOSYNTHETIC REINFORCEMENT	12,177.00	S.F.	3	00	36,531	00
021	208.01001139 RAIN GARDEN SOIL MIX (NYCDPR)	490.00	C.Y.	100	00	49,000	00
022	209.11010011 TEMPORARY CATCH BASIN INSERTS FOR DRAINAGE STRUCTURES TRASH, SEDIMENT AND DEBRIS REMOVAL	5.00	EACH	50	00	250	00
023	209.110101 CHECK DAM (DITCH BOTTOM WIDTH 0.0 TO 3'), STONE - TEMPORARY	51.00	EACH	750	00	38,250	00
024	209.1202 STRAWBALE DIKE- TEMPORARY	671.00	FOOT	25	00	16,775	00



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## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
025	209.13 SILT FENCE-TEMPORARY	8,557.00	L.F.	5	00	42,785	00
026	209.140101 SEDIMENT TRAP, EARTH BERM - TEMPORARY	4.00	EACH	2,500	00	10,000	00
027	209.1501 TURBIDITY CURTAIN - TEMPORARY	2,750.00	L.F.	40	00	110,000	00
028	209.190201 ROLLED EROSION CONTROL PRODUCT, CLASS II TYPE B, INTERMEDIATE	2,090.00	S.Y.	4	00	8,360	00
029	209.20120010 BIO-FIBER ROLLS 12 INCH	5,660.00	L.F.	7	00	39,620	00
030	209.22 CONSTRUCTION ENTRANCE	183.00	S.Y.	100	00	18,300	00
031	211.10 GROUTED TIEBACKS (TEMPORARY)	2.00	EACH	7,500	00	15,000	00
032	304.11 SUBBASE COURSE, TYPE 1	12.00	C.Y.	100	00	1,200	00

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# BID SCHEDULE FORM

COL. 1 SEQ. NO	COL. 2 ITEM NUMBER and DESCRIPTION	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 UNIT PRICE (IN FIGURES)		COL. 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
033	304.12 SUBBASE COURSE, TYPE 2	1,954.00	C.Y.	100	00	195,400	00
034	402.127103 12.5 F1 TOP COURSE HMA, 70 SERIES COMPACTION	592.00	TONS	400	00	236,800	00
035	402.257903 25 F9 BINDER COURSE HMA, 70 SERIES COMPACTION	811.00	TONS	400	00	324,400	00
036	402.377903 37.5 F9 BASE COURSE HMA, 70 SERIES COMPACTION	1,091.00	TONS	400	00	436,400	00
037	407.0102 DILUTED TACK COAT	631.00	GAL.	25	00	15,775	00
038	551.010042 STEEL H-PILES (HP 10X42)	1,562.00	L.F.	200	00	312,400	00
039	551.12 SPICES FOR STEEL H-PILES	71.00	EACH	25	00	1,775	00
040	552.17 SHIELDS AND SHORING	150.00	S.F.	200	00	30,000	00

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## BID SCHEDULE FORM

COL. 1 SEQ. NO	COL. 2 ITEM NUMBER and DESCRIPTION	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 UNIT PRICE (IN FIGURES)		COL. 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
041	552.2001 HOLES IN EARTH FOR SOLDIER PILE AND LAGGING WALL	853.00	L.F.	250	00	213,250	00
042	552.2101 ROCK SOCKETS FOR SOLDIER PILE AND LAGGING WALL	303.00	L.F.	500	00	151,500	00
043	552.2201 SOLDIER PILES FOR SOLDIER PILE AND LAGGING WALL	693.00	L.F.	200	00	138,600	00
044	552.2202 SOLDIER PILES FOR SOLDIER PILE AND LAGGING WALL	451.00	L.F.	200	00	90,200	00
045	552.230201 UNTREATED WOOD LAGGING FOR SOLDIER PILE AND LAGGING WALL	3,163.00	S.F.	75	00	237,225	00
046	553.020001 COFFERDAMS (TYPE 2)	1.00	EACH	150,000	00	150,000	00
047	553.020002 COFFERDAMS (TYPE 2)	1.00	EACH	150,000	00	150,000	00
048	554.40 FILL TYPE RETAINING WALL (0 - 6 FT)	440.00	S.F.	200	00	88,000	00



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## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
049	554.41 FILL TYPE RETAINING WALL (GREATER THAN 6FT. - 12FT.)	4,125.00	S.F.	200	00	825,000	00
050	554.42 FILL TYPE RETAINING WALL (GREATER THAN 12FT. - 18FT.)	8,910.00	S.F.	200	00	1,782,000	00
051	554.43 FILL TYPE RETAINING WALL (GREATER THAN 18FT. - 24FT.)	6,710.00	S.F.	200	00	1,342,000	00
052	554.44 FILL TYPE RETAINING WALL (GREATER THAN 24FT. - 30FT.)	825.00	S.F.	200	00	165,000	00
053	554.53 FILL TYPE RETAINING WALL AESTHETIC TREATMENT -OTHER, AS SHOWN ON THE CONTRACT DOCUMENTS	25,850.00	S.F.	2	00	51,700	00
054	555.0104 FOOTING CONCRETE CLASS A (NO CONCRETE CLASS SUBSTITUTIONS PERMITTED, EXCEPT CLASS H WHERE FOOTING IS 3 FT THICK OR LESS)	171.00	C.Y.	1,500	00	256,500	00
055	555.08 FOOTING CONCRETE, CLASS HP	645.00	C.Y.	1,500	00	967,500	00
056	555.09 CONCRETE FOR STRUCTURES, CLASS HP	1,354.00	C.Y.	500	00	677,000	00

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## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
057	555.72940001 ARCHITECTURAL TREATMENT - VERTICAL CONCRETE SURFACES	1,320.00	S.F.	10	00	13,200	00
058	556.0202 EPOXY- COATED BAR REINFORCEMENT FOR STRUCTURES	111,973.00	LBS.	2	50	279,932	50
059	556.0203 GALVANIZED BAR REINFORCEMENT FOR STRUCTURES	40,966.00	LBS.	3	00	122,898	00
060	556.03 STUD SHEAR CONNECTORS FOR BRIDGES	1,927.00	EACH	10	00	19,270	00
061	557.0109 SUPERSTRUCTURE SLAB WITH INTEGRAL WEARING SURFACE - BOTTOM FORMWORK REQUIRED - TYPE 9 FRICTION	621.00	S.Y.	3,000	00	1,863,000	00
062	557.2009 STRUCTURAL APPROACH SLAB WITH INTEGRAL WEARING SURFACE - TYPE 9 FRICTION	85.00	S.Y.	1,000	00	85,000	00
063	559.16960118 PROTECTIVE SEALING OF STRUCTURAL CONCRETE	9,528.00	S.F.	5	00	47,640	00
064	559.18960118 PROTECTIVE SEALING OF STRUCTURAL CONCRETE ON NEW BRIDGE DECKS AND BRIDGE DECK OVERLAYS	6,691.00	S.F.	5	00	33,455	00



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## BID SCHEDULE FORM

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				DOLLARS	CTS	DOLLARS	CTS
065	559.19010011 PAINTING EXISTING CONCRETE SURFACES	2,530.00	S.F.	5	00	12,650	00
066	560.01 DIMENSION STONE MASONRY	341.00	S.F.	250	00	85,250	00
067	560.01010011 GRANITE COPING (STRAIGHT)	7.00	C.Y.	7,000	00	49,000	00
068	560.01020011 GRANITE COPING (RADIAL)	22.00	C.Y.	7,500	00	165,000	00
069	560.01030011 GRANITE ENTRY PIER	4.00	C.Y.	12,000	00	48,000	00
070	560.01040011 GRANITE WALL	20.00	C.Y.	7,500	00	150,000	00
071	560.06 RUBBLE STONE MASONRY LAID DRY	1,527.00	C.F.	150	00	229,050	00
072	560.07 PRECAST CONCRETE COPING	708.00	L.F.	150	00	106,200	00

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## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
073	564.510001 STRUCTURAL STEEL	508,510.00	LBS.	5	00	2,542,550	00
074	565.2022 TYPE E.B. FIXED BEARING (56K TO 111K)	2.00	EACH	3,000	00	6,000	00
075	565.2024 TYPE E.B. FIXED BEARING (169K TO 225K)	2.00	EACH	3,000	00	6,000	00
076	565.2032 TYPE E.B. EXPANSION BEARING (56 TO 111 KIPS)	2.00	EACH	3,000	00	6,000	00
077	565.2034 TYPE E.B. EXPANSION BEARING (169K TO 225K)	2.00	EACH	3,000	00	6,000	00
078	567.60 ARMORLESS BRIDGE JOINT SYSTEM	42.00	FOOT	300	00	12,600	00
079	568.11010011 STEEL ROD SAFETY RAILING	1,933.00	L.F.	<del>250</del> 250	00	483,250 2,542,550	00
080	568.12010011 HANDRAIL	1,644.00	L.F.	150	00	246,600	00





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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION

PROJECT ID: P-1STARLP

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## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
081	572.010001 STRUCTURAL STEEL PAINTING: SHOP APPLIED	17,656.00	S.F.	5	00	88,280	00
082	572.010002 STRUCTURAL STEEL PAINT SYSTEM: SHOP APPLIED	7,569.00	S.F.	5	00	37,845	00
083	580.01 REMOVAL OF STRUCTURAL CONCRETE	52.00	C.Y.	2,500	00	130,000	00
084	586.0202 DRILLING AND GROUTING BOLTS OR REINFORCING BARS (WITH NON-DESTRUCTIVE INVESTIGATION)	384.00	EACH	75	00	28,800	00
085	603.0202 NON REINFORCED CONCRETE PIPE (CLASS 1) 6 INCH DIAMETER	140.00	L.F.	50	00	7,000	00
086	603.171016 GALVANIZED STEEL END SECTIONS-PIPE (2-23" X 1/2 CORRUGATIONS) 12 INCH DIAMETER, 16 GAUGE	9.00	EACH	750	00	6,750	00
087	603.9812 SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 12 INCH DIAMETER	824.00	L.F.	50	00	41,200	00
088	604.501123 SPECIAL DRAINAGE STRUCTURE	49.00	L.F.	300	00	14,700	00

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## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS		COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS		CTS
089	605.0901 UNDERDRAIN FILLER, TYPE 1	28.00	C.Y.	100	00	2,800	00	00
090	605.1501 PERFORATED CORRUGATED POLYETHYLENE UNDERDRAIN TUBING, 4" DIAMETER	2,071.00	L.F.	25	00	51,775	00	00
091	605.1502 PERFORATED CORRUGATED POLYETHYLENE UNDERDRAIN TUBING, 6 INCH DIAMETER	952.00	L.F.	30	00	28,560	00	00
092	606.16 CORRUGATED BEAM GUIDE RAILING	25.00	L.F.	200	00	5,000	00	00
093	607.03040439 CHAIN LINK FENCE SINGLE GATE - NYCDPR	6.00	EACH	5,000	00	30,000	00	00
094	607.05040439 CHAIN LINK FENCE - NYCDPR	418.00	L.F.	150	00	62,700	00	00
095	607.06400016 PEDESTRIAN FENCING FOR BRIDGES	295.00	L.F.	150	00	44,250	00	00
096	607.30030010 STEEL CHAIN LINK FENCE WITH TOP RAIL, 8 ft HIGH	25.00	FOOT	300	00	7,500	00	00

## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
097	607.4017 OPTIONAL FENCE GATE (SINGLE LEAF 4 FEET OPENING 8 FEET HIGH)	1.00	EACH	1,500	00	1,500	00
098	607.41010010 TEMPORARY PLASTIC BARRIER FENCE	3,110.00	L.F.	10	00	31,100	00
099	607.45240011 ORNAMENTAL STEEL MESH FENCE 8 FT HIGH	1,548.00	L.F.	375	00	580,500	00
100	607.46244911 DOUBLE ORNAMENTAL STEEL MESH GATE, 8FT HIGH, 16FT OPENING	2.00	EACH	15,000	00	30,000	00
101	607.47000011 PRIVACY SLATS	6,574.00	S.F.	5	00	32,870	00
102	607.96000008 REMOVE AND DISPOSE OF EXISTING FENCE	454.00	FOOT	25	00	11,350	00
103	607.98010111 TEMPORARY CHAIN-LINK FENCE	3,199.00	L.F.	75	00	239,925	00
104	608.0101 CONCRETE SIDEWALKS AND DRIVEWAYS	19.00	C.Y.	1,500	00	28,500	00



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COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CENTS	DOLLARS	CENTS
105	608.05000039 ASPHALT BLOCK PAVEMENT ON ASPHALT CONCRETE BASE	1,839.00	S.Y.	500	00	919,500	00
106	608.11 GROUTED STONE BLOCK PAVED SIDEWALKS AND DRIVEWAYS (OPTIONAL CONCRETE SETTING BED)	168.00	S.Y.	500	00	84,000	00
107	608.73166108 BOLLARD-REMOVABLE, WITHOUT LIGHTING, WIDTH OVER 11 INCHES, HEIGHT OVER 36 INCHES	2.00	EACH	1,500	00	3,000	00
108	609.02120011 RAISED GRANITE CURB	311.00	L.F.	500	00	155,500	00
109	609.02130011 FLUSH GRANITE CURB	36.00	L.F.	350	00	12,600	00
110	609.04120011 CONCRETE CURB-NYCDPR	534.00	L.F.	50	00	26,700	00
111	609.15100011 STEEL EDGING	700.00	L.F.	25	00	17,500	00
112	609.26020111 CONCRETE CURB FACED (NYC) TYPE D	50.00	L.F.	100	00	5,000	00

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				DOLLARS	CTS	DOLLARS	CTS
113	610.1102 MULCH FOR PLANTING TYPE C - USDA-APHIS PROTOCOL WOOD CHIPS	96.00	C.Y.	100	00	9,600	00
114	610.11041309 DECORATIVE STONE MULCH 4" - 6" STONE SIZE	136.00	C.Y.	200		27,200	00
115	610.1402 TOPSOIL - ROADSIDE	834.00	C.Y.	100	00	83,400	00
116	610.1403 TOP SOIL - LAWNS	169.00	C.Y.	100	00	16,900	00
117	610.1405 TOP SOIL - ACIDIC	2,990.00	C.Y.	100	00	299,000	00
118	610.17 WILDFLOWER SEEDING	26,860.00	S.Y.	4	00	107,440	00
119	610.18 SODDING	1,509.00	S.Y.	25	00	37,725	00
120	610.21 MOWING	4,985.00	S.Y.	1	00	4,985	00



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				DOLLARS	CTS	DOLLARS	CTS
121	610.22 MOWING LIMITS MARKERS	407.00	EACH	100	00	40,700	00
122	611.0161 PLANTING - MAJOR DECIDUOUS TREES - 2 1/2 INCH CALIPER BALL & BURLAP, FIELD POTTED OR FIELD	2.00	EACH	3,500	00	7,000	00
123	611.0191 PLANTING - MAJOR DECIDUOUS TREES - 4 INCH CALIPER BALL & BURLAP, FIELD POTTED OR FIELD	48.00	EACH	3,500	00	168,000	00
124	611.0211 PLANTING - MINOR DECIDUOUS TREES - SIZE AS SPECIFIED BALL & BURLAP, FIELD POTTED OR FIELD	62.00	EACH	1,500	00	93,000	00
125	611.0432 PLANTING - DECIDUOUS SHRUBS - 18 INCH HEIGHT/SPREAD CONTAINER OR BOX GROWN	3,912.00	EACH	100	00	391,200	00
126	611.0441 PLANTING DECIDUOUS SHRUBS - 2 FOOT HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	42.00	EACH	100	00	4,200	00
127	611.0451 PLANTING DECIDUOUS SHRUBS - 3 FOOT HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	1,209.00	EACH	150	00	181,350	00
128	611.0471 PLANTING DECIDUOUS SHRUBS - 5 FOOT HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	94.00	EACH	500	00	47,000	00



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				DOLLARS	CTS	DOLLARS	CTS
129	611.0531 PLANTING EVERGREEN SHRUBS - 18 INCH HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	216.00	EACH	160	00	34,560	00
130	611.0661 PLANTING - VINES, GROUNDCOVERS - NUMBER 2 CONTAINER - CONTAINER GROWN	265.00	EACH	100	00	26,500	00
131	611.0731 PLANTING - HERBACEOUS PLANTS - NUMBER SP5 CONTAINER - CONTAINER GROWN	2,406.00	EACH	25	00	60,150	00
132	611.19010024 POST PLANTING CARE WITH REPLACEMENT - MAJOR DECIDUOUS TREES	50.00	EACH	750	00	37,500	00
133	611.19020024 POST PLANTING CARE WITH REPLACEMENT - MINOR DECIDUOUS TREES	62.00	EACH	300	00	18,600	00
134	611.19040024 POST PLANTING CARE WITH REPLACEMENT - DECIDUOUS SHRUBS	5,473.00	EACH	25	00	136,825	00
135	611.19050024 POST PLANTING CARE WITH REPLACEMENT - EVERGREEN SHRUBS	216.00	EACH	25	00	5,400	00
136	611.19070024 POST PLANTING CARE WITH REPLACEMENT - HERBACEOUS PLANTS	2,406.00	EACH	60	00	144,360	00

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				DOLLARS	CTS	DOLLARS	CTS
137	614.0411 CARE OF TREES UP TO 12 INCHES DIAMETER AT BREAST HEIGHT - PRUNING	25.00	EACH	250	00	6,250	00
138	614.0421 CARE OF TREES OVER 12 TO 24 INCHES DIAMETER AT BREAST HEIGHT - PRUNING	21.00	EACH	500	00	10,500	00
139	614.0431 CARE OF TREES OVER 24 TO 36 INCHES DIAMETER AT BREAST HEIGHT - PRUNING	4.00	EACH	750	00	3,000	00
140	614.060104 TREE REMOVAL OVER 4 INCHES TO 6 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	129.00	EACH	250	00	32,250	00
141	614.060204 TREE REMOVAL OVER 6 INCHES TO 12 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	210.00	EACH	500	00	105,000	00
142	614.060304 TREE REMOVAL OVER 12 INCHES TO 18 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	39.00	EACH	1,000	00	39,000	00
143	614.060404 TREE REMOVAL OVER 18 INCHES TO 24 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	15.00	EACH	1,500	00	22,500	00
144	614.060504 TREE REMOVAL OVER 24 INCHES TO 36 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	8.00	EACH	2,000	00	16,000	00



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				DOLLARS	CTS	DOLLARS	CTS
145	614.09 TREE ROOT PRUNING	1,172.00	L.F.	50	00	58,600	00
146	614.09010039 TREE ROOT PINNING - NYCDPR (TREE ROOT DIAMETER 1" AND GREATER)	440.00	EACH	100	00	44,000	00
147	615.01000139 SKATEBOARD DETERRENT	144.00	EACH	150	00	21,600	00
148	615.01010110 LITTER (TRASH) RECEPTACLE TYPE 1	10.00	EACH	2,000	00	20,000	00
149	615.01080339 DRINKING FOUNTAIN TYPE "E" HI-LO WITH DOG BOWL - NYCDPR	1.00	EACH	5,000	00	5,000	00
150	615.01080439 DRINKING FOUNTAIN TYPE "E" HI-LO WITH CHILD BOWL - NYCDPR	2.00	EACH	5,000	00	10,000	00
151	615.08020239 1964 WORLD'S FAIR BENCH - RPL SLATS - BACK & ARMS (NYCDPR)	185.00	L.F.	1,000 <del>1,950</del>	00	185,000	00
152	615.27020010 BICYCLE RACK (DESIGN CAPACITY 2 BICYCLES)	12.00	EACH	3,000	00	36,000	00

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COL 1 SEQ. NO.	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
153	615.33010011 TEMPORARY WOODEN TREE GUARD WITHOUT TREE WRAP - NYCDPR	7.00	EACH	500	00	3,500	00
154	615.43000011 GROUND SURFACE PROTECTION MATS	7,728.00	S.F.	50	00	386,400	00
155	615.92010011 PRECAST CONCRETE STEPS (STRAIGHT)	13.00	C.Y.	1,500	00	19,500	00
156	615.92020011 PRECAST CONCRETE STEPS (RADIAL)	2.00	C.Y.	2,500	00	5,000	00
157	615.99060104 LANDSCAPE BOULDERS TYPE 1	17.00	EACH	750	00	12,750	00
158	615.99060204 LANDSCAPE BOULDERS TYPE 2	37.00	EACH	1,500	00	55,500	00
159	615.99060304 LANDSCAPE BOULDERS TYPE 3	36.00	EACH	2,000	00	72,000	00
160	615.99060404 LANDSCAPE BOULDERS TYPE 4	11.00	EACH	2,500	00	27,500	00



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## BID SCHEDULE FORM

COL. 1 SEQ. NO.	COL. 2 ITEM NUMBER and DESCRIPTION	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 UNIT PRICE (IN FIGURES)		COL. 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
161	617.01010024 CONTROLLING INVASIVE PLANT SPECIES WITH HERBICIDES	165,977.00	S.F.	0	25	41494	25
162	617.10000024 DISPOSAL OF MATERIAL CONTAINING INVASIVE PLANT SPECIES	5,193.00	C.Y.	25	00	129825	00
163	617.11000024 EQUIPMENT CLEANING FOR INVASIVE PLANT SPECIES	1.00	L.S.	50000	00	50000	00
164	619.02970001 CONSTRUCTION SIGNS	14.00	EACH	1500	00	21000	00
165	619.04 TYPE III CONSTRUCTION BARRICADE	30.00	EACH	200	00	6000	00
166	619.07010001 PLASTIC CONSTRUCTION DRUMS	35.00	EACH	200	00	7000	00
167	620.02 STONE FILLING (FINE)	25.00	C.Y.	200	00	5000	00
168	620.03 STONE FILLING (LIGHT)	50.00	C.Y.	200	00	10000	00

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
169	620.05 STONE FILLING (HEAVY)	61.00	C.Y.	200	00	12200	00
170	620.06010002 EXTRA HEAVY RIP-RAP	8.00	TONS	100	00	800	00
171	620.14020009 EXTRA HEAVY STONE, TYPE B	347.00	C.Y.	200	00	69400	00
172	621.04 CLEANING DRAINAGE STRUCTURES	8.00	EACH	500	00	4000	00
173	623.10 SCREENED GRAVEL (IN-PLACE MEASURE)	5.00	C.Y.	100	00	500	00
174	623.10010011 STONE SCREENINGS SURFACE-NYCDPR	22.00	S.Y.	100	00	2200	00
175	625.070001 SUPPLEMENTAL SITE SURVEY	1.00	L.S.	150,000	00	150,000	00
176	634.69000010 RODENT CONTROL SURVEY, BAITING AND MAINTENANCE	1.00	L.S.	25000	00	25000	00

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					CTS		CTS
177	634.90030011 RODENT AND VERMIN CONTROL - INITIAL SURVEY, BAITING AND SANITATION	1.00	L.S.	25000	00	25000	00
178	634.90040011 RODENT AND VERMIN CONTROL - MAINTENANCE PROGRAM	27.00	MONTH	500	00	13500	00
179	634.99020017 VIBRATION MONITORING (NONBLASTING)	1.00	L.S.	20000	00	20000	00
180	637.03 CONCRETE CYLINDER CURING BOX	1.00	EACH	3000	25	3000	25
181	637.14 ENGINEER'S FIELD OFFICE - TYPE 4	33.00	MONTH	15000	00	495000	00
182	637.34 OFFICE TECHNOLOGY AND SUPPLIES PRICE BID SHALL BE FOR THE DOLLAR-CENTS OF \$ 10,000.00	1.00	DC	10,000	00	\$10,000	00
183	645.35010010 INTERPRETIVE SIGN PANEL	9.00	S.F.	500	00	4500	00



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				DOLLARS	CTS	DOLLARS	CTS
184	645.5101 GROUND MOUNTED SIGN PANELS WITHOUT Z-BARS	21.00	S.F.	200	00	4200	00
185	645.5102 GROUND MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF WITH Z-BARS	16.00	S.F.	200	00	3200	00
186	645.5201 GROUND MOUNTED SIGN PANELS WITHOUT Z-BARS HIGH- VISIBILITY SHEETING	5.00	S.F.	200	00	1000	00
187	645.5202 GROUND-MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF, WITH Z-BARS, HIGH-VISIBILITY SHEETING	5.00	S.F.	200	00	1000	00
188	645.81 TYPE A SIGN POST	9.00	EACH	500	00	4500	00
189	645.81001039 PARK SIGN - IDENTIFICATION; ID-P - NYCDPR	4.00	EACH	2000	00	8000	00
190	645.81002039 PARK SIGN - FEATURE; ID-F - NYCDPR	3.00	EACH	2000	00	6000	00
191	645.81003039 PARK SIGN - ORIENTATION; O-P - NYCDPR	2.00	EACH	2000	00	4000	00



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				DOLLARS	CTS	DOLLARS	CTS
192	645.81004039 PARK SIGN - DIRECTIONAL; DIR - NYCDPR	12.00	EACH	2000	00	24000	00
193	645.8107 CONCRETE FOOTING FOR TYPE A, HIGH-CAPACITY TYPE A OR BREAKAWAY WOODEN SIGN POSTS WITH	9.00	EACH	1500	00	13500	00
194	645.85 POLE MOUNTED SIGN SUPPORT SYSTEM (BAND MOUNTED)	8.00	EACH	1500	00	12000	00
195	647.61 REMOVE AND DISPOSE SIGNS, GROUND MOUNTED TYPE A SIGN SUPPORTS AND FOUNDATION - SIZE	5.00	EACH	500	00	2500	00
196	648.01 DRILL HOLE, 2 1/2 INCH DIAMETER 0 TO 50 FEET DEPTH RANGE	264.00	FOOT	100	00	26400	00
197	648.15 ROCK CORE DRILLING NX	44.00	FOOT	400	00	17600	00
198	648.17 FURNISHING EQUIPMENT FOR MAKING BORINGS	1.00	EACH	10000	00	10000	00
199	648.21 GROUTING 2 1/2 INCH BORE HOLE	308.00	FOOT	50	00	15400	00

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				DOLLARS	CTS	DOLLARS	CTS
200	651.01000111 HANDS FREE CALL BOX - BLUE LIGHT TOWER	2.00	EACH	10000	00	20000	00
201	655.00110011 CAST COVER FOR MANHOLE (NYCDPR)	3.00	EACH	1000	00	3000	00
202	655.08010010 CAST FRAME F1, WITHOUT CURB BOX AND WITH PARALLEL BAR GRATE 6 PCB	5.00	EACH	1500	00	7500	00
203	660.97020111 STORM SEWER CLEANOUT ASSEMBLY	17.00	EACH	500	00	8500	00
204	663.0604 COPPER WATER SERVICE PIPE 1"	316.00	L.F.	60	00	18960	00
205	663.0606 COPPER WATER SERVICE PIPE 1 1/2"	2,382.00	L.F.	75	00	178650	00
206	663.12010039 PLUG VALVE - 1" NPS - NYCDPR	7.00	EACH	1500	00	10500	00
207	663.13010039 GROUND HYDRANT - 1" DIA. NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION	4.00	EACH	5000	00	20000	00



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## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
208	670.75020011 GROUND WIRE NUMBER 2 AWG	891.00	L.F.	10	00	8910	00
209	675.60000001 SPECIAL PROCEDURES FOR RAILROAD FACILITIES - TRACK MONITORING	260.00	CD	250	00	65000	00
210	685.01 WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 15 MILS	12,198.00	FOOT	2	00	24396	00
211	685.14 WHITE EPOXY REFLECTORIZED PAVEMENT SYMBOLS - 20 MILS	111.00	EACH	50	00	5550	00
212	697.03 FIELD CHANGE PAYMENT (Fixed Price) PRICE BID SHALL BE FOR THE DOLLAR-CENTS OF \$ 1,000,000.00	1.00	DC	1,000,000	00	\$1,000,000	00
213	SL-20.01.02 FURNISH AND INSTALL FOUNDATION FOR TYPE "WF" LAMPOST, AS PER DRAWING E-5124	53.00	EACH	1100	00	58300	00
214	SL-20.02.02 FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION, AS PER DRAWING E-3788	1.00	EACH	1500	00	1500	00

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[REVISION # 3]



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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN  
PROJECT ID: P-1STARLP  
CONTRACT PIN: 8502017HW0048C

## BID SCHEDULE FORM

SECTION	ITEM NUMBER AND DESCRIPTION	QUANTITY	UNIT	ESTIMATED PRICE	UNIT PRICE	TOTAL PRICE
215	SL-21.03.23 FURNISH AND INSTALL FABRICATED STEEL TRANSFORMER BASE AND FABRICATED STEEL 25 FOOT SHAFT (TWIN ARMS AT 90 DEGREES OR 180 DEGREES)	1.00	EACH	3500	00	3500 00
216	SL-21.04.55 FURNISH AND INSTALL TYPE FLUSHING MEADOWS PARK LAMPPOST AS PER STD. DWG. H-8305.	53.00	EACH	2500	00	132500 00
217	SL-22.15.05 FURNISH AND INSTALL 70 WATT MAX LED FLUSHING MEADOWS PARK TYPE LUMINAIRE AS PER SPECIFICATION 474	53.00	EACH	1700	00	90100 00
218	SL-23.01.17 INSTALL UNDER DECK LUMINAIRE SPECIFICATION # 464, LAMP FURNISH BY CONTRACTOR	3.00	EACH	1000	00	3000 00
219	SL-23.01.18 FURNISH LED UNDER DECK LUMINAIRE AS PER SPECIFICATION #464	3.00	EACH	1100	00	3300 00
220	SL-24.02.09 FURNISH AND INSTALL TROUGH FOR THREE FLOODLIGHTS OR THREE PHOTOELECTRIC CONTROLS, AS PER DRAWING J-5229	1.00	EACH	1000	00	1000 00
221	SL-26.01.04 FURNISH AND INSTALL LONG LIFE PHOTO ELECTRIC CONTROL WITH SURGE PROTECTION FOR LED LIGHT	3.00	EACH	100	00	300 00
222	SL-28.02.02 FURNISH AND INSTALL RECEPTACLE FOR PLUG-IN PHOTOELECTRIC CONTROL	3.00	EACH	100	00	300 00

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# BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
215	SL-21.03.23 FURNISH AND INSTALL FABRICATED STEEL TRANSFORMER BASE AND FABRICATED STEEL 25 FOOT SHAFT (TWIN ARMS AT 90 DEGREES OR 180 DEGREES)	1.00	EACH	3500	00	3500	00
216	SL-21.04.55 FURNISH AND INSTALL TYPE "FLUSHING MEADOWS PARK" LAMPPOST AS PER STD. DWG. H-5305.	53.00	EACH	2500	00	132500	00
217	SL-22.15.05 FURNISH AND INSTALL 70 WATT MAX LED "FLUSHING MEADOW PARK" TYPE LUMINAIRE AS PER SPECIFICATION 474	53.00	EACH	1700	00	90100	00
218	SL-23.01.17 INSTALL UNDER DECK LUMINAIRE SPECIFICATION # 464, LAMP FURNISH BY CONTRACTOR	3.00	EACH	1000	00	3000	00
219	SL-23.01.18 FURNISH LED UNDER DECK LUMINAIRE AS PER SPECIFICATION #464	3.00	EACH	1100	00	3300	00
220	SL-24.02.09 FURNISH AND INSTALL TROUGH FOR THREE FLOODLIGHTS OR THREE PHOTOELECTRIC CONTROLS, AS PER DRAWING J-5229	1.00	EACH	1000	00	3000	00
221	SL-26.01.04 FURNISH AND INSTALL LONG LIFE PHOTO ELECTRIC CONTROL WITH SURGE PROTECTION FOR LED LIGHT	3.00	EACH	100	00	300	00
222	SL-26.02.02 FURNISH AND INSTALL RECEPTACLE FOR PLUG-IN PHOTOELECTRIC CONTROL	3.00	EACH	100	00	300	00

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[REVISION # 3]



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

PROJECT ID: P-1STARLP  
CONTRACT PIN: 8502017HW0048C

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## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS : CTS		COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS : CTS	
223	SL-27.01.01 FURNISH AND INSTALL ALUMINUM TAG ON A LAMPPOST, AS PER DRAWING D-2861	53.00	EACH	250	00	13250	00
224	SL-28.01.02 FURNISH AND INSTALL COPPER WELD GROUND ROD AND CLAMP IN DIRT AREA, BURIED BOX, SIDEWALK OR ROADWAY BOX, AS PER DRAWING H-5019.	13.00	EACH	400	00	5200	00
225	SL-33.01.01 FURNISH AND INSTALL NO. 12 AWG XLP COPPER WIRE OR EQUAL IN CONDUIT	370.00	L.F.	5	00	1850	00
226	SL-33.01.02 FURNISH AND INSTALL NO. 6 AWG XLP COPPER CABLE OR EQUAL IN CONDUIT	4,455.00	L.F.	5	00	22275	00
227	SL-33.01.03 FURNISH AND INSTALL NO. 2 AWG XLP COPPER CABLE OR EQUAL IN CONDUIT	18,277.00	L.F.	7	00	127939	00
228	SL-33.03.01 FURNISH AND INSTALL #6 BARE COPPER CONDUCTOR IN CONDUIT OR OVERHEAD.	7,026.00	L.F.	5	00	35130	00
229	SL-35.03.03 FURNISH AND INSTALL 1-1/2" HOT DIPPED GALVANIZED STEEL CONDUIT IN UNPAVED AREA	7.00	L.F.	40	00	280	00
230	SL-35.03.04 FURNISH AND INSTALL 2" HOT DIPPED GALVANIZED STEEL CONDUIT IN UNPAVED AREA	6,428.00	L.F.	45	00	289260	00



Department of  
Design and  
Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

PROJECT ID: P-1STARLP  
CONTRACT PIN: 8502017HW0048C

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## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
231	SL-35.03.05 FURNISH AND INSTALL 3" HOT DIPPED GALVANIZED STEEL CONDUIT IN UNPAVED AREA.	209.00	L.F.	50	00	10450	00
232	SL-35.09.01 FURNISH AND INSTALL 3/4" HOT DIPPED GALVANIZED STEEL CONDUIT ON STRUCTURE.	185.00	L.F.	60	00	11100	00
233	SL-35.09.04 FURNISH AND INSTALL 2" HOT DIPPED GALVANIZED STEEL CONDUIT ON STRUCTURE	812.00	L.F.	75	00	60900	00
234	SL-37.01.02 FURNISH AND INSTALL A POLE MOUNTED STEEL BOX YP TO 1728 CUBIC INCHES MAXIMUM.	1.00	EACH	3000	00	3000	00
235	SL-37.05.09 FURNISH AND INSTALL TYPE 2418 ROADWAY CONCRETE BOX WITH CAST IRON FRAME AND COVER WITH TAMPER PROOF BOLTS AS PER DWG J-3179B.	23.00	EACH	3500	00	80500	00
236	SL-37.05.11 FURNISH AND INSTALL TYPE 3624 ROADWAY CONCRETE BOX WITH CAST IRON FRAME AND COVER WITH TAMPER PROOF BOLTS AS PER DWG J-3179B.	6.00	EACH	4000	00	24000	00
237	SL-37.08.04 FURNISH AND INSTALL 30"X18"X12" CAST IRON JUNCTION BOX FLUSH MOUNTED WITH FRAME AND COVER SIZE #4 AS PER DWG. D- 2280	1.00	EACH	6000	00	6000	00

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Department of  
Design and  
Construction

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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION

PROJECT ID: P-1STARLP

DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502017HW0048C

## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
238	SL-38.03.02 FURNISH AND INSTALL FLUSH MOUNTED OR PEDESTAL MOUNTED SIX (6) RELAY CONTROL CABINET AS PER DWGS H-3441, H-5078, H- 5222A.	1.00	EACH	25000	00	25000	00
239	SL-38.04.02 FURNISH AND INSTALL CONCRETE PEDESTAL FOR SIX (6) RELAY CONTROL CABINET AS PER DWG J-5078.	1.00	EACH	25000	00	25000	00

SUB-TOTAL: \$ 28,615,031.00

240	699.040001 MOBILIZATION BID PRICE OF MOBILIZATION SHALL NOT EXCEED 4% OF THE ABOVE SUB-TOTAL PRICE.	1.00	L.S.	1,100,000	00	1,100,000	00
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TOTAL BID PRICE: \$ 29,715,031.00

PLEASE BE SURE A LEGIBLE BID IS ENTERED FOR EACH ITEM.  
THE BIDDER SHALL INSERT THE TOTAL BID PRICE IN  
THE BID FORM ON PAGE C-4 OF THIS BID BOOKLET.

**BID FORM  
THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

**BID FOR FURNISHING ALL LABOR AND  
MATERIAL NECESSARY AND REQUIRED FOR:**

**PROJECT ID: P-1STARLP**

**BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II, STAGE 2 BRIDGE THE CRITICAL  
SOUTH BRONX GAP**

**BETWEEN WESTCHESTER AVENUE AND EAST 174TH STREET**

**INCLUDING CONSTRUCTION OF EAST 172ND STREET PEDESTRIAN BRIDGE OVER AMTRAK  
(BIN#: 2-24124-0), SOUTH GREENWAY PEDESTRIAN BRIDGE OVER THE BRONX RIVER (BIN#: 2-26990-0), DRAINAGE, RETAINING STRUCTURES, GREENWAY, STREET LIGHTING,  
LANDSCAPING AND TRAFFIC WORK**

Together With All Work Incidental Thereto

**BOROUGH OF THE BRONX  
CITY OF NEW YORK**

Name of Bidder: MLJ Contracting Corp

Date of Bid Opening: May 31, 2018

Bidder is: (Check one, whichever applies)    Individual ( )    Partnership ( )    Corporation (x)

Place of Business of Bidder: 1720 Whitestone Expwy, Suite 300, Whitestone NY 11357

Bidder's Telephone Number: 646-813-6770      Fax Number: 718-357-4818

Bidder's E-Mail Address: rocken@mljcontracting.com

Residence of Bidder (If Individual): \_\_\_\_\_

If Bidder is a Partnership, fill in the following blanks:

Names of Partners

Residence of Partners

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If Bidder is a Corporation, fill in the following blanks:

Organized under the laws of the State of New York

Name and Home Address of President: Richard Ocken

1720 Whitestone Expwy., Suite 300 Whitestone NY 11357

Name and Home Address of Secretary: Frank Cara

1720 Whitestone Expwy., Suite 300, Whitestone NY 11357

Name and Home Address of Treasurer: Robert Squillante

41 Kimi Lane, Sayville, NY 11782

## BID FORM

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The above-named Bidder affirms and declares:

1. The said bidder is of lawful age and the only one interested in this bid; and no person, firm or corporation other than hereinbefore named has any interest in this bid, or in the Contract proposed to be taken.
2. By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief: (1) the prices in this bid have been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; (2) unless otherwise required by law, the prices quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and (3) No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.
3. No councilman or other officer or employee or person whose salary is payable in whole or in part from the City Treasury is directly or indirectly interested in this bid, or in the supplies, materials, equipment, work or labor to which it relates, or in any of the profits thereof.
4. The bidder is not in arrears to the City of New York upon debt or contract or taxes, and is not a defaulter, as surety or otherwise, upon any obligation of the City of New York, and has not been declared not responsible, or disqualified, by any agency of the City of New York or State of New York, nor is there any proceeding pending relating to the responsibility or qualification of the bidder to receive public contracts except as set forth on the Affirmation included as page C-6 of this Bid Booklet.

The bidder hereby affirms that it has paid all applicable City income, excise and other taxes for all years it has conducted business activities in New York City.

5. The bidder, as an individual, or as a member, partner, director or officer of the bidder, if the same be a firm, partnership or corporation, executes this document expressly warranting and representing that should this bid be accepted by the City and the Contract awarded to him, he and his subcontractors engaged in the performance: (1) will comply with the provisions of Section 6-108 of the Administrative Code of the City of New York and the non-discrimination provisions of Section 220a of the New York State Labor Law, as more expressly and in detail set forth in the Agreement; (2) will comply with Section 6-109 of the Administrative Code of the City of New York in relation to minimum wages and other stipulations as more expressly and in detail set forth in the Agreement; (3) have complied with the provisions of the aforesaid laws since their respective effective dates, and (4) will post notices to be furnished by the City, setting forth the requirements of the aforesaid laws in prominent and conspicuous places in each and every plant, factory, building and structure where employees engaged in the performance of the Contract can readily view it, and will continue to keep such notices posted until the supplies, materials and equipment, or work labor and services required to be furnished or rendered by the Contractor have been finally accepted by the City. In the event of any breach or violation of the foregoing, the Contractor may be subject to damages, liquidated or otherwise, cancellation of the Contract and suspension as a bidder for a period of three years. (The words, "the bidder", "he", "his", and "him" where used herein shall mean the individual bidder, firm, partnership or corporation executing this bid).



6. Compliance Report

The bidder, as an individual, or as a member, partner, director, or officer of the bidder, if the same be a firm, partnership, or corporation, (1) represents that his attention has been specifically drawn to Executive Order No. 50, dated, April 25, 1980, on Equal Employment Compliance of the contract, and (2) warrants that he will comply with the provisions of Executive Order No. 50. The Employment Report must be submitted as part of the bid.

The bidder, as an individual, or as a member, partner, director, or officer of the bidder, if the same be a firm, partnership, or corporation, executes this document expressly warranting that he will comply with: (1) the provision of the contract on providing records, Chapter 8.

7. By submission of this bid, the bidder certifies that it now has and will continue to have the financial capability to fully perform the work required for this contract. Any award of this contract will be made in reliance upon such certification. Upon request therefor, the bidder will submit written verification of such financial capability in a form that is acceptable to the department.

8. In accordance with Section 165 of the State Finance Law, the bidder agrees that tropical hardwoods, as defined in Section 165 of the State Finance Law, shall not be utilized in the performance of this Contract, except as the same are permitted by the foregoing provision of law.

9. The bidder has visited and examined the site of the work and has carefully examined the Contract in the form approved by the Corporation Counsel, and will execute the Contract and perform all its items, covenants and conditions, and will provide, furnish and deliver all the work, materials, supplies, tools and appliances for all labor and materials necessary or required for the hereinafter named work, all in strict conformity with the Contract, for the prices set forth in the Bid Schedule:

10. M/WBE UTILIZATION PLAN: By signing its bid, the bidder agrees to the Vendor Certification and Required Affirmations set forth below, unless a full waiver of the Participation Goals is granted. The Vendor Certification and Required Affirmations will be deemed to satisfy the requirement to complete Section V of Part II of Schedule B: M/WBE Utilization Plan.

**Section V: Vendor Certification and Required Affirmations:**

I hereby:

- 1) acknowledge my understanding of the M/WBE participation requirements as set forth in this Contract and the pertinent provisions of Section 6-129 of the Administrative Code of the City of New York and the rules promulgated thereunder;
- 2) affirm that the information supplied in support of the M/WBE Utilization Plan is true and correct;
- 3) agree, if awarded this Contract, to comply with the M/WBE participation requirements of this Contract, the pertinent provisions of Section 6-129, and the rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract;
- 4) agree and affirm that it is a material term of this Contract that the Vendor will award the total dollar value of the M/WBE Participation Goals to certified MBEs and/or WBEs, unless a full waiver is obtained or such goals are modified by the Agency; and
- 5) agree and affirm, if awarded this Contract, to make all reasonable, good faith efforts to meet the M/WBE Participation Goals, or If a partial waiver is obtained or such goals are modified by the Agency, to meet the modified Participation Goals by soliciting and obtaining the participation of certified MBE and/or WBE firms.

**BID FORM**

**PROJECT ID. P-1STARLP**

**TOTAL BID PRICE:** In the space provided below, the Bidder shall indicate its Total Bid Price in figures. Such Total Bid Price is set forth on the final page of the Bid Schedule.

**TOTAL BID PRICE:  
(a/k/a BID PROPOSAL)**

\$ 29,715,031.<sup>00</sup>  
BB 5/31/18

**BIDDER'S SIGNATURE AND AFFIDAVIT**

**Bidder:** MLJ Contracting Corp.

**By:**

  
(Signature of Partner or corporate officer)



**Attest:  
(Corporate Seal)**

**Secretary of Corporate Bidder**

**Affidavit on the following page should be subscribed  
and sworn to before a Notary Public**

**BID FORM (TO BE NOTARIZED)**

**AFFIDAVIT WHERE BIDDER IS AN INDIVIDUAL**

STATE OF NEW YORK, COUNTY OF \_\_\_\_\_ ss:

\_\_\_\_\_ being duly sworn says:  
I am the person described in and who executed the foregoing bid, and the several matters therein stated are in all respects true.

\_\_\_\_\_  
(Signature of the person who signed the Bid)

Subscribed and sworn to before me this  
\_\_\_\_\_ day of \_\_\_\_\_,

\_\_\_\_\_  
Notary Public

**AFFIDAVIT WHERE BIDDER IS A PARTNERSHIP**

STATE OF NEW YORK, COUNTY OF \_\_\_\_\_ ss:

\_\_\_\_\_ being duly sworn says:  
I am a member of \_\_\_\_\_ the firm described in and which executed the foregoing bid. I subscribed the name of the firm thereto on behalf of the firm, and the several matters therein stated are in all respects true.

\_\_\_\_\_  
(Signature of Partner who signed the Bid)

Subscribed and sworn to before me this  
\_\_\_\_\_ day of \_\_\_\_\_,

\_\_\_\_\_  
Notary Public

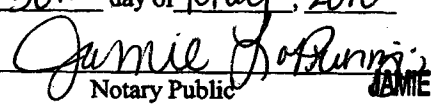
**AFFIDAVIT WHERE BIDDER IS A CORPORATION**

STATE OF NEW YORK, COUNTY OF Queens ss:  
Richard Ocken

\_\_\_\_\_ being duly sworn says:  
I am the President of the above named corporation whose name is subscribed to and which executed the foregoing bid. I reside at Manhattan, NY  
I have knowledge of the several matters therein stated, and they are in all respects true.

  
(Signature of Corporate Officer who signed the Bid)

Subscribed and sworn to before me this  
30th day of May, 2018

  
Notary Public

**JAMIE LOPRINZI**  
**NOTARY PUBLIC, STATE OF NEW YORK**  
**QUEENS COUNTY**  
**LC # 01LO6138413**  
**COMM. EXP 3/25/20 22**

**AFFIRMATION**

**PROJECT ID. P-1STARLP**

The undersigned bidder affirms and declares that said bidder is not in arrears to the City of New York upon debt, contract or taxes and is not a defaulter, as surety or otherwise, upon obligation to the City of New York, and has not been declared not responsible, or disqualified, by any agency of the City of New York, nor is there any proceeding pending relating to the responsibility or qualification of the bidder to receive public contracts except: NONE

(If none, the bidder shall insert the word "None" in the space provided above.)

Full Name of Bidder: MLJ Contracting Corp  
Address: 1720 Whitestone Expwy, Suite 300  
City Whitestone State NY Zip Code 11357

**CHECK ONE BOX AND INCLUDE APPROPRIATE NUMBER:**

☐ A - Individual or Sole Proprietorship\*  
SOCIAL SECURITY NUMBER

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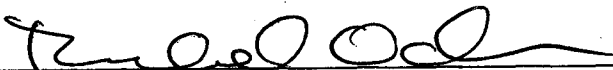
☐ B - Partnership, Joint Venture or other unincorporated organization  
EMPLOYER IDENTIFICATION NUMBER

-----

☒ C- Corporation  
EMPLOYER IDENTIFICATION NUMBER

82-2494014

-----

By:   
Signature

Title: President

If a corporation, place seal here

This affirmation must be signed by an officer or duly authorized representative.

\*Under the Federal Privacy Act the furnishing of Social Security Numbers by bidders on City contracts is voluntary. Failure to provide a Social Security Number will not result in a bidder's disqualification. Social Security Numbers will be used to identify bidders, proposers or vendors to ensure their compliance with laws, to assist the City in enforcement of laws, as well as to provide the City a means of identifying of businesses which seek City contracts.

BID BOND 1  
FORM OF BID BOND

KNOW ALL MEN BY THESE PRESENTS. That we, MLJ Contracting, LLC  
1720 Whitestone Expressway, Suite 300, Whitestone, NY 11357

hereinafter referred to as the "Principal", and Liberty Mutual Insurance Company  
175 Berkeley St., Boston, MA 02116

hereinafter referred to as the "Surety" are held and firmly bound to THE CITY OF NEW YORK,  
hereinafter referred to as the "CITY", or to its successors and assigns in the penal sum of \_\_\_\_\_

Ten Percent of Proposal Price

(\$ 10% of P.P. ), Dollars lawful money of the United States, for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

Whereas, the Principal is about to submit (or has submitted) to the City the accompanying proposal, hereby made a part hereof, to enter into a contract in writing for Project ID: P-1STARLP

Bronx River Greenway: Starlight Park Phase II, Stage 2 Bridge The Critical South Bronx Gap

Between Westchester Avenue and East 174th Street

NOW, THEREFORE, the conditions of this obligation are such that if the Principal shall not withdraw said Proposal without the consent of the City for a period of forty-five (45) days after the opening of bids and in the event of acceptance of the Principal's Proposal by the City, if the Principal shall:

(a) Within ten (10) days after notification by the City, execute in quadruplicate and deliver to the City all the executed counterparts of the Contract in the form set forth in the Contract Documents, in accordance with the proposal as accepted, and

(b) Furnish a performance bond and separate payment bond, as may be required by the City, for the faithful performance and proper fulfillment of such Contract, which bonds shall be satisfactory in all respects to the City and shall be executed by good and sufficient sureties, and

(c) In all respects perform the agreement created by the acceptance of said Proposal as provided in the Information for Bidders, bound herewith and made a part hereof, or if the City shall reject the aforesaid Proposal, then this obligation shall be null and void; otherwise to remain in full force and effect.

BID BOND 2

In the event that the Proposal of the Principal shall be accepted and the Contract be awarded to him the Surety hereunder agrees subject only to the payment by the Principal of the premium therefore, if requested by the City, to write the aforementioned performance and payment bonds in the form set forth in the Contract Documents.

It is expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

There shall be no liability under this bond if, in the event of the acceptance of the Principal's Proposal by the City, either a performance bond or payment bond, or both, shall not be required by the City on or before the 30th day after the date on which the City signs the Contract.

The surety, for the value received, hereby stipulates and agrees that the obligations of the Surety and its bond shall in no way be impaired or affected by any postponements of the date upon which the City will receive or open bids, or by any extensions of the time within which the City may accept the Principal's Proposal, or by any waiver by the City of any of the requirements of the Information for Bidders, and the Surety hereby waives notice of any such postponements, extensions, or waivers.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers the 25th day of May, 2018.

(Seal)

MLJ Contracting, LLC (L.S.)  
Principal

By: Michael Ode

(Seal)

Liberty Mutual Insurance Company  
Surety

By: Thomas Bean  
Thomas Bean, Attorney-In-Fact

BID BOND 3

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of NEW YORK County of QUEENS ss:  
On this 28th day of MAY, 2018, before me personally came  
Richard Ocken to me known, who, being by me duly sworn, did depose and say  
that he resides at Manhattan, NY  
that he is the President of MLJ Contracting Corp  
the corporation described in and which executed the foregoing instrument; that he knows the seal of said  
corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of  
the directors of said corporation, and that he signed his name thereto by like order.

**JAMIE LOPRINZI**  
**NOTARY PUBLIC, STATE OF NEW YORK**  
**QUEENS COUNTY**  
**LIC # 01LO6138413**  
**COMM. EXP. 3/25/20 28**

  
Notary Public

ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:  
On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me personally appeared  
\_\_\_\_\_ to me known and known to me to be one of the members of the  
firm of \_\_\_\_\_ described in and who executed the foregoing  
instrument, and he acknowledged to me that he executed the same as and for the act and deed of said  
firm.

\_\_\_\_\_  
Notary Public

ACKNOWLEDGMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:  
On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me personally appeared  
\_\_\_\_\_ to me known and known to me to be the person described in  
and who executed the foregoing instrument and acknowledged that he executed the same.

\_\_\_\_\_  
Notary Public

AFFIX ACKNOWLEDGMENTS AND JUSTIFICATION OF SURETIES

ACKNOWLEDGMENT OF SURETY COMPANY

STATE OF New York }

COUNTY OF Nassau }

On this May 25, 2018, before me personally came Thomas Bean  
to me known, who, being by me duly sworn, did depose and say; that he/she resides in  
Suffolk County, State of New York that he/she is the Attorney-In-Fact  
of the Liberty Mutual Insurance Company  
the corporation described in which executed the above instrument; that he/she knows the seal  
of said corporation; that the seal affixed to said instrument is such corporate seal; that is was so  
affixed by the Board of Directors of said corporation; and that he/she signed his/her name  
thereto by like order; and the affiant did further depose and say that the Superintendent of  
Insurance of the State of New York, has pursuant to Section 1111 of the Insurance Law of the  
State of New York, issued to Liberty Mutual Insurance Company  
(Surety) his/her certificate of qualification evidencing the qualification of said Company and its  
sufficiency under any law of the State of New York as surety and guarantor, and the propriety of  
accepting and approving is as such; and that such certificate has not been revoked.

Michelle Wannamaker  
Notary Public

NY acknowledgement

**MICHELLE WANNAMAKER**  
Notary Public-State of New York  
No. 01WA6294569  
Qualified in Kings County  
Commission Expires 12/23/2021



**THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.**

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 7961152

Liberty Mutual Insurance Company  
The Ohio Casualty Insurance Company West American Insurance Company

**POWER OF ATTORNEY**

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Colette R. Chisholm; Dana Granice; Susan Lupski; Robert T. Pearson; Michelle Wannamaker; Thomas Bean; George O. Brewster; Desiree Cardlin; Lee Ferrucci; Peter F. Jones; Gerard S. Macholz; Camille Maitland; Nelly Renciwich; Rita Sagistano; Vincent A. Walsh; Mia Woo-Warren

all of the city of Uniondale state of NY each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 12th day of December 2017



The Ohio Casualty Insurance Company  
Liberty Mutual Insurance Company  
West American Insurance Company

By: David M. Carey  
David M. Carey, Assistant Secretary

STATE OF PENNSYLVANIA ss  
COUNTY OF MONTGOMERY

On this 12th day of December 2017, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA  
Notarial Seal  
Teresa Pastella, Notary Public  
Upper Merion Twp., Montgomery County  
My Commission Expires March 28, 2021  
Member, Pennsylvania Association of Notaries

By: Teresa Pastella  
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

**ARTICLE IV – OFFICERS** – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

**ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings.** Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

**Certificate of Designation** – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

**Authorization** – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this \_\_\_\_\_ day of \_\_\_\_\_, 2017



By: Renee C. Llewellyn  
Renee C. Llewellyn, Assistant Secretary



LIBERTY MUTUAL INSURANCE COMPANY  
FINANCIAL STATEMENT — DECEMBER 31, 2017

Assets		Liabilities	
Cash and Bank Deposits.....	\$370,003,299	Unearned Premiums.....	\$7,503,154,587
*Bonds — U.S Government.....	1,331,664,975	Reserve for Claims and Claims Expense.....	19,658,731,454
*Other Bonds.....	11,127,053,004	Funds Held Under Reinsurance Treaties.....	224,693,828
*Stocks.....	16,367,850,688	Reserve for Dividends to Policyholders.....	967,520
Real Estate.....	272,895,626	Additional Statutory Reserve.....	52,491,027
Agents' Balances or Uncollected Premiums.....	5,258,657,823	Reserve for Commissions, Taxes and	
Accrued Interest and Rents.....	100,341,596	Other Liabilities.....	<u>4,049,392,852</u>
Other Admitted Assets.....	<u>11,192,287,530</u>	<b>Total.....</b>	<b>\$31,489,431,268</b>
		Special Surplus Funds.....	\$176,230,822
		Capital Stock.....	10,000,000
		Paid in Surplus.....	9,484,316,385
		Unassigned Surplus.....	4,860,776,066
		<b>Surplus to Policyholders.....</b>	<b><u>14,531,323,273</u></b>
<b>Total Admitted Assets.....</b>	<b><u>\$46,020,754,541</u></b>	<b>Total Liabilities and Surplus.....</b>	<b><u>\$46,020,754,541</u></b>



\* Bonds are stated at amortized or investment value; Stocks at Association Market Values.  
The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2017, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 16<sup>th</sup> day of March, 2018.

*TAMikolajewski*

Assistant Secretary

## M/WBE PROGRAM

### M/WBE UTILIZATION PLAN

**M/WBE Program Requirements:** The requirements for the M/WBE Program are set forth on the following pages of this Bid Booklet, in the section entitled "Notice to All Prospective Contractors".

**Schedule B: M/WBE Utilization Plan:** Schedule B: M/WBE Utilization Plan for this Contract is set forth in this Bid Booklet on the pages following the section entitled "Notice to All Prospective Contractors". The M/WBE Utilization Plan (Part I) indicates whether Participation Goals have been established for this Contract. If Participation Goals have been established for this Contract, the bidder must submit an M/WBE Utilization Plan (Part II) with its bid.

**Waiver:** The bidder may seek a full or partial pre-award waiver of the Participation Goals in accordance with the "Notice to All Prospective Contractors" (See Part A, Section 10). The bidder's request for a waiver must be submitted at least seven (7) calendar days prior to the bid date. Waiver requests submitted after the deadline will not be considered. The form for requesting a waiver of the Participation Goals is set forth in the M/WBE Utilization Plan (Part III).

**Rejection of the Bid:** The bidder must complete Schedule B: M/WBE Utilization Plan (Part II) set forth in this Bid Booklet on the pages following the section entitled "Notice to All Prospective Contractors". A Schedule B submitted by the bidder which does not include the Vendor Certification and Required Affirmations (See Section V of Part II) will be deemed to be non-responsive, unless a full waiver of the Participation Goals is granted (Schedule B, Part III). In the event that the City determines that the bidder has submitted a Schedule B where the Vendor Certification and Required Affirmations are completed but other aspects of the Schedule B are not complete, or contain a copy or computation error that is at odds with the Vendor Certification and Required Affirmations, the bidder will be notified by the Agency and will be given four (4) calendar days from receipt of notification to cure the specified deficiencies and return a completed Schedule B to the Agency. Failure to do so will result in a determination that the Bid is non-responsive. Receipt of notification is defined as the date notice is emailed or faxed (if the bidder has provided an email address or fax number), or no later than five (5) calendar days from the date of mailing or upon delivery, if delivered.

**Impact on LBE Requirements:** If Participation Goals have been established for the participation of M/WBEs, the contractor is not required to comply with the Locally Based Enterprise Program ("LBE"). The LBE Program is set forth in Article 67 of the Contract.

## NOTICE TO ALL PROSPECTIVE CONTRACTORS

### PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT

#### ARTICLE I. M/WBE PROGRAM

Local Law No. 129 of 2005 added and Local Law 1 of 2013 amended Section 6-129 of the Administrative Code of the City of New York (hereinafter "Section 6-129"). Section 6-129 establishes the program for participation in City procurement ("M/WBE Program") by minority-owned business enterprises ("MBEs") and women-owned business enterprises ("WBEs"), certified in accordance with Section 1304 of the New York City Charter. As stated in Section 6-129, the intent of the program is to address the impact of discrimination on the City's procurement process, and to promote the public interest in avoiding fraud and favoritism in the procurement process, increasing competition for City business, and lowering contract costs. The contract provisions contained herein are pursuant to Section 6-129, and the rules of the Department of Small Business Services ("DSBS") promulgated thereunder.

If this Contract is subject to the M/WBE Program established by Section 6-129, the specific requirements of MBE and/or WBE participation for this Contract are set forth in Schedule B of the Contract (entitled the "M/WBE Utilization Plan"), and are detailed below. The Contractor must comply with all applicable MBE and WBE requirements for this Contract.

All provisions of Section 6-129 are hereby incorporated in the Contract by reference and all terms used herein that are not defined herein shall have the meanings given such terms in Section 6-129. Article I, Part A, below, sets forth provisions related to the participation goals for construction, standard and professional services contracts. Article I, Part B, below, sets forth miscellaneous provisions related to the M/WBE Program.

#### PART A

#### PARTICIPATION GOALS FOR CONSTRUCTION, STANDARD AND PROFESSIONAL SERVICES CONTRACTS OR TASK ORDERS

1. The MBE and/or WBE Participation Goals established for this Contract or Task Orders issued pursuant to this Contract, ("Participation Goals"), as applicable, are set forth on Schedule B, Part I to this Contract (see Page 1, line 1 Total Participation Goals) or will be set forth on Schedule B, Part I to Task Orders issued pursuant to this Contract, as applicable.

The Participation Goals represent a percentage of the total dollar value of the Contract or Task Order, as applicable, that may be achieved by awarding subcontracts to firms certified with New York City Department of Small Business Services as MBEs and/or WBEs, and/or by crediting the participation of prime contractors and/or qualified joint ventures as provided in Section 3 below, unless the goals have been waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

2. If Participation Goals have been established for this Contract or Task Orders issued pursuant to this Contract, Contractor agrees or shall agree as a material term of the Contract that Contractor shall be subject to the Participation Goals, unless the goals are waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

3. If Participation Goals have been established for this Contract or Task Order issued pursuant to this Contract, a Contractor that is an MBE and/or WBE shall be permitted to count its own participation toward fulfillment of the relevant Participation Goal, provided that in accordance with Section 6-129 the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that the Contractor pays to direct subcontractors (as defined in Section 6-129(c)(13)), and provided further that a Contractor that is certified as both an MBE and a WBE may count its own participation either toward the goal for MBEs or the goal for WBEs, but not both.

A Contractor that is a qualified joint venture (as defined in Section 6-129(c)(30)) shall be permitted to count a percentage of its own participation toward fulfillment of the relevant **Participation Goal**. In accordance with Section 6-129, the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that Contractor pays to direct subcontractors, and then multiplying the remainder by the percentage to be applied to total profit to determine the amount to which an MBE or WBE is entitled pursuant to the joint venture agreement, provided that where a participant in a joint venture is certified as both an MBE and a WBE, such amount shall be counted either toward the goal for MBEs or the goal for WBEs, but not both.

4. A. If **Participation Goals** have been established for this Contract, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Utilization Plan, Part II (see Pages 2-4) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; and (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end. In the event that this M/WBE Utilization Plan indicates that the bidder or proposer, as applicable, does not intend to meet the **Participation Goals**, the bid or proposal, as applicable, shall be deemed non-responsive, unless Agency has granted the bidder or proposer, as applicable, a pre- award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.

B. (i) If this Contract is for a master services agreement or other requirements type contract that will result in the issuance of Task Orders that will be individually registered ("Master Services Agreement") and is subject to M/WBE **Participation Goals**, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Participation Requirements for Master Services Agreements That Will Require Individually Registered Task Orders, Part II (page 2) indicating the prospective contractor's certification and required affirmations to make all reasonable good faith efforts to meet participation goals established on each individual Task Order issued pursuant to this Contract, or if a partial waiver is obtained or such goals are modified by the Agency, to meet the modified **Participation Goals** by soliciting and obtaining the participation of certified MBE and/or WBE firms. In the event that the Schedule B indicates that the bidder or proposer, as applicable, does not intend to meet the **Participation Goals** that may be established on Task Orders issued pursuant to this Contract, the bid or proposal, as applicable, shall be deemed nonresponsive.

(ii) **Participation Goals** on a Master Services Agreement will be established for individual Task Orders issued after the Master Services Agreement is awarded. If **Participation Goals** have been established on a Task Order, a contractor shall be required to submit a Schedule B – M/WBE Utilization Plan For Independently Registered Task Orders That Are Issued Pursuant to Master Services Agreements, Part II (see Pages 2-4) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; and (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end. The contractor must engage in good faith efforts to meet the **Participation Goals** as established for the Task Order unless Agency has granted the contractor a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.

C. **THE BIDDER/PROPOSER MUST COMPLETE THE SCHEDULE B INCLUDED HEREIN (SCHEDULE B, PART II). A SCHEDULE B SUBMITTED BY THE BIDDER/PROPOSER WHICH DOES NOT INCLUDE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS (SEE SECTION V OF PART II) WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE PARTICIPATION GOALS IS GRANTED (SCHEDULE B, PART III). IN THE EVENT THAT THE CITY DETERMINES THAT THE BIDDER/PROPOSER HAS SUBMITTED A SCHEDULE B WHERE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS ARE COMPLETED BUT OTHER ASPECTS OF THE SCHEDULE B ARE NOT COMPLETE, OR CONTAIN A COPY OR COMPUTATION ERROR THAT IS AT ODDS WITH THE VENDOR CERTIFICATION AND AFFIRMATIONS, THE BIDDER/PROPOSER WILL BE NOTIFIED BY THE AGENCY AND WILL BE GIVEN FOUR (4) CALENDAR DAYS FROM RECEIPT OF NOTIFICATION TO CURE THE SPECIFIED DEFICIENCIES AND RETURN A COMPLETED SCHEDULE B TO THE AGENCY. FAILURE TO DO**

SO WILL RESULT IN A DETERMINATION THAT THE BID/PROPOSAL IS NON-RESPONSIVE. RECEIPT OF NOTIFICATION IS DEFINED AS THE DATE NOTICE IS E-MAILED OR FAXED (IF THE BIDDER/PROPOSER HAS PROVIDED AN E-MAIL ADDRESS OR FAX NUMBER), OR NO LATER THAN FIVE (5) CALENDAR DAYS FROM THE DATE OF MAILING OR UPON DELIVERY, IF DELIVERED.

5. Where an M/WBE Utilization Plan has been submitted, the Contractor shall, within 30 days of issuance by Agency of a notice to proceed, submit a list of proposed persons or entities to which it intends to award subcontracts within the subsequent 12 months. In the case of multiyear contracts, such list shall also be submitted every year thereafter. The Agency may also require the Contractor to report periodically about the contracts awarded by its direct subcontractors to indirect subcontractors (as defined in Section 6-129(c)(22)). **PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor must identify all those to which it intends to award construction subcontracts for any portion of the Wicks trade work at the time of bid submission, regardless of what point in the life of the contract such subcontracts will occur. In identifying intended subcontractors in the bid submission, bidders may satisfy any Participation Goals established for this Contract by proposing one or more subcontractors that are MBEs and/or WBEs for any portion of the Wicks trade work. In the event that the Contractor's selection of a subcontractor is disapproved, the Contractor shall have a reasonable time to propose alternate subcontractors.**

6. MBE and WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the **Participation Goals**. Such certification must occur prior to the firms' commencement of work. A list of MBE and WBE firms may be obtained from the DSBS website at [www.nyc.gov/buycertified](http://www.nyc.gov/buycertified), by emailing DSBS at [buyer@sbs.nyc.gov](mailto:buyer@sbs.nyc.gov), by calling (212) 513-6356, or by visiting or writing DSBS at 110 William St., New York, New York, 10038, 7th floor. Eligible firms that have not yet been certified may contact DSBS in order to seek certification by visiting [www.nyc.gov/getcertified](http://www.nyc.gov/getcertified), emailing [MWBE@sbs.nyc.gov](mailto:MWBE@sbs.nyc.gov), or calling the DSBS certification helpline at (212) 513-6311. A firm that is certified as both an MBE and a WBE may be counted either toward the goal for MBEs or the goal for WBEs, but not both. No credit shall be given for participation by a graduate MBE or graduate WBE, as defined in Section 6-129(c)(20).

7. Where an M/WBE Utilization Plan has been submitted, the Contractor shall, with each voucher for payment, and/or periodically as Agency may require, submit statements, certified under penalty of perjury, which shall include, but not be limited to, the total amount the Contractor paid to its direct subcontractors, and, where applicable pursuant to Section 6-129(j), the total amount direct subcontractors paid to indirect subcontractors; the names, addresses and contact numbers of each MBE or WBE hired as a subcontractor by the Contractor, and, where applicable, hired by any of the Contractor's direct subcontractors; and the dates and amounts paid to each MBE or WBE. The Contractor shall also submit, along with its voucher for final payment: the total amount it paid to subcontractors, and, where applicable pursuant to Section 6-129(j), the total amount its direct subcontractors paid directly to their indirect subcontractors; and a final list, certified under penalty of perjury, which shall include the name, address and contact information of each subcontractor that is an MBE or WBE, the work performed by, and the dates and amounts paid to each.

8. If payments made to, or work performed by, MBEs or WBEs are less than the amount specified in the Contractor's M/WBE Utilization Plan, Agency shall take appropriate action, in accordance with Section 6-129 and Article II below, unless the Contractor has obtained a modification of its M/WBE Utilization Plan in accordance with Section 6-129 and Part A, Section 11 below.

9. Where an M/WBE Utilization Plan has been submitted, and the Contractor requests a change order the value of which exceeds the greater of 10 percent of the Contract or Task Order, as applicable, or \$500,000, Agency shall review the scope of work for the Contract or Task Order, as applicable, and the scale and types of work involved in the change order, and determine whether the **Participation Goals** should be modified.

10. Pre-award waiver of the **Participation Goals**. (a) A bidder or proposer, or contractor with respect to a Task Order, may seek a pre-award full or partial waiver of the **Participation Goals** in accordance with Section 6-129, which requests that Agency change one or more **Participation Goals** on the grounds that the **Participation Goals** are unreasonable in light of the availability of certified firms to perform the services required, or by demonstrating that it has legitimate business reasons for proposing a lower level of subcontracting in its M/WBE Utilization Plan.

(b) To apply for a full or partial waiver of the **Participation Goals**, a bidder, proposer, or contractor, as applicable, must complete Part III (Page 5) of Schedule B and submit such request no later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due, in writing to the Agency by email at [zhangji@ddc.nyc.gov](mailto:zhangji@ddc.nyc.gov) or via facsimile at (718) 391-1886. Bidders, proposers, or contractors, as applicable, who have submitted requests will receive an Agency response by no later than two (2) calendar days prior to the due date for bids, proposals, or Task Orders; provided, however, that if that date would fall on a weekend or holiday, an Agency response will be provided by close-of-business on the business day before such weekend or holiday date.

(c) If the Agency determines that the **Participation Goals** are unreasonable in light of the availability of certified firms to perform the services required, it shall revise the solicitation and extend the deadline for bids and proposals, or revise the Task Order, as applicable.

(d) Agency may grant a full or partial waiver of the **Participation Goals** to a bidder, proposer or contractor, as applicable, who demonstrates—before submission of the bid, proposal or Task Order, as applicable—that it has legitimate business reasons for proposing the level of subcontracting in its M/WBE Utilization Plan. In making its determination, Agency shall consider factors that shall include, but not be limited to, whether the bidder, proposer or contractor, as applicable, has the capacity and the bona fide intention to perform the Contract without any subcontracting, or to perform the Contract without awarding the amount of subcontracts represented by the **Participation Goals**. In making such determination, Agency may consider whether the M/WBE Utilization Plan is consistent with past subcontracting practices of the bidder, proposer or contractor, as applicable, whether the bidder, proposer or contractor, as applicable, has made efforts to form a joint venture with a certified firm, and whether the bidder, proposer, or contractor, as applicable, has made good faith efforts to identify other portions of the Contract that it intends to subcontract.

11. Modification of M/WBE Utilization Plan. (a) A Contractor may request a modification of its M/WBE Utilization Plan after award of this Contract. **PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor may request a Modification of its M/WBE Utilization Plan as part of its bid submission.** The Agency may grant a request for Modification of a Contractor's M/WBE Utilization Plan if it determines that the Contractor has established, with appropriate documentary and other evidence, that it made reasonable, good faith efforts to meet the **Participation Goals**. In making such determination, Agency shall consider evidence of the following efforts, as applicable, along with any other relevant factors:

- (i) The Contractor advertised opportunities to participate in the Contract, where appropriate, in general circulation media, trade and professional association publications and small business media, and publications of minority and women's business organizations;
- (ii) The Contractor provided notice of specific opportunities to participate in the Contract, in a timely manner, to minority and women's business organizations;
- (iii) The Contractor sent written notices, by certified mail or facsimile, in a timely manner, to advise MBEs or WBEs that their interest in the Contract was solicited;
- (iv) The Contractor made efforts to identify portions of the work that could be substituted for portions originally designated for participation by MBEs and/or WBEs in the M/WBE Utilization Plan, and for which the Contractor claims an inability to retain MBEs or WBEs;

- (v) The Contractor held meetings with MBEs and/or WBEs prior to the date their bids or proposals were due, for the purpose of explaining in detail the scope and requirements of the work for which their bids or proposals were solicited;
- (vi) The Contractor made efforts to negotiate with MBEs and/or WBEs as relevant to perform specific subcontracts, or act as suppliers or service providers;
- (vii) Timely written requests for assistance made by the Contractor to Agency's M/WBE liaison officer and to DSBS;
- (viii) Description of how recommendations made by DSBS and Agency were acted upon and an explanation of why action upon such recommendations did not lead to the desired level of participation of MBEs and/or WBEs.

Agency's M/WBE officer shall provide written notice to the Contractor of the determination.

(b) The Agency may modify the **Participation Goals** when the scope of the work has been changed by the Agency in a manner that affects the scale and types of work that the Contractor indicated in its **M/WBE Utilization Plan** would be awarded to subcontractors.

12. If this Contract is for an indefinite quantity of construction, standard or professional services or is a requirements type contract and the Contractor has submitted an **M/WBE Utilization Plan** and has committed to subcontract work to MBEs and/or WBEs in order to meet the **Participation Goals**, the Contractor will not be deemed in violation of the M/WBE Program requirements for this Contract with regard to any work which was intended to be subcontracted to an MBE and/or WBE to the extent that the Agency has determined that such work is not needed.

13. If **Participation Goals** have been established for this Contract or a Task Order issued pursuant to this Contract, at least once annually during the term of the Contract or Task Order, as applicable, Agency shall review the Contractor's progress toward attainment of its M/WBE Utilization Plan, including but not limited to, by reviewing the percentage of work the Contractor has actually awarded to MBE and/or WBE subcontractors and the payments the Contractor made to such subcontractors.

14. If **Participation Goals** have been established for this Contract or a Task Order issued pursuant to this Contract, Agency shall evaluate and assess the Contractor's performance in meeting those goals, and such evaluation and assessment shall become part of the Contractor's overall contract performance evaluation.

## **PART B: MISCELLANEOUS**

1. The Contractor shall take notice that, if this solicitation requires the establishment of an **M/WBE Utilization Plan**, the resulting contract may be audited by DSBS to determine compliance with Section 6-129. See §6-129(e)(10). Furthermore, such resulting contract may also be examined by the City's Comptroller to assess compliance with the **M/WBE Utilization Plan**.

2. Pursuant to DSBS rules, construction contracts that include a requirement for an **M/WBE Utilization Plan** shall not be subject to the law governing Locally Based Enterprises set forth in Section 6-108.1 of the Administrative Code of the City of New York.

3. DSBS is available to assist contractors and potential contractors in determining the availability of MBEs and/or WBEs to participate as subcontractors, and in identifying opportunities that are appropriate for participation by MBEs and/or WBEs in contracts.

4. Prospective contractors are encouraged to enter into qualified joint venture agreements with MBEs and/or WBEs as defined by Section 6-129(c)(30).



5. By submitting a bid or proposal the Contractor hereby acknowledges its understanding of the M/WBE Program requirements set forth herein and the pertinent provisions of Section 6-129, and any rules promulgated thereunder, and if awarded this Contract, the Contractor hereby agrees to comply with the M/WBE Program requirements of this Contract and pertinent provisions of Section 6-129, and any rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract. The Contractor hereby agrees to make all reasonable, good faith efforts to solicit and obtain the participation of MBEs and/or WBEs to meet the required **Participation Goals**.

## **ARTICLE II. ENFORCEMENT**

1. If Agency determines that a bidder or proposer, as applicable, has, in relation to this procurement, violated Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, Agency may disqualify such bidder or proposer, as applicable, from competing for this Contract and the Agency may revoke such bidder's or proposer's prequalification status, if applicable.

2. Whenever Agency believes that the Contractor or a subcontractor is not in compliance with Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to any **M/WBE Utilization Plan**, Agency shall send a written notice to the Contractor describing the alleged noncompliance and offering the Contractor an opportunity to be heard. Agency shall then conduct an investigation to determine whether such Contractor or subcontractor is in compliance.

3. In the event that the Contractor has been found to have violated Section 6-129, the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to, any **M/WBE Utilization Plan**, Agency may determine that one of the following actions should be taken:

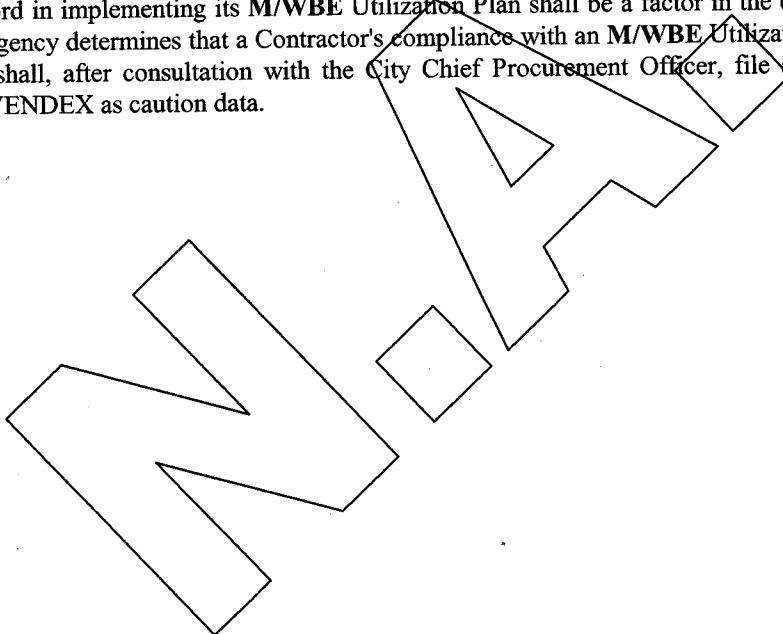
- (a) entering into an agreement with the Contractor allowing the Contractor to cure the violation;
- (b) revoking the Contractor's pre-qualification to bid or make proposals for future contracts;
- (c) making a finding that the Contractor is in default of the Contract;
- (d) terminating the Contract;
- (e) declaring the Contractor to be in breach of Contract;
- (f) withholding payment or reimbursement;
- (g) determining not to renew the Contract;
- (h) assessing actual and consequential damages;
- (i) assessing liquidated damages or reducing fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the M/WBE Program, or in meeting the purposes of the Contract, the costs of meeting utilization goals through additional procurements, the administrative costs of investigation and enforcement, or other factors set forth in the Contract;
- (j) exercising rights under the Contract to procure goods, services or construction from another contractor and charge the cost of such contract to the Contractor that has been found to be in noncompliance; or
- (k) taking any other appropriate remedy.

4. If an **M/WBE Utilization Plan** has been submitted, and pursuant to this Article II, Section 3, the Contractor has been found to have failed to fulfill its **Participation Goals** contained in its **M/WBE Utilization Plan** or the **Participation Goals** as modified by Agency pursuant to Article I, Part A, Section 11, Agency may assess liquidated damages in the amount of ten percent (10%) of the difference between the dollar amount of work required to be awarded to MBE and/or WBE firms to meet the **Participation Goals** and the dollar amount the Contractor actually awarded and paid, and/or credited, to MBE and/or WBE firms. In view of the difficulty of accurately ascertaining the loss which the City will suffer by reason of Contractor's failure to meet the **Participation Goals**, the foregoing amount is hereby fixed and agreed as the liquidated damages that the City will suffer by reason of such failure, and not as a penalty. Agency may deduct and retain out of any monies which may become due under this Contract the amount of any such liquidated damages; and in case the amount which may become due under this Contract shall be less than the amount of liquidated damages suffered by the City, the Contractor shall be liable to pay the difference.

5. Whenever Agency has reason to believe that an MBE and/or WBE is not qualified for certification, or is participating in a contract in a manner that does not serve a commercially useful function (as defined in Section 6-129(c)(8)), or has violated any provision of Section 6-129, Agency shall notify the Commissioner of DSBS who shall determine whether the certification of such business enterprise should be revoked.

6. Statements made in any instrument submitted to Agency pursuant to Section 6-129 shall be submitted under penalty of perjury and any false or misleading statement or omission shall be grounds for the application of any applicable criminal and/or civil penalties for perjury. The making of a false or fraudulent statement by an MBE and/or WBE in any instrument submitted pursuant to Section 6-129 shall, in addition, be grounds for revocation of its certification.

7. The Contractor's record in implementing its **M/WBE** Utilization Plan shall be a factor in the evaluation of its performance. Whenever Agency determines that a Contractor's compliance with an **M/WBE** Utilization Plan has been unsatisfactory, Agency shall, after consultation with the City Chief Procurement Officer, file an advice of caution form for inclusion in VENDEX as caution data.



Tax ID #: \_\_\_\_\_

APT E- 85017B0106  
PIN #: \_\_\_\_\_**SCHEDULE B – M/WBE Utilization Plan****Part I: M/WBE Participation Goals****Part I to be completed by contracting agency****Contract Overview**

APT E- Pin # 85017B0106 FMS Project ID#: P-1STARLP  
 Project Title/ Agency PIN # STARLIGHT PARK PHASE II / 8502017HW0048C  
 Bid/Proposal Response Date \_\_\_\_\_  
 Contracting Agency Department of Design and Construction  
 Agency Address 30-30 Thomson Ave. City Long Island City State NY Zip Code 11101  
 Contact Person Lea Case Title MWBE Liaison & Compliance Analyst  
 Telephone # (718) 391-1003 Email casele@ddc.nyc.gov

**Project Description** (attach additional pages if necessary)

**BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II, STAGE 2 BRIDGE THE CRITICAL SOUTH  
 BRONX GAP**  
**BETWEEN WESTCHESTER AVENUE AND EAST 174TH STREET**  
 INCLUDING CONSTRUCTION OF EAST 172ND STREET PEDESTRIAN BRIDGE OVER AMTRAK (BIN#: 2-24124-0),  
 SOUTH GREENWAY PEDESTRIAN BRIDGE OVER THE BRONX RIVER (BIN#: 2-26990-0), DRAINAGE,  
 RETAINING STRUCTURES, GREENWAY, STREET LIGHTING, LANDSCAPING AND TRAFFIC WORK  
 Together With All Work Incidental Thereto  
**BOROUGH OF THE BRONX  
 CITY OF NEW YORK**

**M/WBE Participation Goals for Services**

*Enter the percentage amount for each group or for an unspecified goal. Please note that there are no goals for Asian Americans in Professional Services.*

**Prime Contract Industry: Construction**

Group	Percentage
<b>Unspecified*</b>	<b>EXEMPT %</b>
or	
Black American	<b>UNSPECIFIED*</b>
Hispanic American	<b>UNSPECIFIED*</b>
Asian American	<b>UNSPECIFIED*</b>
Women	<b>UNSPECIFIED*</b>
<b>Total Participation Goals</b>	<b>EXEMPT %</b> <b>Line 1</b>

*\*Note: For this procurement, individual ethnicity and gender goals are not specified. The Total Participation Goal for construction contracts may be met by using either Black-American, Hispanic-American, Asian American, or Women certified firms or any combination of such firms.*

Tax ID #: \_\_\_\_\_

APT E-  
PIN #: \_\_\_\_\_

85017B0106

**SCHEDULE B - Part II: M/WBE Participation Plan**

Part II to be completed by the bidder/proposer.

Please note: For Non-M/WBE Prime Contractors who will NOT subcontract any services and will self-perform the entire contract, you must obtain a FULL waiver by completing the Waiver Application on pages 17 and 18 and timely submitting it to the contracting agency pursuant to the Notice to Prospective Contractors. Once a FULL WAIVER is granted, it must be included with your bid or proposal and you do not have to complete or submit this form with your bid or proposal.

**Section I: Prime Contractor Contact Information**

Tax ID # _____	FMS Vendor ID # _____
Business Name _____	Contact Person _____
Address _____	
Telephone # _____	Email _____

**Section II: M/WBE Utilization Goal Calculation: Check the applicable box and complete subsection.****PRIME CONTRACTOR ADOPTING AGENCY M/WBE PARTICIPATION GOALS**

☐ For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Agency M/WBE Participation Goals.

Calculate the total dollar value of your total bid that you agree will be awarded to M/WBE subcontractors for services and/or credited to an M/WBE prime contractor or Qualified Joint Venture.

Please review the Notice to Prospective Contractors for more information on how to obtain credit for M/WBE participation.

Total Bid/Proposal Value	Agency Total Participation Goals (Line 1, Page 13)	Calculated M/WBE Participation Amount
\$ _____	X	= \$ Line 2

**PRIME CONTRACTOR OBTAINED PARTIAL WAIVER APPROVAL: ADOPTING MODIFIED M/WBE PARTICIPATION GOALS**

☐ For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Modified M/WBE Participation Goals.

Calculate the total dollar value of your total bid that you agree will be awarded to M/WBE subcontractors for services and/or credited to an M/WBE prime contractor or Qualified Joint Venture.

Please review the Notice to Prospective Contractors for more information on how to obtain credit for M/WBE participation.

Total Bid/Proposal Value	Adjusted Participation Goal (From Partial Waiver)	Calculated M/WBE Participation Amount
\$ _____	X	= \$ Line 3

Tax ID #: \_\_\_\_\_

APT E-

PIN #: \_\_\_\_\_

**Section III: M/WBE Utilization Plan: How Proposer/Bidder Will Fulfill M/WBE Participation Goals. Please review the Notice to Prospective Contractors for more information on how to obtain credit for M/WBE participation. Check applicable box. The Proposer or Bidder will fulfill the M/WBE Participation Goals:**

☐ As an M/WBE Prime Contractor that will self-perform and/or subcontract to other M/WBE firms a portion of the contract the value of which is at least the amount located on Lines 2 or 3 above, as applicable. The value of any work subcontracted to non-M/WBE firms will not be credited towards fulfillment of M/WBE Participation Goals. Please check all that apply to Prime Contractor:

☐ MBE

☐ WBE

☐ As a Qualified Joint Venture with an M/WBE partner, in which the value of the M/WBE partner's participation and/or the value of any work subcontracted to other M/WBE firms is at least the amount located on Lines 2 or 3 above, as applicable. The value of any work subcontracted to non M/WBE firms will not be credited towards fulfillment of M/WBE Participation Goals.

☐ As a non M/WBE Prime Contractor that will enter into subcontracts with M/WBE firms the value of which is at least the amount located on Lines 2 or 3 above, as applicable.

**Section IV: General Contract Information**

What is the expected percentage of the total contract dollar value that you expect to award in subcontracts for services, regardless of M/WBE status? % \_\_\_\_\_

Enter brief description of the type(s) and dollar value of subcontracts for all/any services you plan on subcontracting if awarded this contract. For each item, indicate whether the work is designated for participation by MBEs and/or WBEs and the time frame in which such work is scheduled to begin and end. Use additional sheets if necessary.

✓ Scopes of Subcontract Work

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_
17. \_\_\_\_\_

Tax ID #: \_\_\_\_\_

APT E-  
PIN #: \_\_\_\_\_

### Section V: Vendor Certification and Required Affirmations

I hereby:

- 1) acknowledge my understanding of the M/WBE participation requirements as set forth herein and the pertinent provisions of Section 6-129 of the Administrative Code of the City of New York ("Section 6-129"), and the rules promulgated thereunder;
- 2) affirm that the information supplied in support of this M/WBE Utilization Plan is true and correct;
- 3) agree, if awarded this Contract, to comply with the M/WBE participation requirements of this Contract, the pertinent provisions of Section 6-129, and the rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract;
- 4) agree and affirm that it is a material term of this Contract that the Vendor will award the total dollar value of the M/WBE Participation Goals to certified MBEs and/or WBEs, unless a full waiver is obtained or such goals are modified by the Agency; and
- 5) agree and affirm, if awarded this Contract, to make all reasonable, good faith efforts to meet the M/WBE Participation Goals, or If a partial waiver is obtained or such goals are modified by the Agency, to meet the modified Participation Goals by soliciting and obtaining the participation of certified MBE and/or WBE firms.

Signature _____	Date _____
Print Name _____	Title _____

# SCHEDULE B – PART III – REQUEST FOR WAIVER OF M/WBE PARTICIPATION REQUIREMENT

## Contract Overview

Tax ID # \_\_\_\_\_ FMS Vendor ID # \_\_\_\_\_  
 Business Name \_\_\_\_\_  
 Contact Name \_\_\_\_\_ Telephone # \_\_\_\_\_ Email \_\_\_\_\_  
 Type of Procurement ☐ Competitive Sealed Bids ☐ Other Bid/Response Due Date \_\_\_\_\_  
 APT E-PIN # (for this procurement): \_\_\_\_\_ Contracting Agency: \_\_\_\_\_

## M/WBE Participation Goals as described in bid/solicitation documents

\_\_\_\_\_%  
 Agency M/WBE Participation Goal

## Proposed M/WBE Participation Goal as anticipated by vendor seeking waiver

\_\_\_\_\_% of the total contract value anticipated in good faith by the bidder/proposer to be subcontracted for services and/or credited to an M/WBE Prime Contractor or Qualified Joint Venture.

## Basis for Waiver Request: Check appropriate box & explain in detail below (attach additional pages if needed)

- ☐ Vendor does not subcontract services, and has the capacity and good faith intention to perform all such work itself with its own employees.
- ☐ Vendor subcontracts some of this type of work but at a lower % than bid/solicitation describes, and has the capacity and good faith intention to do so on this contract. (Attach subcontracting plan outlining services that the vendor will self-perform and subcontract to other vendors or consultants.)
- ☐ Vendor has other legitimate business reasons for proposing the M/WBE Participation Goal above. Explain under separate cover.

## References

List 3 most recent contracts performed for NYC agencies (if any). Include information for each subcontract awarded in performance of such contracts. Add more pages if necessary.

CONTRACT NO. _____	AGENCY _____	DATE COMPLETED _____
Total Contract Amount \$ _____	Total Amount Subcontracted \$ _____	
Item of Work Subcontracted and Value of subcontract _____	Item of Work Subcontracted and Value of subcontract _____	Item of Work Subcontracted and Value of subcontract _____

CONTRACT NO. _____	AGENCY _____	DATE COMPLETED _____
Total Contract Amount \$ _____	Total Amount Subcontracted \$ _____	
Item of Work Subcontracted and Value of subcontract _____	Item of Work Subcontracted and Value of subcontract _____	Item of Work Subcontracted and Value of subcontract _____

CONTRACT NO. _____	AGENCY _____	DATE COMPLETED _____
Total Contract Amount \$ _____	Total Amount Subcontracted \$ _____	
Item of Work Subcontracted and Value of subcontract _____	Item of Work Subcontracted and Value of subcontract _____	Item of Work Subcontracted and Value of subcontract _____

List 3 most recent contracts performed for other entities. Include information for each subcontract awarded in performance of such contracts. Add more pages if necessary.  
 (Complete ONLY if vendor has performed fewer than 3 New York City contracts.)

TYPE OF Contract	ENTITY	DATE COMPLETED
Manager at entity that hired vendor (Name/Phone No./Email)		
Total Contract Amount \$	Total Amount Subcontracted \$	
Type of Work Subcontracted		

TYPE OF Contract	AGENCY/ENTITY	DATE COMPLETED
Manager at agency/entity that hired vendor (Name/Phone No./Email)		
Total Contract Amount \$	Total Amount Subcontracted \$	
Item of Work Subcontracted and Value of subcontract	Item of Work Subcontracted and Value of subcontract	Item of Work Subcontracted and Value of subcontract

TYPE OF Contract	AGENCY/ENTITY	DATE COMPLETED
Manager at entity that hired vendor (Name/Phone No./Email)		
Total Contract Amount \$	Total Amount Subcontracted \$	
Item of Work Subcontracted and Value of subcontract	Item of Work Subcontracted and Value of subcontract	Item of Work Subcontracted and Value of subcontract

**VENDOR CERTIFICATION:** I hereby affirm that the information supplied in support of this waiver request is true and correct, and that this request is made in good faith.

Signature:	Date:
Print Name:	Title:

Shaded area below is for agency completion only

AGENCY CHIEF CONTRACTING OFFICER APPROVAL

Signature
Date

CITY CHIEF PROCUREMENT OFFICER APPROVAL

Signature
Date

Waiver Determination

Full Waiver Approved
Waiver Denied
Partial Waiver Approved
Revised Participation Goal %



## APPRENTICESHIP PROGRAM REQUIREMENTS

Bidders are advised that the Apprenticeship Program Requirements set forth below apply to each contract for which a check mark is indicated before the word "Yes". Compliance with these requirements will be determined solely by the City.

  ✓   YES                             NO

### (1) Apprenticeship Program Requirements

Notice to Bidders: Please be advised that, pursuant to the authority granted to the City under Labor Law Section 816-b, the Department of Design and Construction hereby requires that the contractor awarded a contract as a result of this Invitation for Bids, and any of its subcontractors with subcontracts worth two million dollars or over, have, prior to entering into such contract or subcontract, apprenticeship agreements appropriate for the type and scope of work to be performed that have been registered with, and approved by, the New York State Commissioner of Labor. In addition, the contractor and its subcontractors will be required to show that such apprenticeship program/s have successfully passed the two year Probation period following the initial registration date of such program/s with the New York State Department of Labor.

The failure to prove, upon request, that these requirements have been met shall result in the contract not being awarded to the contractor or the subcontract not being approved.

Please be further advised that, pursuant to Labor Law Section 220, the allowable ratio of apprentices to journeypersons in any craft classification shall not be greater than the ratio permitted to the contractor as to its workforce on any job under the registered apprenticeship program.

### (2) Apprenticeship Program Questionnaire

The bidder must submit a completed and signed Apprenticeship Program Questionnaire. The Questionnaire is set forth on the following page of the Bid Booklet.

**\*MLJ Contracting will participate with unions and GCA apprentice programs**  
**APPRENTICESHIP PROGRAM QUESTIONNAIRE ("APQ")**

Bidder Name: MLJ Contracting Corp.

Project ID Number: P-1STARLP

The Bidder MUST complete, sign, and submit this Apprenticeship Program Questionnaire with its bid.

1. Does the bidder have any Apprenticeship Program agreement(s) appropriate for the type and scope of work to be performed? (Note: Participation may be by either direct sponsorship or through collective bargaining agreement(s).) *please see Response Above*

       YES        NO

2. Has/have the bidder's Apprenticeship Program agreement(s) been registered with, and approved by the New York State Commissioner of Labor ("NYSDOL Commissioner")?

       YES        NO *Please See Response Above*

3. Has/have the bidder's Apprenticeship Program successfully passed the two-year Probation period following its initial registration with the New York State Department of Labor ("NYSDOL")?

       YES        NO *Please See Response Above*

If the answers to Questions 1, 2, and 3 are "Yes". The bidder shall, in the space below (and/or attached herewith where applicable), provide the contact information for such Apprenticeship Program(s) as well as information demonstrating that such Apprenticeship Program(s) have passed the two-year Probation period following its initial registration with the NYSDOL. (The bidder may attach additional pages if necessary).

- Where the bidder directly sponsors any such apprenticeship Program(s), the bidder shall provide the following:
  - The trade classification(s) covered by such program(s), and the date(s) such program(s) was/were approved by the NYSDOL Commissioner; and/or
  - A copy of a letter(s) from the NYSDOL, on NYSDOL's letterhead, executed by an official thereof, which verifies/verify the trade classification(s) covered by such program(s), and the date(s) such program(s) was/were approved by the NYSDOL Commissioner and the Active status of such program(s).
- Where the bidder participates in any such Apprenticeship Program(s) through its membership in an employer organization(s) that directly sponsors such program(s) or where the employer association(s) participates in such program(s) through collective bargaining, the bidder shall provide the following:
  - The contact information for the employer organization(s), and the apprenticeable trade(s) covered pursuant to the bidder's affiliation therewith, and the date such program(s) was/were approved by the NYSDOL Commissioner; or
  - A letter(s) from such employer organization(s), on letterhead of such organization(s), executed by an officer, delegate or official thereof, which verifies/verify the trade classification(s) covered by such program(s) was/were approved by the NYSDOL Commissioner, and that the bidder is both a member in good standing of the identified employer organization and is subject to the provisions of the Apprenticeship Program agreement(s) sponsored thereby.

## APPRENTICESHIP PROGRAM QUESTIONNAIRE ("APO")

Project ID Number: P-1STARLP

- **Where the bidder participates in any such Apprenticeship Programs through collective bargaining agreements, the bidder shall provide the following:**
  - The contact information for such collective bargaining entity(ies) and the apprenticeable trade(s) covered pursuant to the bidder's affiliation therewith;
  - A letter(s) from such collective bargaining entity(ies), on letterhead of such entity(ies), executed by an officer, delegate or official thereof, which verifies/verify the bidder's status as a signatory/participant in good standing to such collective bargaining entity(ies) Apprenticeship Program Agreements.

Bidder: MLJ Contracting Corp

By: [Signature]  
(Signature of Partner or Corporate Officer)

**Title:** President

Date: May 30, 2018

Agreement effective this 6<sup>th</sup> day of June, 20 18 by and between Local Union 14-14B and Local Union 15, 15A, 15C and 15D, International Union of Operating Engineers, AFL-CIO (the "Union") and MLT Contracting Corp. (the "Employer").

**WHEREAS**, the parties hereto acknowledge that there are presently Collective Bargaining Agreements between the Union and the Cement League, the General Contractors Association of New York, the Contractors Association of Greater New York, the Building Contractors Association, Allied Building Metal Industries, Inc., Association of Concrete Contractors of New York, Inc., the Construction Industry Council of Westchester and Hudson Valley, the Associated Brick Mason Contractors of Greater New York, the Association of New York City Concrete Producers, Inc. and the Asbestos Abatement Contractors Association; and **WHEREAS**, the Employer recognizes there are or will be certain amendments, extensions and renewals to the various Association Agreements (hereinafter referred to as the "Association Collective Bargaining Agreements") to be negotiated on behalf of the Employer by the various Employer Associations; and **WHEREAS**, the Employer acknowledges receipt of a copy of each of the Association Collective Bargaining Agreements; and **WHEREAS**, the Employer performs work from time to time which is covered by all or some of the above-mentioned Agreements and recognizes the Union as a source for the procurement of skilled workers for the work described in the applicable Association Collective Bargaining Agreements.

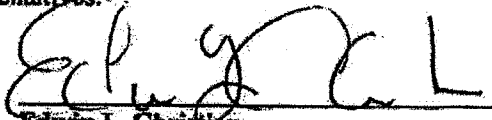
**NOW, THEREFORE**, the parties agree as follows:

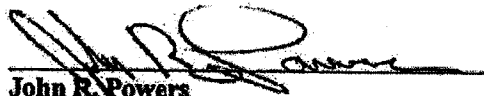
1. The Employer is bound to all the terms and conditions as are applicable from time to time by the nature of the work performed for each of the Association Collective Bargaining Agreements which are incorporated herein by reference as if fully set forth in this Agreement, except as specifically set forth hereafter in paragraphs 2 and 3.
2. The grievance and arbitration procedure described in each Association Collective Bargaining Agreement shall not apply to this Agreement and the procedures shall instead be as follows: Any complaint, dispute or difference arising out of this Agreement shall be referred to the Union Business Agent and a representative of the Employer for a job site meeting within three (3) days notice to them of the occurrence giving rise to such complaint, dispute or difference. If the matter is not resolved within seven (7) days of such meeting, then the aggrieved party may submit the matter for arbitration to one of the two (2) arbitrators named hereafter. These arbitrators shall be John Crotty and Eugene T. Coughlin.
3. The Employer agrees that the operation of Scissor-Lift Trucks is the jurisdiction of the Operating Engineers. Scissor-Lift Trucks used solely as scaffolds or welding platforms will not be manned by an Operating Engineer. Scissor-Lift Trucks used for hoisting any material will be manned by an Operating Engineer. Occasional use of a Scissor-Lift Truck is the jurisdiction of the Operating Engineers, and the computation of the time used as a hoisting machine will be agreed upon by both the Employer and the Union.
4. The parties further agree to be bound to all the agreements and declarations of trusts, amendments and regulations, thereto, establishing the fringe benefit trust funds referenced in the applicable Association Collective Bargaining Agreements and to remit all contributions as set forth under the applicable Association Collective Bargaining Agreements and all amendments, renewals and/or extensions thereto, as adopted by the aforesaid Associations and the aforesaid Local Unions or their designated trustees.
5. The Employer agrees to be responsible for the payment of fringe benefit contributions through the purchase of stamps which are reported for each of the three (3) reporting periods which occur every year in March, July and November. Owner/Operators Only: The Employer agrees that for any and all individuals employed as Operating Engineers for any length of time during any given period who are also employed by the Employer during such period in some other capacity and/or hold a different title with the Employer, including but not limited to, owner, shareholder, officer, director, etc. (an "owner/operator"), the Employer shall be responsible for the payment of fringe benefit contributions for a minimum of forty (40) hours per week for every week in such period.

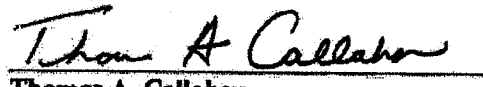
ANY FUTURE ORDER OF FRINGE BENEFIT STAMPS MUST BE MADE BY CERTIFIED CHECK

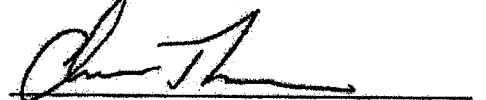
6. The Employer agrees that the applicable Association shall, on behalf of the Employer, negotiate successor Collective Bargaining Agreements, amendments, renewals and extensions of the applicable Collective Bargaining Agreements and the Employer agrees to be bound by any and all amendments, renewals and/or extensions of the above referenced Association Collective Bargaining Agreements unless and until this Agreement is properly terminated by either the Employer or the Union by providing the other party written notice of intent to terminate at least sixty (60) days but not more than ninety (90) days prior to the expiration date of the applicable Association Collective Bargaining Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives:

  
Edwin L. Christian  
Business Manager  
International Union of Operating Engineers,  
Local 14-14B

  
John R. Powers  
Recording Corresponding Secretary  
International Union of Operating Engineers,  
Local 14-14B

  
Thomas A. Callahan  
President and Business Manager  
International Union of Operating Engineers,  
Local 15, 15A, 15C and 15D

  
Christopher R. Thomas  
Recording Corresponding Secretary  
International Union of Operating Engineers,  
Local 15, 15A, 15C and 15D


MLJ Contracting  
Company Name  
17-20 Whitestone Express  
Address

Whitestone, NY 11357  
City, State, Zip Code

646-813-6771  
Telephone Number

718-357-4818  
Fax Number

rockea@mljcontracting.com  
Email Address

  
Signature of Officer(s)

Richard Ockea  
Name and Title of Officer(s)  
(PLEASE PRINT) President

In accordance with N.Y.S. Apprenticeship  
Regulation 601.8 Part (d)(1)(2) & (3), the  
Employer provides its Federal Employment  
Identification No. or its N.Y.S. Unemployment  
No.: 82-2494014

ANY FUTURE ORDER OF FRINGE BENEFIT STAMPS MUST BE MADE BY CERTIFIED CHECK

**SAFETY QUESTIONNAIRE**

The bidder must include, with its bid, all information requested on this Safety Questionnaire. Failure to provide a completed and signed Safety Questionnaire at the time of bid opening may result in disqualification of the bid as non-responsive.

**1. Bidder Information:**Company Name: MLJ Contracting CorpDDC Project Number: P-1STARLP

Company Size: X Ten (10) employees or less  
           Greater than ten (10) employees

Company has previously worked for DDC            YES X NO

**2. Type(s) of Construction Work**

TYPE OF WORK	LAST 3 YEARS	THIS PROJECT
General Building Construction	<u>          </u>	<u>          </u>
Residential Building Construction	<u>          </u>	<u>          </u>
Nonresidential Building Construction	<u>          </u>	<u>          </u>
Heavy Construction, except building	<u>          </u>	<u>          </u>
Highway and Street Construction	<u>          </u>	<u>X</u>
Heavy Construction, except highways	<u>          </u>	<u>X</u>
Plumbing, Heating, HVAC	<u>          </u>	<u>          </u>
Painting and Paper Hanging	<u>          </u>	<u>          </u>
Electrical Work	<u>          </u>	<u>          </u>
Masonry, Stonework and Plastering	<u>          </u>	<u>          </u>
Carpentry and Floor Work	<u>          </u>	<u>          </u>
Roofing, Siding, and Sheet Metal	<u>          </u>	<u>          </u>
Concrete Work	<u>          </u>	<u>X</u>
Specialty Trade Contracting	<u>          </u>	<u>          </u>
Asbestos Abatement	<u>          </u>	<u>          </u>
Other (specify)	<u>          </u>	<u>          </u>

**3. Experience Modification Rate:**

The Experience Modification Rate (EMR) is a rating generated by the National Council of Compensation Insurance (NCCI). This rating is used to determine the contractor's premium for worker's compensation insurance. The contractor may obtain its EMR by contacting its insurance broker or the NCCI. If the contractor cannot obtain its EMR, it must submit a written explanation as to why.

The Contractor must indicate its Intrastate and Interstate EMR for the past three years. [Note: For contractors with less than three years of experience, the EMR will be considered to be 1.00].

YEAR	INTRASTATE RATE	INTERSTATE RATE
NOT AVAILABLE YET		
_____	_____	_____
_____	_____	_____
_____	_____	_____

If the Intrastate and/or Interstate EMR for any of the past three years is greater than 1.00, the contractor must attach, to this questionnaire, a written explanation for the rating and identify what corrective action was taken to correct the situation resulting in that rating.

#### 4. OSHA Information:

- ☐ YES    ☒ NO    Contractor has received a willful violation issued by OSHA or New York City Department of Buildings (NYCDOB) within the last three years.
- ☐ YES    ☒ NO    Contractor has had an incident requiring OSHA notification within 8 hours (all work-related fatalities) or an incident requiring OSHA notification within 24 hours (all work-related in-patient hospitalizations, all amputations and all losses of an eye).

The Occupational Safety and Health Act (OSHA) of 1970 requires employers with ten or more employees, on a yearly basis to complete and maintain on file the form entitled "Log of Work-related Injuries and Illnesses". This form is commonly referred to as the OSHA 300 Log (OSHA 200 Log for 2001 and earlier).

The OSHA 300 Log must be submitted for the last three years for contractors with more than ten employees.

The Contractor must indicate the total number of hours worked by its employees, as reflected in payroll records for the past three years.

The contractor must submit the Incident Rate for Lost Time Injuries (the Incident Rate) for the past three years. The Incident Rate is calculated in accordance with the formula set forth below. For each given year, the total number of incidents is the total number of non-fatal injuries and illnesses reported on the OSHA 300 Log. The 200,000 hours represents the equivalent of 100 employees working forty hours a week, fifty weeks per year.

$$\text{Incident Rate} = \frac{\text{Total Number of Incidents} \times 200,000}{\text{Total Number of Hours Worked by Employees}}$$

YEAR	TOTAL NUMBERS OF HOURS WORKED BY EMPLOYEES	INCIDENT RATE
NOT AVAILABLE YET		
_____	_____	_____
_____	_____	_____
_____	_____	_____

If the contractor's Incident Rate for any of the past three years is one point higher than the Incident Rate for the type of construction it performs (listed below), the contractor must attach, to this questionnaire, a written explanation for the relatively high rate.

General Building Construction	8.5
Residential Building Construction	7.0
Nonresidential Building Construction	10.2
Heavy Construction, except building	8.7
Highway and Street Construction	9.7
Heavy Construction, except highways	8.3
Plumbing, Heating, HVAC	11.3
Painting and Paper Hanging	6.9
Electrical Work	9.5
Masonry, Stonework and Plastering	10.5
Carpentry and Floor Work	12.2
Roofing, Siding, and Sheet Metal	10.3
Concrete Work	8.6
Specialty Trade Contracting	8.6

#### 5. Safety Performance on Previous DDC Project(s)

☐ YES ☒ NO Contractor previously audited by the DDC Office of Site Safety.

DDC Project Number(s): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

☐ YES ☒ NO Accident on previous DDC Project(s).

DDC Project Number(s): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

☐ YES ☒ NO Fatality or Life-altering Injury on DDC Project(s) within the last three years.  
[Examples of a life-altering injury include loss of limb, loss of a sense (e.g., sight, hearing), or loss of neurological function].

DDC Project Number(s): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Date: 5/30/18

By:   
(Signature of Owner, Partner, Corporate Officer)

Title: President



## Pre-Award Process

The bidder is advised that as part of the pre-award review of its bid, it may be required to submit the information described in Sections (A) through (D) below. If required, such information must be submitted by the bidder within five (5) business days following receipt of notification from DDC that it is among the low bidders. Such notification from DDC will be by facsimile or in writing and will specify the types of information must be submitted. The types of information the bidder may be required to submit are described below. In the event the bidder fails to submit the required information within the specified time frame, its bid may be rejected as nonresponsive.

\*\*\*\*\*

- (A) **Project Reference Form:** If required, the bidder must complete and submit the Project Reference Form set forth on pages 27 through 29 of this Bid Booklet. The Project Reference Form consists of 3 parts: (1) Contracts Completed by the Bidder, (2) Contracts Currently Under Construction by the Bidder, and (3) Pending Contracts Not Yet Started by the Bidder.
- (B) **Copy of License:** If required, the bidder must submit a copy of the license under which the bidder will be performing the work. Such license must clearly show the following: (1) Name of the Licensee, (2) License Number, and (3) Expiration date of the License. A copy of the license will be required from bidders for the following contracts: Plumbing Work, Electrical Work and Asbestos Abatement.
- (C) **Financial Information:** If required, the bidder must submit the financial information described below:
  - (1) **Audited Financial Statements:** Financial statements (Balance Sheet and Income Statement) of the entity submitting the bid, as audited by an independent auditor licensed to practice as a certified public accountant (CPA). Audited financial statements for the three most recent fiscal years must be submitted. Each such financial statement must include the auditor's standard report.

If the bidder does not have audited financial statements, it must submit an affidavit attesting to the fact that the bidder does not have such statements. In addition, the bidder must submit the following documentation covering the three most recent fiscal years: signed federal tax returns, unaudited financial statements, and a "certified review letter" from a certified public accountant (CPA) verifying the unaudited financial statements.

Unless the most recent audited or unaudited financial statement was issued within ninety (90) days, the bidder must submit interim financial information that includes data on financial position and results of operation (income data) for the current fiscal year. Such information may be summarized on a monthly or quarterly basis or at other intervals.
  - (2) **Schedule of Aged Accounts Receivable,** including portion due within ninety (90) days.

(D) **Project Specific Information:** If required, the bidder must submit the project specific information described below:

- (1) Statement indicating the number of years of experience the bidder has had and in what type of construction.
- (2) Resumes of all key personnel to be involved in the project, including the proposed project superintendent.
- (3) List of significant pieces of equipment expected to be used for the contract, and whether such equipment is owned or leased.
- (4) Description of work expected to be subcontracted, and to what firms, if known.
- (5) List of key material suppliers.
- (6) Preliminary bar chart time schedule
- (7) Contractor's expected means of financing the project. This should be based on the assumption that the contractor is required to finance 2X average monthly billings throughout the contract period.
- (8) Any other issues the contractor sees as impacting his ability to complete the project according to the contract.

In addition to the information described in Sections (A) through (D) above, the bidder shall submit such additional information as the Commissioner may require, including without limitation, an explanation or justification for specific unit price items.

The bidder is further advised that it may be required to attend a pre-award meeting with DDC representatives. If such a meeting is convened, the bidder will be advised as to any additional material to be provided.

**A. PROJECT REFERENCES – CONTRACTS COMPLETED BY THE BIDDER**

List all contracts substantially completed within the last 4 years, up to a maximum of 10, in descending order of date of substantial completion.

Project & Location	Contract Type	Contract Amount (\$000)	Date Completed	Owner Reference & Tel. No.	Architect/Engineer Reference & Tel. No. if different from owner
Dyre Avenue Signals	MTA Signals	\$128,500,000	12/2017	Dave Bumford 646-252-3914	
Montague Tube Rehab	MTA Tunnel Rehab	\$115,000,000	12/2015	Piyush Patel 646-252-4035	
South Ferry Terminal	MTA Station	\$206,000,000	06/2017	Piyush Patel 646-252-4035	
MED-609	Water Mains	\$236,000,000	Ongoing due to extra work	Shah Jaromi 917-417-6790	
MED-625	Water Mains	\$15,000,000	Ongoing due to extra work	Shah Jaromi 917-417-6790	
<b>*NOTE: These projects were performed /completed by Judlau Contracting when Mr. Ocken was Vice President there, and Mr. Iovino was Owner/CEO. Mr. Ocken was the Vice President responsible for these projects at Judlau</b>					

**B. PROJECT REFERENCES – CONTRACTS CURRENTLY UNDER CONSTRUCTION BY THE BIDDER**

List all contracts currently under construction even if they are not similar to the contract being awarded.

Project & Location	Contract Type	Contract Amount (\$000)	Subcontracted to Others (\$000)	Uncompleted Portion (\$000)	Date Scheduled to Complete	Owner Reference & Tel. No.	Architect/Engineer Reference & Tel. No. if different from owner
NONE							

**C. PROJECT REFERENCES – PENDING CONTRACTS NOT YET STARTED BY THE BIDDER**

List all contracts awarded to or won by the bidder but not yet started.

Project & Location	Contract Type	Contract Amount (\$000)	Date Scheduled to Start	Owner Reference & Tel. No.	Architect/Engineer Reference & Tel. No. if different from owner
NONE					

(NO TEXT ON THIS PAGE)

**OFFICE OF THE MAYOR  
BUREAU OF LABOR SERVICES  
CONTRACT CERTIFICATE**

To be completed if the contract is less than \$1,000,000

Contractor: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Telephone Number: \_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_  
\_\_\_\_\_

Contracting Agency or Owner: \_\_\_\_\_

Project Number: \_\_\_\_\_

Proposed Contract Amount: \_\_\_\_\_

Description and Address of Proposed Contract: \_\_\_\_\_

Names of Subcontractors in the amount of 750,000 or more on this contract (if not known at this time, so state indicating that trades will be subcontracted):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I, (fill in name of person signing) \_\_\_\_\_,  
hereby affirm that I am authorized by the above-named contractor to certify that said contractor's  
proposed contract with the above-named owner or city agency is less than \$1,000,000. This affirmation  
is made in accordance with Executive Order No. 50 (1980) as amended and its implementing regulations.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

**WILLFUL OR FRAUDULENT FALSIFICATION OF ANY DATA OR INFORMATION  
SUBMITTED HEREWITH MAY RESULT IN THE TERMINATION OF ANY CONTRACT BETWEEN  
THE CITY AND THE BIDDER OR CONTRACTOR AND BAR THE BIDDER OR CONTRACTOR FROM  
PARTICIPATION IN ANY CITY CONTRACT FOR A PERIOD OF UP TO THREE YEARS. FURTHER,  
SUCH FALSIFICATION MAY RESULT IN CRIMINAL PROSECUTION.**

(NO TEXT ON THIS PAGE)



## VENDEX COMPLIANCE

(A) **Vendex Fees:** Pursuant to Procurement Policy Board Rule 2-08(f)(2), the contractor will be charged a fee for the administration of the VENDEX system, including the Vendor Name Check process, if a Vendor Name Check review is required to be conducted by the Department of Investigation. The contractor shall also be required to pay the applicable required fees for any of its subcontractors for which Vendor Name Check reviews are required. The fee(s) will be deducted from payments made to the contractor under the contract. For contracts with an estimated value of less than or equal to \$1,000,000, the fee will be \$175 per Vendor Name Check review. For contracts with an estimated value of greater than \$1,000,000, the fee will be \$350 per Vendor Name Check review.

(B) **Confirmation of Vendex Compliance:** The Bidder shall submit this Confirmation of Vendex Compliance to the Department of Design and Construction, Contracts Section, 30-30 Thomson Avenue – First Floor, Long Island City, NY 11101.

**Bid Information:** The Bidder shall complete the bid information set forth below.

Name of Bidder: MLJ Contracting Corp  
Bidder's Address: 1720 Whitestone Expwy., Suite 300, Whitestone NY 11357  
Bidder's Telephone Number: 646-813-6770  
Bidder's Fax Number: 718-357-4818  
Date of Bid Opening: May 31, 2018  
PROJECT ID: P-1STARLP

**Vendex Compliance:** To demonstrate compliance with Vendex requirements, the Bidder shall complete either Section (1) or Section (2) below, whichever applies.

- (1) **Submission of Vendex Questionnaires to MOCS:** By signing in the space provided below, the Bidder certifies that as of the date specified below, the Bidder has submitted Vendex Questionnaires to the Mayor's Office of Contract Services, Attn: VENDEX, 253 Broadway, 9<sup>th</sup> Floor, New York, New York 10007.

Date of Submission: January 12, 2018 (PASSPort Online)

By:   
(Signature of Partner or corporate officer)

Print Name: Richard Ocken

- (2) **Submission of Certification of No Change to DDC:** By signing in the space provided below, the Bidder certifies that it has read the instructions in a "Vendor's Guide to Vendex" and that such instructions do not require the Bidder to submit Vendex Questionnaires. The Bidder has completed **TWO ORIGINALS** of the Certification of No Change set forth on the next page of this Bid Booklet.

By:   
(Signature of Partner or corporate officer)

Print Name: Richard Ocken



# Certificate of No Change Form

- Please submit two completed forms. Copies will not be accepted.
- Please send both copies to the agency that requested it, unless you are advised to send it directly to the Mayor's Office of Contract Services (MOCS).
- A materially false statement willfully or fraudulently made in connection with this certification, and/or the failure to conduct appropriate due diligence in verifying the information that is the subject of this certification, may result in rendering the submitting entity non-responsible for the purpose of contract award.
- A materially false statement willfully or fraudulently made in connection with this certification may subject the person making the false statement to criminal charges

I, Richard Ocken, being duly sworn, state that I have read  
*Enter Your Name*

and understand all the items contained in the vendor questionnaire and any submission of change as identified on page one of this form and certify that as of this date, these items have not changed. I further certify that, to the best of my knowledge, information and belief, those answers are full, complete, and accurate, and that, to the best of my knowledge, information, and belief, those answers continue to be full, complete, and accurate.

In addition, I further certify on behalf of the submitting vendor that the information contained in the principal questionnaire(s) and any submission of change identified on page two of this form have not changed and have been verified and continue, to the best of my knowledge, to be full, complete and accurate.

I understand that the City of New York will rely on the information supplied in this certification as additional inducement to enter into a contract with the submitting entity.

## Vendor Questionnaire *This section is required.*

*This refers to the vendor questionnaire(s) submitted for the vendor doing business with the City.*

Name of Submitting Entity: MLJ Contracting Corp

Vendor's Address: 1720 Whitestone Expwy., Suite 300, Whitestone NY 11357

Vendor's EIN or TIN: 82-2494014 Requesting Agency: NYCDDC

Are you submitting this Certification as a parent? (Please circle one) Yes No

Signature date on the last full vendor questionnaire signed for the submitting vendor: 1-12-2018

Signature date on change submission for the submitting vendor: N/A

## Principal Questionnaire

*This section refers to the most recent principal questionnaire submissions.*



	Principal Name	Date of signature on last full Principal Questionnaire	Date(s) of signature on submission of change
1	Richard Ocken	N/A	
2	Thomas Iovino	N/A	
3	Robert Squillante	1-12-2018 (Online PASSPort)	
4			
5			
6			

☐ Check if additional changes were submitted and attach a document with the date of additional submissions.

### Certification *This section is required.*

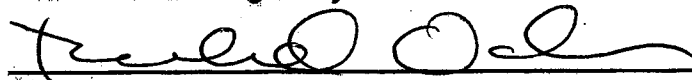
*This form must be signed and notarized. Please complete this twice. Copies will not be accepted.*

#### Certified By:

Richard Ocken  
Name (Print)

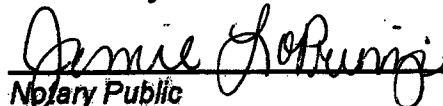
President  
Title

MLJ Contracting Corp  
Name of Submitting Entity

  
Signature

5/30/18  
Date

#### Notarized By:

  
Notary Public

Queens  
County License Issued

JAMIE LOPRINZI  
NOTARY PUBLIC, STATE OF NEW YORK  
QUEENS COUNTY  
License Number  
COMM. EXP. 3/25/2022

Sworn to before me on: May 30, 2018  
Date



# Certificate of No Change Form

- Please submit two completed forms. Copies will not be accepted.
- Please send both copies to the agency that requested it, unless you are advised to send it directly to the Mayor's Office of Contract Services (MOCS).
- A materially false statement willfully or fraudulently made in connection with this certification, and/or the failure to conduct appropriate due diligence in verifying the information that is the subject of this certification, may result in rendering the submitting entity non-responsible for the purpose of contract award.
- A materially false statement willfully or fraudulently made in connection with this certification may subject the person making the false statement to criminal charges

I, Richard Ocken, being duly sworn, state that I have read  
*Enter Your Name*

and understand all the items contained in the vendor questionnaire and any submission of change as identified on page one of this form and certify that as of this date, these items have not changed. I further certify that, to the best of my knowledge, information and belief, those answers are full, complete, and accurate, and that, to the best of my knowledge, information, and belief, those answers continue to be full, complete, and accurate.

In addition, I further certify on behalf of the submitting vendor that the information contained in the principal questionnaire(s) and any submission of change identified on page two of this form have not changed and have been verified and continue, to the best of my knowledge, to be full, complete and accurate.

I understand that the City of New York will rely on the information supplied in this certification as additional inducement to enter into a contract with the submitting entity.

## Vendor Questionnaire *This section is required.*

*This refers to the vendor questionnaire(s) submitted for the vendor doing business with the City.*

Name of Submitting Entity: MLJ Contracting Corp

Vendor's Address: 1720 Whitestone Expwy., Suite 300, Whitestone NY 11357

Vendor's EIN or TIN: 82-2494014 Requesting Agency: NYCDDC

Are you submitting this Certification as a parent? (Please circle one) Yes No

Signature date on the last full vendor questionnaire signed for the submitting vendor: 1-12-2018

Signature date on change submission for the submitting vendor: N/A

## Principal Questionnaire

This section refers to the most recent principal questionnaire submissions.



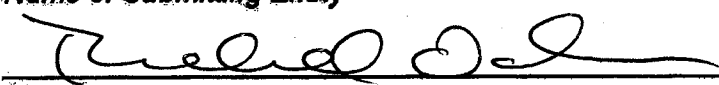
	Principal Name	Date of signature on last full Principal Questionnaire	Date(s) of signature on submission of change
1	Richard Ocken	N/A	
2	Thomas Iovino	N/A	
3	Robert Squillante	1-12-2018 (Online PASSPort)	
4			
5			
6			

☐ Check if additional changes were submitted and attach a document with the date of additional submissions.

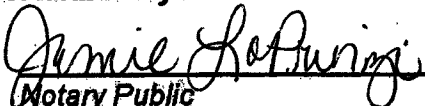
### Certification This section is required.

This form must be signed and notarized. Please complete this twice. Copies will not be accepted.

#### Certified By:

Richard Ocken  
Name (Print)  
President  
Title  
MLJ Contracting Corp  
Name of Submitting Entity  
  
Signature  
5/30/18  
Date

#### Notarized By:

  
Notary Public  
Queens  
County License Issued  
License Number  
JAMIE LOPRINZI

Sworn to before me on: May 30, 2018  
Date

NOTARY PUBLIC, STATE OF NEW YORK  
QUEENS COUNTY  
LIC # 01LO6138413  
COMM. EXP. 3/25/20\_\_

## **IRAN DIVESTMENT ACT COMPLIANCE RIDER**

### **FOR NEW YORK CITY CONTRACTORS**

The Iran Divestment Act of 2012, effective as of April 12, 2012, is codified at State Finance Law ("SFL") §165-a and General Municipal Law ("GML") §103-g. The Iran Divestment Act, with certain exceptions, prohibits municipalities, including the City, from entering into contracts with persons engaged in investment activities in the energy sector of Iran. Pursuant to the terms set forth in SFL §165-a and GML §103-g, a person engages in investment activities in the energy sector of Iran if:

- (a) The person provides goods or services of twenty million dollars or more in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers, or products used to construct or maintain pipelines used to transport oil or liquefied natural gas, for the energy sector of Iran; or
- (b) The person is a financial institution that extends twenty million dollars or more in credit to another person, for forty-five days or more, if that person will use the credit to provide goods or services in the energy sector in Iran and is identified on a list created pursuant to paragraph (b) of subdivision three of Section 165-a of the State Finance Law and maintained by the Commissioner of the Office of General Services.

A bid or proposal shall not be considered for award nor shall any award be made where the bidder or proposer fails to submit a signed and verified bidder's certification.

Each bidder or proposer must certify that it is not on the list of entities engaged in investment activities in Iran created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law. In any case where the bidder or proposer cannot certify that they are not on such list, the bidder or proposer shall so state and shall furnish with the bid or proposal a signed statement which sets forth in detail the reasons why such statement cannot be made. The City of New York may award a bid to a bidder who cannot make the certification on a case by case basis if:

- (1) The investment activities in Iran were made before the effective date of this section (i.e., April 12, 2012), the investment activities in Iran have not been expanded or renewed after the effective date of this section and the person has adopted, publicized and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran; or
- (2) The City makes a determination that the goods or services are necessary for the City to perform its functions and that, absent such an exemption, the City would be unable to obtain the goods or services for which the contract is offered. Such determination shall be made in writing and shall be a public document.

**BIDDER'S CERTIFICATION OF COMPLIANCE WITH  
IRAN DIVESTMENT ACT**

Pursuant to General Municipal Law §103-g, which generally prohibits the City from entering into contracts with persons engaged in investment activities in the energy sector of Iran, the bidder/proposer submits the following certification:

[Please Check One]

**BIDDER'S CERTIFICATION**

- ☒ By submission of this bid or proposal, each bidder/proposer and each person signing on behalf of any bidder/proposer certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief, that each bidder/proposer is not on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law.
- ☐ I am unable to certify that my name and the name of the bidder/proposer does not appear on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law. I have attached a signed statement setting forth in detail why I cannot so certify.



SIGNATURE

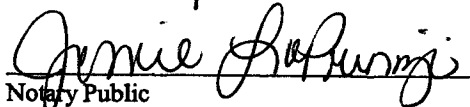
Richard Ocken

PRINTED NAME

President

TITLE

Sworn to before me this  
30<sup>th</sup> day of May, 2018

  
Notary Public

Dated: May 30, 2018

**THE CITY OF NEW YORK  
DEPARTMENT OF SMALL BUSINESS SERVICES  
DIVISION OF LABOR SERVICES  
CONTRACT COMPLIANCE UNIT  
110 WILLIAMS STREET  
NEW YORK, NEW YORK 10038  
PHONE: (212) 513-6323  
FAX: (212) 618-8879**

## **CONSTRUCTION**

## **EMPLOYMENT**

## **REPORT**



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The City of New York  
Department of Small Business Services  
Division of Labor Services  
Contract Compliance Unit  
110 William Street  
New York, New York 10038  
Phone: (212) 513 - 6323  
Fax: (212) 618-8879

## CONSTRUCTION EMPLOYMENT REPORT INSTRUCTIONS

### WHO MUST FILE A CONSTRUCTION EMPLOYMENT REPORT

A Construction Employment Report (ER) must be filed if you meet the following conditions:

CONTRACT FUNDING SOURCE	CONTRACTOR	CONTRACT VALUE	SUBMISSION REQUIREMENT
Federal/Federally assisted	Prime and subcontractors	\$10,000 or greater	Construction Employment Report
City and state funded	Prime contractor	\$1,000,000 or greater	
	Subcontractor	\$750,000 or greater	
		Less than \$750,000	Less than \$750,000 Certificate (City/State Only)

#### Prime Contractor:

- A general contractor or construction manager selected to perform work on a construction project funded (in whole or in part) by the federal government with a proposed contract value of \$10,000 or more.
- A general contractor or construction manager selected to perform work on a construction project funded or assisted by the City of New York with a proposed contract value of \$1,000,000 or more.

#### Subcontractor:

- A subcontractor selected to perform work on a construction project funded (in whole or in part) by the federal government with a proposed contract value of \$10,000 or more.
- A subcontractor selected to perform work on a construction project funded or assisted by the City of New York with a proposed contract value of \$750,000 or more.
- A subcontractor selected to perform work on a construction project funded or assisted by the City of New York with a proposed contract value of less than \$750,000 must submit a "Less than \$750,000" certificate.

### WHERE TO FILE

Employment Reports must be filed with the City agency awarding the contract. If you are a contractor or subcontractor who will be working for a private developer in receipt of funding or assistance from the City, the ER must be filed with the City agency with jurisdiction over the developer's project.

### DLS REVIEW PROCESS

In accordance with Executive Order 50 (EO 50), upon receipt by DLS of a completed ER, DLS conducts a review of the contractor's current employment policies, practices and procedures, as well as perform a statistical analysis of the contractor's workforce, if necessary. The process is as follows:

1. Within five (5) business days, DLS will review the ER for completeness and accuracy. If any information is omitted or incorrect, or if necessary documents are not submitted, the submission shall be deemed incomplete and DLS will inform the contractor. The substantive compliance review does not commence until the submission is complete. An incomplete submission will delay the review process and may preclude or interrupt the contract approval.
2. If the ER submission is complete, the compliance review will proceed, resulting in one of the following:

**Certificate of Approval**

The contractor is found to be in compliance with all applicable laws and regulations. The approval is valid for 36 months.

**Continued Approval Certificate**

The contractor has been issued a Certificate of Approval in the previous 36 months which is good for the applicable contract.

**Conditional Certificate of Compliance**

The contractor is required to take corrective actions in order to be in compliance with EO 50. The contractor must meet the conditions within one month of the issue of the Conditional Certificate.

**Determination of Nonperformance**

The contractor has failed to take the required corrective actions stipulated in the Conditional Certificate. A determination of nonperformance may prevent a contractor from receiving an award of a contract.

## HOW TO COMPLETE THE EMPLOYMENT REPORT

### Contents

**General Information**

**Part I: Contractor/Subcontractor Information**

**Part II: Employment Policies and Practices**

**Part III: Contract Bid Information and Projected and Current Workforce Forms**

**Signature Page**

### **PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION**

- Questions 7 – 11: Please provide the required contact information for your company. All contracts must have a designated Equal Employment Officer.
- Question 12: If you are a subcontractor, you must state the name of the contractor for whom you are providing the construction services.
- Question 13: Please provide the number of permanent employees in your company.
- Question 14a-g: The Project Identification Number (PIN) and the Contract Registration ID Number (CT#) can be obtained from the City agency. Provide a description of the trade work you will perform on this project and the address where the work will be performed. Subcontractors can obtain this information from the contract they have with the prime contractor.
- Questions 15 – 18: If your company has received a valid Certificate of Approval within the past 36 months, been audited by the United States Department of Labor, Office of Federal Contract Compliance Programs (OFCCP), or if your company has submitted an ER for a different contract for which you have not yet received a compliance certificate, then you only need to complete and submit the following:
- General Information section
  - Part I - Contractor/Subcontractor Information
  - Form B - Projected Workforce
  - Signature Page

If your company is currently waiting for an approval on another contract previously submitted, be certain to identify the date on which you submitted the completed Employment Report, the name of the City contracting agency with which the contract was made, and the name and telephone number of the person to whom the Employment Report was submitted.

If your company was issued a Conditional Certificate of Approval, all required corrective actions must have been taken or DLS will not issue a Continued Certificate.

- Question 18: If the company was audited by the OFCCP, also provide the following:
- Identify the reviewing OFCCP office by its name and address
  - If an unconditional certificate of compliance was issued by the OFCCP, attach a copy of the certificate in lieu of completing Parts II and III;
  - Include copies of all corrective actions and documentation of OFCCP's performance; and
  - Provide a copy of all stated OFCCP findings.

- Question 19: Please provide a copy of any Collective Bargaining Agreement(s) which is negotiated through an employer trade association on behalf of your organization or any of its affiliates.

## **PART II: EMPLOYMENT POLICIES AND PRACTICES**

*Remember to label all documents with the question number for which they are submitted.*

Questions 20a – j: You must respond to the questions as to whether or not your firm has documents reflecting written policies, benefits and procedures. If so, then you must identify by name each document in which the policy(ies), procedure(s) and benefit(s) is located and submit copies of all of the document(s). If your firm follows unwritten practices or procedures, include an explanation of how they operate. Please submit the most current document(s), including all applicable amendments. Label each document and/or unwritten practice according to the question to which it corresponds (e.g. 20a, 20b, etc.)

Questions 21a – h: Inquires about the manner/methods by which you comply with the requirements of the Immigration Reform and Control Act of 1986 (IRCA).

Question 22: Inquires into where and how I-9 forms are maintained and stored.

Questions 23a – e: Inquires into whether or not there is a requirement that an applicant or employee be subjected to a medical examination at any given time. Copies of the medical information questionnaire and instructions must be submitted with the Employment Report.

Question 24: Indicate the existence and location of all statements of your firm's Equal Employment Opportunity policy and attach a copy of each statement.

Question 25: Submit any current Affirmative Action Plan(s) created pursuant to Executive Order 11246.

Question 26: If your firm or collective bargaining agreement has an internal grievance procedure, indicate this and submit a copy of the policy and procedure. If unwritten, explain its nature and operation. Explain how your firm's procedure addresses EEO complaints.

Question 27: If your employees have used the procedure in the last three (3) years, please submit an explanation in the format indicated below:

1. Number of complaint(s)	2. Nature of the complaint(s)	3. Position(s) of the complainant(s)	4. Was an investigation conducted? Y/N	5. Current status of the disposition
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Question 28: Indicate whether in the past three (3) years complaints have been filed with a court of law or administrative agency, naming your company as a defendant (or respondent) in a complaint alleging violation of any anti-discrimination or affirmative action laws. If yes, develop and submit a log to show, for each administrative/and or judicial action filed, the following information:

1. Name(s) of complainant(s)	2. Administrative agency or court in which action was filed	3. Nature of the complaint(s)	4. Current status	5. If not pending, the complaint's disposition
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Question 29: Identify each job for which a physical qualification exists. Identify and explain the physical qualification(s) for each stated job. Submit job descriptions for each job and the reasons for the qualifications.

Question 30: Identify each job for which there exists any qualification related to age, race, color, national origin, sex, creed, disability, marital status, sexual orientation or citizenship status. Identify and explain the specific related qualification for each job stated. Submit job descriptions for each job and the reasons for the qualifications.

### **PART III: CONTRACT BID INFORMATION AND PROJECTED AND CURRENT WORKFORCE FORMS**

#### **FORM A: CONTRACT BID INFORMATION – USE OF SUBCONTRACTORS/TRADES**

Your projections for the utilization of subcontractors on the proposed contract are to be provided in this section. A chart has been provided for the identification of subcontractors. Information is to be provided to the extent known at the time the ER is filed for review by DLS. If the subcontractor's name is unknown, then write "unknown". Under "ownership", enter the appropriate race/ethnic and gender code. If the contract is federally funded or assisted and the subcontractor is being utilized in accordance with applicable federal requirements with respect to Minority Business Enterprise or Woman Business Enterprise requirements, enter the appropriate code. This will also apply to state funded contracts with similar requirements for minority and female owned businesses.

#### **FORM B: PROJECTED WORKFORCE FOR WORK TO BE PERFORMED ON THIS PROJECT**

For each trade to be engaged by your company for this project, enter the projected workforce for Males and Females by trade classification in the charts provided.

#### **FORM C: CURRENT WORKFORCE FOR WORK TO BE PERFORMED ON THIS PROJECT**

For each trade *currently* engaged by your company for all work performed in NYC, enter the current workforce for Males and Females by trade classification in the charts provided.

### **SIGNATURE PAGE**

The signatory of this Employment Report and all other documents submitted to DLS must be an official authorized to enter into a binding legal agreement. The signature page must be completed in its entirety and notarized. Only original signatures will be accepted.



13. Number of employees in your company: 8

14. Contract information:

(a) NYCDDC  
Contracting Agency (City Agency)

(b) \_\_\_\_\_  
Contract Amount

(c) 8502017HW0048C  
Procurement Identification Number (PIN)

(d) \_\_\_\_\_  
Contract Registration Number (CT#)

(e) \_\_\_\_\_  
Projected Commencement Date

(f) \_\_\_\_\_  
Projected Completion Date

(g) Description and location of proposed contract:

Bronx River Greenway: Starlight Park Phase II, Stage 2 Bridge the Critical South Bronx Gap

15. Has your firm been reviewed by the Division of Labor Services (DLS) within the past 36 months and issued a Certificate of Approval? Yes \_\_\_ No x

If yes, attach a copy of certificate.

16. Has DLS within the past month reviewed an Employment Report submission for your company and issued a Conditional Certificate of Approval? Yes \_\_\_ No x

If yes, attach a copy of certificate.

**NOTE: DLS WILL NOT ISSUE A CONTINUED CERTIFICATE OF APPROVAL IN CONNECTION WITH THIS CONTRACT UNLESS THE REQUIRED CORRECTIVE ACTIONS IN PRIOR CONDITIONAL CERTIFICATES OF APPROVAL HAVE BEEN TAKEN.**

17. Has an Employment Report already been submitted for a different contract (not covered by this Employment Report) for which you have not yet received compliance certificate? Yes \_\_\_ No x If yes,

Date submitted: \_\_\_\_\_

Agency to which submitted: \_\_\_\_\_

Name of Agency Person: \_\_\_\_\_

Contract No: \_\_\_\_\_

Telephone: \_\_\_\_\_

18. Has your company in the past 36 months been audited by the United States Department of Labor, Office of Federal Contract Compliance Programs (OFCCP)? Yes \_\_\_ No x

If yes,

(a) Name and address of OFCCP office.

\_\_\_\_\_  
\_\_\_\_\_

(b) Was a Certificate of Equal Employment Compliance issued within the past 36 months?  
Yes\_\_\_ No\_\_\_

If yes, attach a copy of such certificate.

(c) Were any corrective actions required or agreed to? Yes\_\_\_ No\_\_\_

If yes, attach a copy of such requirements or agreements.

(d) Were any deficiencies found? Yes\_\_\_ No\_\_\_

If yes, attach a copy of such findings.

19. Is your company or its affiliates a member or members of an employers' trade association which is responsible for negotiating collective bargaining agreements (CBA) which affect construction site hiring? Yes\_\_\_ No x

If yes, attach a list of such associations and all applicable CBA's.

**PART II: DOCUMENTS REQUIRED** Will Provide if Low Bidder

20. For the following policies or practices, attach the relevant documents (e.g., printed booklets, brochures, manuals, memoranda, etc.). If the policy(ies) are unwritten, attach a full explanation of the practices. See instructions.

- \_\_\_ (a) Health benefit coverage/description(s) for all management, nonunion and union employees (whether company or union administered)
- \_\_\_ (b) Disability, life, other insurance coverage/description
- \_\_\_ (c) Employee Policy/Handbook
- \_\_\_ (d) Personnel Policy/Manual
- \_\_\_ (e) Supervisor's Policy/Manual
- \_\_\_ (f) Pension plan or 401k coverage/description for all management, nonunion and union employees, whether company or union administered
- \_\_\_ (g) Collective bargaining agreement(s).
- \_\_\_ (h) Employment Application(s)
- \_\_\_ (i) Employee evaluation policy/form(s).
- \_\_\_ (j) Does your firm have medical and/or non-medical (i.e. education, military, personal, pregnancy, child care) leave policy?



21. To comply with the Immigration Reform and Control Act of 1986 when and of whom does your firm require the completion of an I-9 Form?

- |  |              |             |
|--|--------------|-------------|
| (a) Prior to job offer                     | Yes          | No <u>X</u> |
| (b) After a conditional job offer          | Yes          | No <u>X</u> |
| (c) After a job offer                      | Yes <u>X</u> | No          |
| (d) Within the first three days on the job | Yes          | No <u>X</u> |
| (e) To some applicants                     | Yes          | No <u>X</u> |
| (f) To all applicants                      | Yes          | No <u>X</u> |
| (g) To some employees                      | Yes          | No <u>X</u> |
| (h) To all employees                       | Yes <u>X</u> | No          |

22. Explain where and how completed I-9 Forms, with their supportive documentation, are maintained and made accessible.

In a HR filing System

23. Does your firm or any of its collective bargaining agreements require job applicants to take a medical examination? Yes No X

If yes, is the medical examination given:

- |                                   |     |    |
|-----------------------------------|-----|----|
| (a) Prior to a job offer          | Yes | No |
| (b) After a conditional job offer | Yes | No |
| (c) After a job offer             | Yes | No |
| (d) To all applicants             | Yes | No |
| (e) Only to some applicants       | Yes | No |

If yes, list for which applicants below and attach copies of all medical examination or questionnaire forms and instructions utilized for these examinations.

24. Do you have a written equal employment opportunity (EEO) policy? Yes X No

If yes, list the document(s) and page number(s) where these written policies are located.

25. Does the company have a current affirmative action plan(s) (AAP)

Minorities and Women

Individuals with handicaps

Other. Please specify

26. Does your firm or collective bargaining agreement(s) have an internal grievance procedure with respect to EEO complaints? Yes Y No

If yes, please attach a copy of this policy.

If no, attach a report detailing your firm's unwritten procedure for handling EEO complaints.



1720 Whitestone Expwy., Suite 300  
Whitestone, NY 11357

To: All Employees  
From: EEO Officer

**AFFIRMATIVE ACTION PROGRAM**  
**(Equal Employment Opportunity)**

In the interest of demonstrating compliance with the Civil Rights Act of 1964, and Executive Order 11246 of President, and to conform to the Equal Employment Opportunity Provisions of Federal Spec. (41CFR60) Construction Contractors-Affirmative Action Requirements, **MLJ Contracting Corp** hereby affirms its policy not to discriminate against any employee or applicant for employment because of race, creed, sex, color or national origin, religion, martial status, sexual orientation, age, citizenship status on disability not specifically related to work.

Moreover, we recognize and accept our responsibility to develop employment practices that will seek to provide opportunities for minority and female group members to become qualified for employment and advancement within our organization, and to correct any discriminatory practices, which may be found to exist therein.

Our Employment Opportunity Officer, **Jamie LoPrinzi**, will actively administer the following policy.

It will be the responsibility of the Equal Employment Opportunity Officer to insure that any and all personnel of this Company who hire, discharge, promote and supervise employees, or who recommend such action, share this Company's commitment to Equal Employment Opportunity and determine the measure of compliance to our policy.

We agree to submit, upon request, a breakdown of our current work force indicating the extent to minority representation and detailing all classification of employees, the total number of employees in each classification, and the number of minority and female group members in each classification.

Any advertisements for employees which are deemed necessary, and which are not precluded by valid collective bargaining agreements, will include the notation "**An Equal Opportunity Employer**" Local newspapers will be used for this purpose as well as any other publications deemed necessary to reach other segments of the minority and female group population.

Equal Opportunity Employer



1720 Whitestone Expwy., Suite 300  
Whitestone, NY 11357

Every effort will be made to communicate our Equal Employment Opportunity policy to all our employees, to prospective employees and potential sources of employment including, but not limited to, labor unions, employment agencies and school placement offices.

Unless precluded by valid bargaining agreements, systematic and direct recruitment will be conducted through public employee referral sources likely to yield minority and female group applicants. These sources will include schools, training facilities and organizations as well as our own employees who will personally be encouraged to refer minority and female group applicants to us for employment.

Wages, working conditions, employee benefits and promotional capabilities that for the most part are set forth in union agreements, will be administered on non-discriminatory basis and they will be reviewed periodically for the purpose of adjusting any inequities, which may be found to exist. All employees will be advised of their rights to participate in Company sponsored recreational and social activities.

The Equal Employment Opportunity Officer will have the authority and the responsibility of protecting the employment rights of all employees' with respect to upgrading, promotions, transfers, demotions, layoffs and termination's.

Since our Company is almost entirely dependent on labor unions as source of work force, we will actively seek their cooperation in striving to increase minority and female group opportunities within the unions and effecting referrals by the unions of greater numbers of minority and female group employees. Through direct participation in contractor association programs, we will make known our willingness to cooperate completely in developing training programs geared toward qualifying minority and female group individuals for union memberships. Every effort will be made to enter into union agreements, which assure equal employment opportunities for minority and female groups.

We agree to solicit the employment of qualified minority and female group subcontractors and subcontractors with minority and female group representation among their employees.

**Jamie LoPrinzi**  
EEO Officer

Equal Opportunity Employer



## EQUAL EMPLOYMENT OPPORTUNITY STATEMENT

It is the policy of **MLJ Contracting Corp** not to discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability, marital status, or sexual orientation, citizenship status. We will take specific action to ensure that applicants are employed and that employees are treated during employment, without regard to their race, creed, color, national origin, sex, age, disability, marital status, sexual orientation or citizenship status. Such action shall include, but not be limited to the following: recruitment, hiring, compensation, training and apprenticeship, promotion, upgrading, demotion, downgrading, transfer, lay-off and termination, and all other terms and conditions of employment except as provided by law.

**Jamie LoPrinzi** has been appointed Director of our Equal Employment Opportunity programs. As director of **MLJ Contracting Corp's** Equal Employment Opportunity programs, **Jamie LoPrinzi** responsibilities include:

- i. Developing policy statements, equal employment opportunity Program, internal and external communication techniques, and programs:
- ii. Assisting in the identification of problem areas:
- iii. Assisting line management in arriving at solutions to problems:
- iv. Designing and implementing audit and reporting systems that will:
  - a. Measure effectiveness for the policy and implementing programs including supervisors' and management's adherence to the equal employment opportunity policy:
  - b. Indicate need for remedial action: and
  - c. Determine the degree to which the equal employment objectives have been met.
- v. Serve as liaison between the company and enforcement agencies:
- vi. Serve as liaison between the company and minority organizations, women's organizations, and advocate organizations for other protected groups and community action groups concerned with equal employment opportunity.

To ensure adherence to this policy, performance evaluations for supervisory personnel shall include ratings on their equal employment opportunity efforts and results.



1720 Whitestone Expwy., Suite 300  
Whitestone, NY 11357

Additionally, in furtherance of our equal employment opportunity commitment **MLJ Contracting Corp** shall insist that labor unions and other recruiting sources actively recruit and refer members of all protected groups for all positions: incorporated non-discriminatory provisions in all its contracts and purchase orders and include the EEO logo, slogan or statement in all solicitations or advertisements for employees.

**MLJ Contracting Corp**

COMPANY NAME

**Jamie LoPrinzi, EEO Officer**

NAME & TITLE

*Jamie LoPrinzi*

SIGNATURE

**5/29/2018**

DATE

27. Has any employee, within the past three years, filed a complaint pursuant to an internal grievance procedure or with any official of your firm with respect to equal employment opportunity? Yes\_\_\_ No x

If yes, attach an internal complaint log. See instructions.

28. Has your firm, within the past three years, been named as a defendant (or respondent) in any administrative or judicial action where the complainant (plaintiff) alleged violation of any anti-discrimination or affirmative action laws? Yes\_\_\_ No x

If yes, attach a log. See instructions.

29. Are there any jobs for which there are physical qualifications? Yes\_\_\_ No x

If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).

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30. Are there any jobs for which there are age, race, color, national origin, sex, creed, disability, marital status, sexual orientation, or citizenship qualifications? Yes\_\_\_ No x

If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).

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### SIGNATURE PAGE

I, (print name of authorized official signing) Richard Ocken hereby certify that the information submitted herewith is true and complete to the best of my knowledge and belief and submitted with the understanding that compliance with New York City's equal employment requirements, as contained in Chapter 56 of the City Charter, Executive Order No. 50 (1980), as amended, and the implementing Rules and Regulations, is a contractual obligation. I also agree on behalf of the company to submit a certified copy of payroll records to the Division of Labor Services on a monthly basis.

MLJ Contracting Corp  
Contractor's Name

Jamie LoPrinzi Operations Manager  
Name of person who prepared this Employment Report Title

Richard Ocken President  
Name of official authorized to sign on behalf of the contractor Title

646-813-6770  
Telephone Number

 5/30/18  
Signature of authorized official Date

If contractors are found to be underutilizing minorities and females in any given trade based on Chapter 56 Section 3H, the Division of Labor Services reserves the right to request the contractor's workforce data and to implement an employment program.


Contractors who fail to comply with the above mentioned requirements or are found to be in noncompliance may be subject to the withholding of final payment.

Willful or fraudulent falsifications of any data or information submitted herewith may result in the termination of the contract between the City and the bidder or contractor and in disapproval of future contracts for a period of up to five years. Further, such falsification may result in civil and/or criminal prosecution.

To the extent permitted by law and consistent with the proper discharge of DLS' responsibilities under Charter Chapter 56 of the City Charter and Executive Order No. 50 (1980) and the implementing Rules and Regulations, all information provided by a contractor to DLS shall be confidential.

Only original signatures accepted.

Sworn to before me this 30th day of May 20 18

 5/30/18  
Notary Public Authorized Signature Date

JAMIE LOPRINZI  
NOTARY PUBLIC, STATE OF NEW YORK  
QUEENS COUNTY  
LIC # 01LO6138413  
COMM. EXP. 3/25/2021

**FORM A. CONTRACT BID INFORMATION: USE OF SUBCONTRACTORS/TRADES**

1. Do you plan to subcontract work on this contract? Yes ☐ No ☐
2. If yes, complete the chart below.

**NOTE: All proposed subcontractors with a subcontract in excess of \$750,000 must complete an Employment Report for review and approval before the contract may be awarded and work commences.**

SUBCONTRACTOR'S NAME*	OWNERSHIP (ENTER APPROPRIATE CODE LETTERS BELOW)	WORK TO BE PERFORMED BY SUBCONTRACTOR	TRADE PROJECTED FOR USE BY SUBCONTRACTOR	PROJECTED DOLLAR VALUE OF SUBCONTRACT

**\*If subcontractor is presently unknown, please enter the trade (craft name).**

**OWNERSHIP CODES**

- W: White  
 B: Black  
 H: Hispanic  
 A: Asian  
 N: Native American  
 F: Female



# FORM B: PROJECTED WORKFORCE

## TRADE CLASSIFICATION CODES

(J) Journeylevel Workers  
(H) Helper  
(TOT) Total by Column

(A) Apprentice  
(TRN) Trainee

For each trade to be engaged by your company for this project, enter the projected workforce for Males and Females by trade classification on the charts below.

### MALES

### FEMALES

Trade:

Union Affiliation, if applicable

Total (Col. #1-10):

Total Minority, Male & Female  
(Col. #2,3,4,5,7,8,9, & 10):

Total Female  
(Col. #6 - 10):

	MALES					FEMALES				
	(1) White Non Hisp.	(2) Black Non Hisp.	(3) Hisp.	(4) Asian	(5) Native Amer.	(6) White Non Hisp.	(7) Black Non Hisp.	(8) Hisp.	(9) Asian	(10) Native Amer.
J										
H										
A										
TRN										
TOT										

What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?

# **FORM B: PROJECTED WORKFORCE**

Trade:

Union Affiliation, if applicable

Total (Col. #1-10):

Total Minority, Male & Female  
(Col. #2,3,4,5,7,8,9, & 10):

Total Female  
(Col. #6 - 10):

## **MALES**

(1) White Non Hisp.	(2) Black Non Hisp.	(3) Hisp.	(4) Asian	(5) Native Amer.
J				
H				
A				
TRN				
TOT				

## **FEMALES**

(6) White Non Hisp.	(7) Black Non Hisp.	(8) Hisp.	(9) Asian	(10) Native Amer.
J				
H				
A				
TRN				
TOT				

What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?

# FORM C: CURRENT WORKFORCE

## TRADE CLASSIFICATION CODES

(J) Journeylevel Workers  
(H) Helper  
(TOT) Total by Column

(A) Apprentice  
(TRN) Trainee

For each trade currently engaged by your company for all work performed in New York City, enter the current workforce for Males and Females by trade classification on the charts below.

### MALES

### FEMALES

Trade:

Union Affiliation, if applicable

Total (Col. #1-10):

Total Minority, Male & Female  
(Col. #2,3,4,5,7,8,9, & 10):

Total Female  
(Col. #6 - 10):

(1) White Non Hisp.	(2) Black Non Hisp.	(3) Hisp.	(4) Asian	(5) Native Amer.	(6) White Non Hisp.	(7) Black Non Hisp.	(8) Hisp.	(9) Asian	(10) Native Amer.
J									
H									
A									
TRN									
TOT									

What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?

# **FORM C: CURRENT WORKFORCE**

Trade: \_\_\_\_\_

Union Affiliation, if applicable \_\_\_\_\_

Total (Col. #1-10): \_\_\_\_\_

Total Minority, Male & Female  
(Col. #2,3,4,5,7,8,9, & 10): \_\_\_\_\_

Total Female  
(Col. #6 - 10): \_\_\_\_\_

## **MALES**

(1) White Non Hisp.	(2) Black Non Hisp.	(3) Hisp.	(4) Asian	(5) Native Amer.
J				
H				
A				
TRN				
TOT				

## **FEMALES**

(6) White Non Hisp.	(7) Black Non Hisp.	(8) Hisp.	(9) Asian	(10) Native Amer.
J				
H				
A				
TRN				
TOT				

What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?

(NO TEXT ON THIS PAGE)

The City of New York Department of Small Business Services  
Division of Labor Services Contract Compliance Unit  
110 William Street, New York, New York 10038  
Phone: (212) 513 - 6323  
Fax: (212) 618-8879

**CONSTRUCTION EMPLOYMENT REPORT**

**GENERAL INFORMATION**

1. Your contractual relationship in this contract is: Prime contractor\_\_\_\_ Subcontractor x
- 1a. Are M/WBE goals attached to this project? Yes \_\_\_\_\_ No \_\_\_\_\_
2. Please check one of the following if your firm would like information on how to certify with the City of New York as a:  

<input type="checkbox"/> Minority Owned Business Enterprise	<input type="checkbox"/> Locally Based Business Enterprise
<input type="checkbox"/> Women Owned Business Enterprise	<input type="checkbox"/> Emerging Business Enterprise
<input type="checkbox"/> Disadvantaged Business Enterprise	
- 2a. If you are certified as an **MBE, WBE, LBE, EBE** or **DBE**, what city/state agency are you certified with? \_\_\_\_\_ Are you DBE certified? Yes \_\_\_\_\_ No \_\_\_\_\_
3. Please indicate if you would like assistance from SBS in identifying certified M/WBEs for contracting opportunities: Yes \_\_\_\_\_ No \_\_\_\_\_
4. Is this project subject to a project labor agreement? Yes \_\_\_\_\_ No \_\_\_\_\_
5. Are you a Union contractor? Yes \_\_\_\_\_ No \_\_\_\_\_ If yes, please list which local(s) you affiliated with \_\_\_\_\_
6. Are you a Veteran owned company? Yes \_\_\_\_\_ No \_\_\_\_\_

**PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION**

7. \_\_\_\_\_  
Employer Identification Number or Federal Tax I.D. \_\_\_\_\_ Email Address \_\_\_\_\_
8. \_\_\_\_\_  
Company Name \_\_\_\_\_
9. \_\_\_\_\_  
Company Address and Zip Code \_\_\_\_\_
10. \_\_\_\_\_  
Chief Operating Officer \_\_\_\_\_ Telephone Number \_\_\_\_\_
11. \_\_\_\_\_  
Designated Equal Opportunity Compliance Officer \_\_\_\_\_ Telephone Number \_\_\_\_\_  
(If same as Item #10, write "same")
12. \_\_\_\_\_  
Name of Prime Contractor and Contact Person \_\_\_\_\_  
(If same as Item #8, write "same")

13. Number of employees in your company: \_\_\_\_\_

14. Contract information:

(a) \_\_\_\_\_  
Contracting Agency (City Agency)

(b) \_\_\_\_\_  
Contract Amount

(c) \_\_\_\_\_  
Procurement Identification Number (PIN)

(d) \_\_\_\_\_  
Contract Registration Number (CT#)

(e) \_\_\_\_\_  
Projected Commencement Date

(f) \_\_\_\_\_  
Projected Completion Date

(g) Description and location of proposed contract:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

15. Has your firm been reviewed by the Division of Labor Services (DLS) within the past 36 months and issued a Certificate of Approval? Yes\_\_\_ No\_\_\_

If yes, attach a copy of certificate.

16. Has DLS within the past month reviewed an Employment Report submission for your company and issued a Conditional Certificate of Approval? Yes\_\_\_ No\_\_\_

If yes, attach a copy of certificate.

**NOTE: DLS WILL NOT ISSUE A CONTINUED CERTIFICATE OF APPROVAL IN CONNECTION WITH THIS CONTRACT UNLESS THE REQUIRED CORRECTIVE ACTIONS IN PRIOR CONDITIONAL CERTIFICATES OF APPROVAL HAVE BEEN TAKEN.**

17. Has an Employment Report already been submitted for a different contract (not covered by this Employment Report) for which you have not yet received compliance certificate?  
Yes\_\_\_ No\_\_\_ If yes,

Date submitted: \_\_\_\_\_

Agency to which submitted: \_\_\_\_\_

Name of Agency Person: \_\_\_\_\_

Contract No: \_\_\_\_\_

Telephone: \_\_\_\_\_

18. Has your company in the past 36 months been audited by the United States Department of Labor, Office of Federal Contract Compliance Programs (OFCCP)? Yes\_\_\_ No\_\_\_

If yes,

(a) Name and address of OFCCP office.

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(b) Was a Certificate of Equal Employment Compliance issued within the past 36 months?  
Yes\_\_\_ No\_\_\_

If yes, attach a copy of such certificate.

(c) Were any corrective actions required or agreed to? Yes\_\_\_ No\_\_\_

If yes, attach a copy of such requirements or agreements.

(d) Were any deficiencies found? Yes\_\_\_ No\_\_\_

If yes, attach a copy of such findings.

19. Is your company or its affiliates a member or members of an employers' trade association which is responsible for negotiating collective bargaining agreements (CBA) which affect construction site hiring? Yes\_\_\_ No\_\_\_

If yes, attach a list of such associations and all applicable CBA's.

## **PART II: DOCUMENTS REQUIRED**

20. For the following policies or practices, attach the relevant documents (e.g., printed booklets, brochures, manuals, memoranda, etc.). If the policy(ies) are unwritten, attach a full explanation of the practices. See instructions.

- \_\_\_ (a) Health benefit coverage/description(s) for all management, nonunion and union employees (whether company or union administered)
- \_\_\_ (b) Disability, life, other insurance coverage/description
- \_\_\_ (c) Employee Policy/Handbook
- \_\_\_ (d) Personnel Policy/Manual
- \_\_\_ (e) Supervisor's Policy/Manual
- \_\_\_ (f) Pension plan or 401k coverage/description for all management, nonunion and union employees, whether company or union administered
- \_\_\_ (g) Collective bargaining agreement(s).
- \_\_\_ (h) Employment Application(s)
- \_\_\_ (i) Employee evaluation policy/form(s).
- \_\_\_ (j) Does your firm have medical and/or non-medical (i.e. education, military, personal, pregnancy, child care) leave policy?



21. To comply with the Immigration Reform and Control Act of 1986 when and of whom does your firm require the completion of an I-9 Form?

- |  |        |       |
|--|--------|-------|
| (a) Prior to job offer                     | Yes___ | No___ |
| (b) After a conditional job offer          | Yes___ | No___ |
| (c) After a job offer                      | Yes___ | No___ |
| (d) Within the first three days on the job | Yes___ | No___ |
| (e) To some applicants                     | Yes___ | No___ |
| (f) To all applicants                      | Yes___ | No___ |
| (g) To some employees                      | Yes___ | No___ |
| (h) To all employees                       | Yes___ | No___ |

22. Explain where and how completed I-9 Forms, with their supportive documentation, are maintained and made accessible.

\_\_\_\_\_

\_\_\_\_\_

23. Does your firm or any of its collective bargaining agreements require job applicants to take a medical examination? Yes\_\_\_ No\_\_\_

If yes, is the medical examination given:

- |                                   |        |       |
|-----------------------------------|--------|-------|
| (a) Prior to a job offer          | Yes___ | No___ |
| (b) After a conditional job offer | Yes___ | No___ |
| (c) After a job offer             | Yes___ | No___ |
| (d) To all applicants             | Yes___ | No___ |
| (e) Only to some applicants       | Yes___ | No___ |

If yes, list for which applicants below and attach copies of all medical examination or questionnaire forms and instructions utilized for these examinations.

\_\_\_\_\_

\_\_\_\_\_

24. Do you have a written equal employment opportunity (EEO) policy? Yes\_\_\_ No\_\_\_

If yes, list the document(s) and page number(s) where these written policies are located.

\_\_\_\_\_

\_\_\_\_\_

25. Does the company have a current affirmative action plan(s) (AAP)

- \_\_\_\_ Minorities and Women
- \_\_\_\_ Individuals with handicaps
- \_\_\_\_ Other. Please specify \_\_\_\_\_

26. Does your firm or collective bargaining agreement(s) have an internal grievance procedure with respect to EEO complaints? Yes\_\_\_ No\_\_\_

If yes, please attach a copy of this policy.

If no, attach a report detailing your firm's unwritten procedure for handling EEO complaints.

27. Has any employee, within the past three years, filed a complaint pursuant to an internal grievance procedure or with any official of your firm with respect to equal employment opportunity? Yes\_\_\_ No\_\_\_

If yes, attach an internal complaint log. See instructions.

28. Has your firm, within the past three years, been named as a defendant (or respondent) in any administrative or judicial action where the complainant (plaintiff) alleged violation of any anti-discrimination or affirmative action laws? Yes\_\_\_ No\_\_\_

If yes, attach a log. See instructions.

29. Are there any jobs for which there are physical qualifications? Yes\_\_\_ No\_\_\_

If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).

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30. Are there any jobs for which there are age, race, color, national origin, sex, creed, disability, marital status, sexual orientation, or citizenship qualifications? Yes\_\_\_ No\_\_\_

If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).

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### SIGNATURE PAGE

I, (print name of authorized official signing) \_\_\_\_\_ hereby certify that the information submitted herewith is true and complete to the best of my knowledge and belief and submitted with the understanding that compliance with New York City's equal employment requirements, as contained in Chapter 56 of the City Charter, Executive Order No. 50 (1980), as amended, and the implementing Rules and Regulations, is a contractual obligation. I also agree on behalf of the company to submit a certified copy of payroll records to the Division of Labor Services on a monthly basis.

\_\_\_\_\_  
Contractor's Name

\_\_\_\_\_  
Name of person who prepared this Employment Report

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name of official authorized to sign on behalf of the contractor

\_\_\_\_\_  
Title

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Signature of authorized official

\_\_\_\_\_  
Date

If contractors are found to be underutilizing minorities and females in any given trade based on Chapter 56 Section 3H, the Division of Labor Services reserves the right to request the contractor's workforce data and to implement an employment program.

Contractors who fail to comply with the above mentioned requirements or are found to be in noncompliance may be subject to the withholding of final payment.

Willful or fraudulent falsifications of any data or information submitted herewith may result in the termination of the contract between the City and the bidder or contractor and in disapproval of future contracts for a period of up to five years. Further, such falsification may result in civil and/or criminal prosecution.

To the extent permitted by law and consistent with the proper discharge of DLS' responsibilities under Charter Chapter 56 of the City Charter and Executive Order No. 50 (1980) and the implementing Rules and Regulations, all information provided by a contractor to DLS shall be confidential.

**Only original signatures accepted.**

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Date

**FORM A. CONTRACT BID INFORMATION: USE OF SUBCONTRACTORS/TRADES**

1. Do you plan to subcontract work on this contract? Yes ☐ No ☐
2. If yes, complete the chart below.

**NOTE: All proposed subcontractors with a subcontract in excess of \$750,000 must complete an Employment Report for review and approval before the contract may be awarded and work commences.**

SUBCONTRACTOR'S NAME*	OWNERSHIP (ENTER APPROPRIATE CODE LETTERS BELOW)	WORK TO BE PERFORMED BY SUBCONTRACTOR	TRADE PROJECTED FOR USE BY SUBCONTRACTOR	PROJECTED DOLLAR VALUE OF SUBCONTRACT

**\*If subcontractor is presently unknown, please enter the trade (craft name).**

**OWNERSHIP CODES**

- W: White
- B: Black
- H: Hispanic
- A: Asian
- N: Native American
- F: Female

# **FORM B: PROJECTED WORKFORCE**

## **TRADE CLASSIFICATION CODES**

(J) Journeylevel Workers  
(H) Helper  
(TOT) Total by Column

(A) Apprentice  
(TRN) Trainee

For each trade to be engaged by your company for this project, enter the projected workforce for Males and Females by trade classification on the charts below.

### **MALES**

(1) White Non Hisp.	(2) Black Non Hisp.	(3) Hisp.	(4) Asian	(5) Native Amer.
J				
H				
A				
TRN				
TOT				

### **FEMALES**

(6) White Non Hisp.	(7) Black Non Hisp.	(8) Hisp.	(9) Asian	(10) Native Amer.

Trade: \_\_\_\_\_

Union Affiliation, if applicable \_\_\_\_\_

Total (Col. #1-10): \_\_\_\_\_

Total Minority, Male & Female  
(Col. #2,3,4,5,7,8,9, & 10): \_\_\_\_\_

Total Female  
(Col. #6 - 10): \_\_\_\_\_

What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?

**FORM B: PROJECTED WORKFORCE**

Trade: \_\_\_\_\_

Union Affiliation, if applicable \_\_\_\_\_

Total (Col. #1-10): \_\_\_\_\_

Total Minority, Male & Female  
(Col. #2,3,4,5,7,8,9, & 10): \_\_\_\_\_

Total Female  
(Col. #6 – 10): \_\_\_\_\_

**MALES**

(1) White Non Hisp.	(2) Black Non Hisp.	(3) Hisp.	(4) Asian	(5) Native Amer.

J

H

A

TRN

TOT

**FEMALES**

(6) White Non Hisp.	(7) Black Non Hisp.	(8) Hisp.	(9) Asian	(10) Native Amer.

What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?

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## TRADE CLASSIFICATION CODES

For each trade currently engaged by your company for all work performed in New York City, enter the current workforce for Males and Females by trade classification on the charts below.

**(A) Apprentice  
(TRN) Trainee**

(TOT) Total by Column

Trade:		MALES					FEMALES				
		(1) White Non Hisp.	(2) Black Non Hisp.	(3) Hisp.	(4) Asian	(5) Native Amer.	(6) White Non Hisp.	(7) Black Non Hisp.	(8) Hisp.	(9) Asian	(10) Native Amer.
Union Affiliation, if applicable											
Total (Col. #1-10):											
Total Minority, Male & Female (Col. #2,3,4,5,7,8,9, & 10):											
Total Female (Col. #6 – 10):											

What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?

# **FORM C: CURRENT WORKFORCE**

Trade: \_\_\_\_\_

Union Affiliation, if applicable \_\_\_\_\_

Total (Col. #1-10): \_\_\_\_\_

Total Minority, Male & Female  
(Col. #2,3,4,5,7,8,9, & 10): \_\_\_\_\_

Total Female  
(Col. #6 – 10): \_\_\_\_\_

## **MALES**

(1) White Non Hisp.	(2) Black Non Hisp.	(3) Hisp.	(4) Asian	(5) Native Amer.

J

H

A

TRN

TOT

## **FEMALES**

(6) White Non Hisp.	(7) Black Non Hisp.	(8) Hisp.	(9) Asian	(10) Native Amer.

What are the recruitment sources for you projected hires (i.e., unions, government employment office, job tap center, community outreach)?

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(NO TEXT ON THIS PAGE)

The City of New York Department of Small Business Services  
Division of Labor Services Contract Compliance Unit  
110 William Street, New York, New York 10038  
Phone: (212) 513 - 6323 Fax: (212) 618-8879

Date \_\_\_\_\_

File Number \_\_\_\_\_

**LESS THAN \$750,000 SUBCONTRACT CERTIFICATE  
(CITY, STATE AND ICIP ONLY)**

Are you currently certified as one of the following? Please check yes or no:

MBE Yes \_\_\_ No \_\_\_

WBE Yes \_\_\_ No \_\_\_

LBE Yes \_\_\_ No \_\_\_

DBE Yes \_\_\_ No \_\_\_

EBE Yes \_\_\_ No \_\_\_

If you are certified as an MBE, WBE, LBE, EBE or DBE, what city/state agency are you certified with?

Please check one of the following if your firm would like information on how to certify with the City of New York as a:

\_\_\_ Minority Owned Business Enterprise

\_\_\_ Locally based Business Enterprise

\_\_\_ Women Owned Business Enterprise

\_\_\_ Emerging Business Enterprise

\_\_\_ Disadvantaged Business Enterprise

Company Name \_\_\_\_\_

Employer Identification Number or Federal Tax I.D. \_\_\_\_\_

Company Address and Zip Code \_\_\_\_\_

Contact Person (First Name, Last Name) \_\_\_\_\_

Telephone Number \_\_\_\_\_

Fax Number \_\_\_\_\_

E-mail Address \_\_\_\_\_

Description and location of proposed subcontract: \_\_\_\_\_

Are you a Union contractor? Yes \_\_\_ No \_\_\_ If yes, please list which local(s) you affiliated with \_\_\_\_\_

Are you a Veteran owned company? Yes \_\_\_ No \_\_\_

Procurement Identification Number (PIN)  
(City contracts only)

Contract Registration Number (CT#)  
(City contracts only)

Block and Lot Number  
(ICIP projects only)

Contract Amount

I, (print name of authorized official signing) \_\_\_\_\_ hereby certify that I am authorized by the above-named subcontractor to certify that said subcontractor's proposed contract with the above named owner or City agency is less than \$750,000. This affirmation is made in accordance with NYC Charter Chapter 56, Executive Order No. 50 (1980) and the implementing Rules.

Willful or fraudulent falsifications of any data or information submitted herewith may result in the termination of the contract between the City and the bidder or contractor and in disapproval of future contracts for a period of up to five years. Further, such falsification may result in civil and/or criminal prosecution.

Signature of authorized official

Date

**Only original signatures accepted.**

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

Notary Public

Authorized Signature

Date

CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE

# ADDENDA CONTROL SHEET

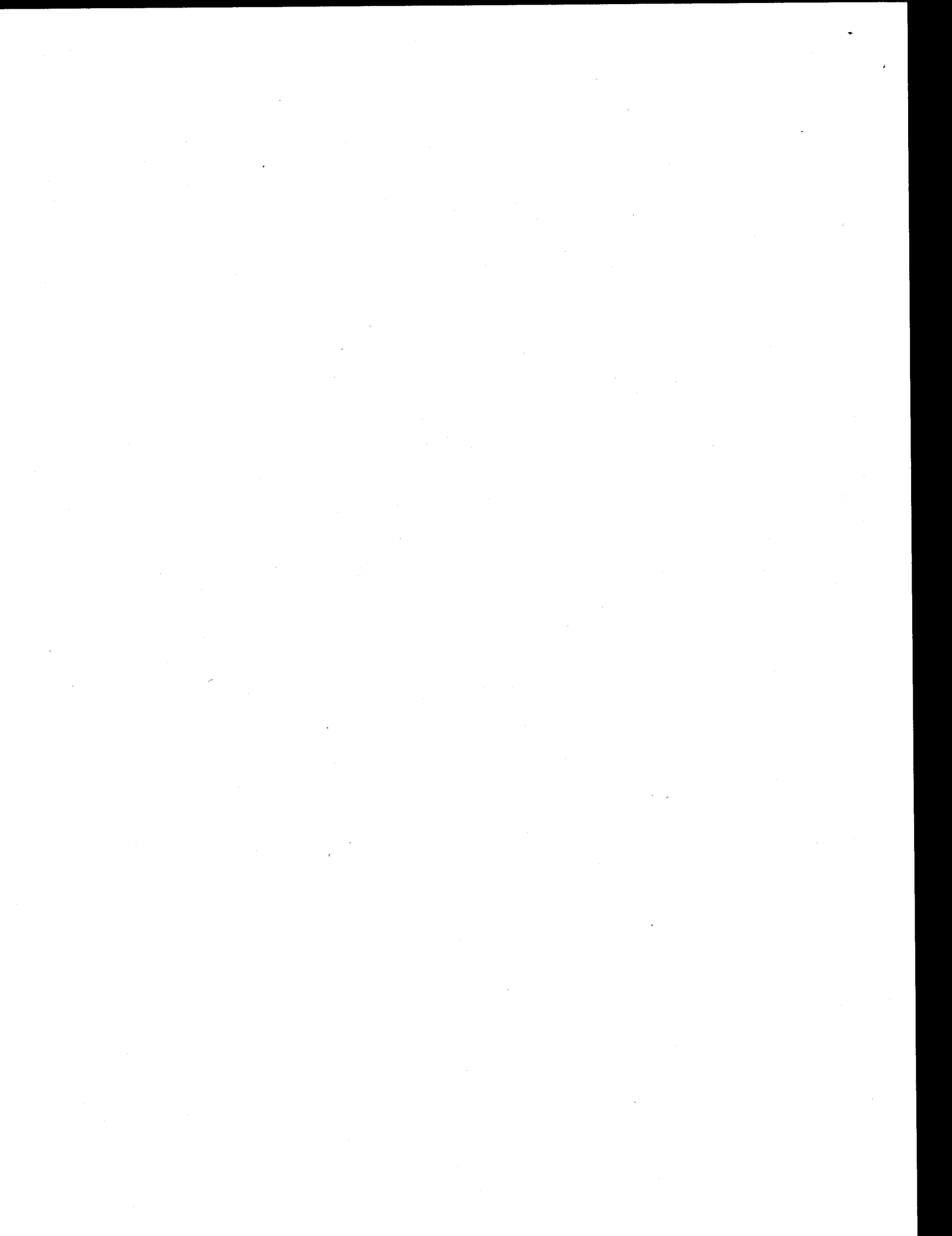
BID OPENING DATE: **MAY 31, 2018**

PROJECT NO.: **P-1STARLP**

DESCRIPTION: **BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II,  
STAGE 2 BRIDGE THE CRITICAL SOUTH BRONX GAP**

Addendum		Addendum Contains:				
No.	Date	Revised Bid Date/Time	Revised Bid Schedule	Questions & Responses	Additional Ammendments	Drawings (number)
1	5/23/2018	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (2)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)

The Table above is a guide. Refer to the referenced Addendum for specific information.



ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: P-1STARLP

BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II, STAGE 2 BRIDGE THE CRITICAL SOUTH BRONX GAP  
BETWEEN WESTCHESTER AVENUE AND EAST 174TH STREET

INCLUDING CONSTRUCTION OF EAST 172ND STREET PEDESTRIAN BRIDGE OVER AMTRAK (BIN#: 2-24124-0), SOUTH GREENWAY PEDESTRIAN BRIDGE OVER THE BRONX RIVER (BIN#: 2-26990-0), DRAINAGE, RETAINING STRUCTURES, GREENWAY, STREET LIGHTING, LANDSCAPING AND TRAFFIC WORK

Together With All Work Incidental Thereto

BOROUGH OF THE BRONX  
CITY OF NEW YORK

ADDENDUM NO. 1

DATED: MAY 23, 2018

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Refer to the Bid and Contract Documents, Volume 1 of 3;  
Delete Bid Schedule pages B-3 through B-64 in their entirety;  
Insert attached revised Bid Schedule pages B-3 [REVISION # 1] through B-34 [REVISION # 1].

**NOTE: 1) ADDED NEW ITEM - 675.60000001 - SPECIAL PROCEDURES FOR RAILROAD FACILITIES – TRACK MONITORING;**  
**2) REVISED UNIT PRICE FOR ITEM 637.34 AND ITEM 697.03.**

2. Refer to the Bid and Contract Documents, Volume 3 of 3, I-Pages;  
Delete Table of Contents in its entirety;  
Insert attached corrected Table of Contents
3. Refer to the Bid and Contract Documents, Volume 3 of 3, I-Pages;  
Insert attached new Section - 675.60000001 - SPECIAL PROCEDURES FOR RAILROAD FACILITIES – TRACK MONITORING after page number I-154;
4. Refer to the Contract Drawings, sheet 2 of 339 and sheet 6 of 339;  
Delete sheet 2 of 339 and sheet 6 of 339 in their entirety;  
Substitute with the new sheet 2R of 339 and sheet 6R of 339.



5. For additional information, see the attached ONE (1) page of "Questions Submitted by Bidders and DDC's Responses".

**END OF ADDENDUM NO. 1**

**By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of TWO (2) pages, and attachments consisting of THIRTY-NINE (39) pages, and TWO (2) drawings.**

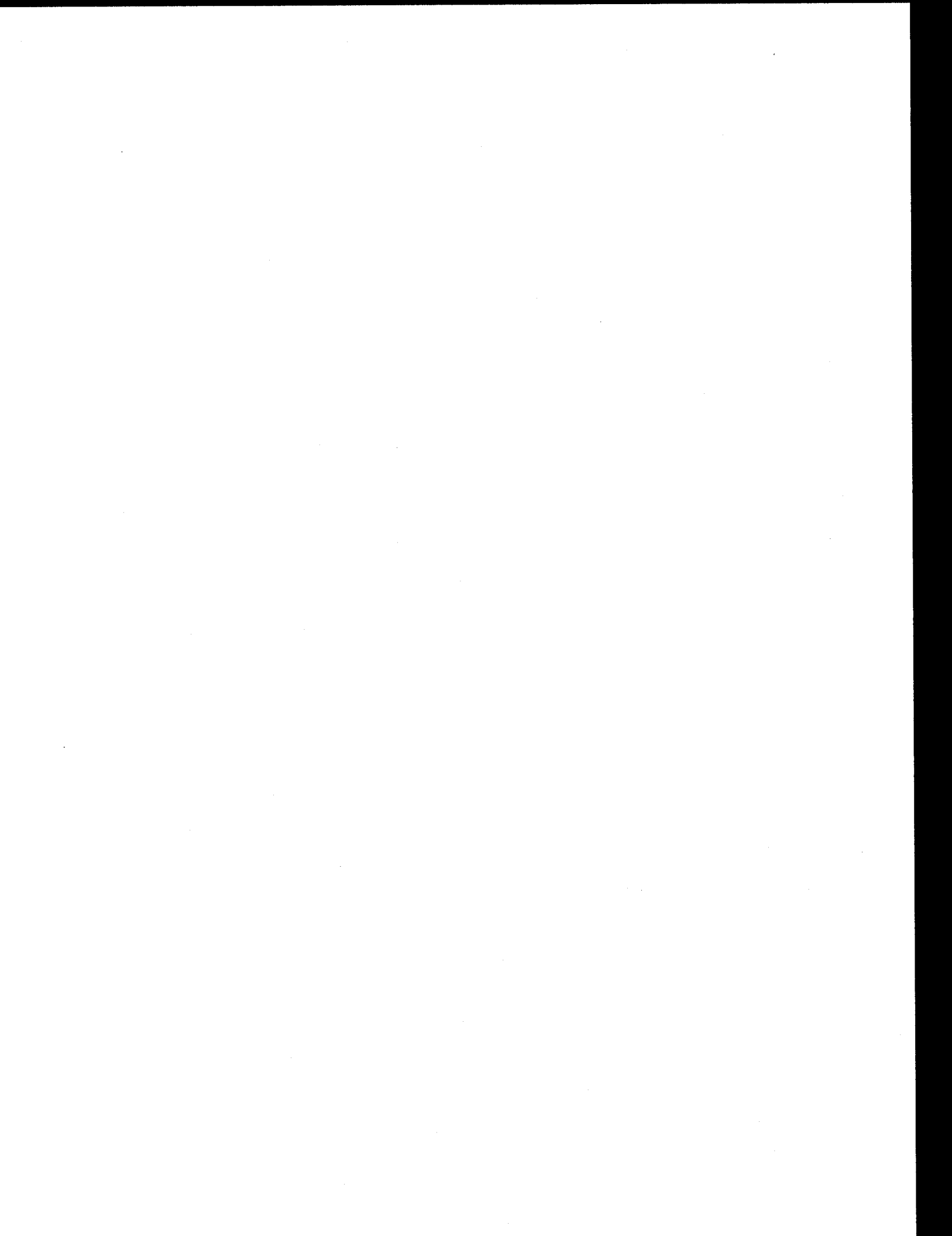
**THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID**

MLJ Contracting Corp  
Name of Bidder

By: [Signature]

How Sheen Pau.  
HOW SHEEN PAU, P.E.  
Assistant Commissioner





## BID SCHEDULE

**NOTE:** (1) The Agency may reject a bid if it contains unbalanced bid prices. An unbalanced bid is considered to be one containing lump sum or unit items which do not reflect reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated for the performance of the items in question.

(2) The following bid prices on Unit Price Contracts are to be paid for the actual quantities of the item numbers in the completed work or structure, and they cover the cost of all work, labor, material, tools, plant and appliances of every description necessary to complete the entire work, as specified, and the removal of all debris, temporary work and appliances.

(3) **PLEASE BE SURE A LEGIBLE BID IS ENTERED, IN INK, FOR EACH ITEM.**  
Alterations must be initialed in ink by the bidder.

(4) The Extended Amount entered in Column 6 shall be the product of the Estimated Quantity in Column 3 times the Unit Price Bid in Column 5.

(5) Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished them. The pages of this Bid Schedule are numbered consecutively, as follows:  
B - 3 [REVISION # 1] Through B - 34 [REVISION # 1]

**PLEASE BE SURE A LEGIBLE BID IS ENTERED FOR EACH ITEM.**  
**THE BIDDER SHALL INSERT THE TOTAL BID PRICE IN**  
**THE BID FORM ON PAGE C-4 OF THIS BID BOOKLET.**

## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN DOLLARS)	COL 6 EXTENDED AMOUNT (IN DOLLARS)
001	201.07 CLEARING AND GRUBBING	1.00	ACRE		
002	203.02 UNCLASSIFIED EXCAVATION AND DISPOSAL	3,105.00	C.Y.		
003	203.02990006 PAVEMENT EXCAVATION	681.00	S.F.		
004	203.03 EMBANKMENT IN PLACE	23,394.00	C.Y.		
005	203.07 SELECT GRANULAR FILL	547.00	C.Y.		
006	203.21 SELECT STRUCTURAL FILL	2,937.00	C.Y.		
007	203.25 SAND BACKFILL	661.00	C.Y.		
008	203.30020063 EXCAVATION AND DISPOSAL OF ROCK, EMERGENCY CONTRACT STANDBY WORK, QUANTITY RANGE 2 (131 to 650)	500.00	C.Y.		



Department of  
Design and  
Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

PROJECT ID: P-1STARLP

CONTRACT PIN: 8502017HW0048C

5/21/2018 10:48 AM

## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEERS ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE IN DOLLARS (SUBS. 2)	COL 6 TOTAL AMOUNT IN DOLLARS (SUBS. 2)
009	205.0201 SEGREGATION AND STORAGE OF CONTAMINATED SOIL	1.00	L.S.		
010	205.050101 DISPOSAL OF CONTAMINATED HAZARDOUS WASTE SOIL	105.00	TONS		
011	205.050201 DISPOSAL OF CONTAMINATED NON-HAZARDOUS SOIL	36.00	TONS		
012	206.01 STRUCTURE EXCAVATION	10,091.00	C.Y.		
013	206.0201 TRENCH AND CULVERT EXCAVATION	3,176.00	C.Y.		
014	206.04010011 PNEUMATIC EXCAVATION AND BACKFILL OF TRENCHES	1,172.00	L.F.		
015	206.05 TEST PIT EXCAVATION	2.00	EACH		
016	207.20 GEOTEXTILE BEDDING	1,439.00	S.Y.		

5/21/2018 10:48 AM

## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS / CTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS / CTS
017	207.21 GEOTEXTILE SEPARATION	467.00	S.Y.		
018	207.22 GEOTEXTILE DRAINAGE	26,785.00	S.Y.		
019	207.26 PREFABRICATED COMPOSITE STRUCTURAL DRAIN	1,178.00	S.Y.		
020	207.96000017 GEOSYNTHETIC REINFORCEMENT	12,177.00	S.F.		
021	208.01001139 RAIN GARDEN SOIL MIX (NYCDPR)	490.00	C.Y.		
022	209.11010011 TEMPORARY CATCH BASIN INSERTS FOR DRAINAGE STRUCTURES TRASH, SEDIMENT AND DEBRIS REMOVAL	5.00	EACH		
023	209.110101 CHECK DAM (DITCH BOTTOM WIDTH 0.0 TO 3'), STONE - TEMPORARY	51.00	EACH		
024	209.1202 STRAWBALE DIKE- TEMPORARY	671.00	FOOT		



**Department of  
Design and  
Construction**

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

PROJECT ID: P-1STARLP

CONTRACT PIN: 8502017HW0048C

5/21/2018 10:48 AM

## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE		COL 6 TOTAL ESTIMATED AMOUNT IN CUBIC FEET	COL 7 TOTAL ESTIMATED AMOUNT IN CUBIC FEET
				PER UNIT	PER CUBIC FOOT		
025	209.13 SILT FENCE-TEMPORARY	8,557.00	L.F.				
026	209.140101 SEDIMENT TRAP, EARTH BERM - TEMPORARY	4.00	EACH				
027	209.1501 TURBIDITY CURTAIN - TEMPORARY	2,750.00	L.F.				
028	209.190201 ROLLED EROSION CONTROL PRODUCT, CLASS II TYPE B, INTERMEDIATE	2,090.00	S.Y.				
029	209.20120010 BIO-FIBER ROLLS 12 INCH	5,660.00	L.F.				
030	209.22 CONSTRUCTION ENTRANCE	183.00	S.Y.				
031	211.10 GROUTED TIEBACKS (TEMPORARY)	2.00	EACH				
032	304.11 SUBBASE COURSE, TYPE 1	12.00	C.Y.				

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## BID SCHEDULE FORM

COL 1	COL 2	COL 3	COL 4	COL 5	COL 6
SEQ. NO.	ITEM NUMBER AND DESCRIPTION	ENGINEER'S ESTIMATE OF QUANTITY	UNIT	UNIT PRICE (IN FIGURES)	EXTENDED AMOUNT (IN FIGURES)
033	304.12 SUBBASE COURSE, TYPE 2	1,954.00	C.Y.		
034	402.127103 12.5 F1 TOP COURSE HMA, 70 SERIES COMPACTION	592.00	TONS		
035	402.257903 25 F9 BINDER COURSE HMA, 70 SERIES COMPACTION	811.00	TONS		
036	402.377903 37.5 F9 BASE COURSE HMA, 70 SERIES COMPACTION	1,091.00	TONS		
037	407.0102 DILUTED TACK COAT	631.00	GAL.		
038	551.010042 STEEL H-PILES (HP 10X42)	1,562.00	L.F.		
039	551.12 SPICES FOR STEEL H-PILES	71.00	EACH		
040	552.17 SHIELDS AND SHORING	150.00	S.F.		

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[REVISION # 1]



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: P-1STARLP  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502017HW0048C

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## BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEERS ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (DOLLARS PER QUANTITY)	COL 6 EXTENDED AMOUNT (DOLLARS)	COL 7 GTS
041	552.2001 HOLES IN EARTH FOR SOLDIER PILE AND LAGGING WALL	853.00	L.F.			
042	552.2101 ROCK SOCKETS FOR SOLDIER PILE AND LAGGING WALL	303.00	L.F.			
043	552.2201 SOLDIER PILES FOR SOLDIER PILE AND LAGGING WALL	693.00	L.F.			
044	552.2202 SOLDIER PILES FOR SOLDIER PILE AND LAGGING WALL	451.00	L.F.			
045	552.230201 UNTREATED WOOD LAGGING FOR SOLDIER PILE AND LAGGING WALL	3,163.00	S.F.			
046	553.020001 COFFERDAMS (TYPE 2)	1.00	EACH			
047	553.020002 COFFERDAMS (TYPE 2)	1.00	EACH			
048	553.020003 COFFERDAMS (TYPE 2)	1.00	EACH			



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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN DOLLARS)	COL 6 EXTENDED AMOUNT (IN DOLLARS)	COL 7 C.T.S.
049	554.40 FILL TYPE RETAINING WALL (0 - 6 FT)	440.00	S.F.			
050	554.41 FILL TYPE RETAINING WALL (GREATER THAN 6FT. - 12FT.)	4,125.00	S.F.			
051	554.42 FILL TYPE RETAINING WALL (GREATER THAN 12FT. - 18FT.)	8,910.00	S.F.			
052	554.43 FILL TYPE RETAINING WALL (GREATER THAN 18FT. - 24FT.)	6,710.00	S.F.			
053	554.44 FILL TYPE RETAINING WALL (GREATER THAN 24FT. - 30FT.)	825.00	S.F.			
054	554.53 FILL TYPE RETAINING WALL AESTHETIC TREATMENT -OTHER; AS SHOWN ON THE CONTRACT DOCUMENTS	25,850.00	S.F.			
055	555.0104 FOOTING CONCRETE CLASS A (NO CONCRETE CLASS SUBSTITUTIONS PERMITTED, EXCEPT CLASS H WHERE FOOTING IS 3 FT THICK OR LESS)	171.00	C.Y.			
056	555.08 FOOTING CONCRETE, CLASS HP	645.00	C.Y.			



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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (N. CODE)	COL 6 EXTENDED AMOUNT (N. CODE)	COL 7 TOTAL
057	555.09 CONCRETE FOR STRUCTURES, CLASS HP	1,354.00	C.Y.			
058	555.72940001 ARCHITECTURAL TREATMENT - VERTICAL CONCRETE SURFACES	1,320.00	S.F.			
059	556.0202 EPOXY- COATED BAR REINFORCEMENT FOR STRUCTURES	111,973.00	LBS.			
060	556.0203 GALVANIZED BAR REINFORCEMENT FOR STRUCTURES	40,966.00	LBS.			
061	556.03 STUD SHEAR CONNECTORS FOR BRIDGES	1,927.00	EACH			
062	557.0109 SUPERSTRUCTURE SLAB WITH INTEGRAL WEARING SURFACE - BOTTOM FORMWORK REQUIRED - TYPE 9 FRICTION	621.00	S.Y.			
063	557.2009 STRUCTURAL APPROACH SLAB WITH INTEGRAL WEARING SURFACE - TYPE 9 FRICTION	85.00	S.Y.			
064	559.16960118 PROTECTIVE SEALING OF STRUCTURAL CONCRETE	9,528.00	S.F.			

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## BID SCHEDULE FORM

COL 1	COL 2	COL 3	COL 4	COL 5	COL 6
SEQ. NO.	ITEM NUMBER AND DESCRIPTION	ENGINEERS ESTIMATE OF QUANTITY	UNIT	UNIT PRICE (IN FIGURES)	EXTENDED AMOUNT (IN FIGURES)
				DOLLARS	DOLLARS
					C.T.S.
065	559.18960118 PROTECTIVE SEALING OF STRUCTURAL CONCRETE ON NEW BRIDGE DECKS AND BRIDGE DECK OVERLAYS	6,691.00	S.F.		
066	559.19010011 PAINTING EXISTING CONCRETE SURFACES	2,530.00	S.F.		
067	560.01 DIMENSION STONE MASONRY	341.00	S.F.		
068	560.01010011 GRANITE COPING (STRAIGHT)	7.00	C.Y.		
069	560.01020011 GRANITE COPING (RADIAL)	22.00	C.Y.		
070	560.01030011 GRANITE ENTRY PIER	4.00	C.Y.		
071	560.01040011 GRANITE WALL	20.00	C.Y.		
072	560.06 RUBBLE STONE MASONRY LAID DRY	1,527.00	C.F.		

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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

PROJECT ID: P-1STARLP  
CONTRACT PIN: 8502017HW0048C

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNITS REQUIRED FOR BIDDING	COL 6 TOTAL BIDDING AMOUNT (UNIT PRICES)	COL 7 TOTAL BIDDING AMOUNT (UNIT PRICES)
073	560.07 PRECAST CONCRETE COPING	708.00	L.F.			
074	564.510001 STRUCTURAL STEEL	508,510.00	LBS.			
075	565.2022 TYPE E.B. FIXED BEARING (56K TO 111K)	2.00	EACH			
076	565.2024 TYPE E.B. FIXED BEARING (169K TO 225K)	2.00	EACH			
077	565.2032 TYPE E.B. EXPANSION BEARING (56 TO 111 KIPS)	2.00	EACH			
078	565.2034 TYPE E.B. EXPANSION BEARING (169K TO 225K)	2.00	EACH			
079	567.60 ARMORLESS BRIDGE JOINT SYSTEM	42.00	FOOT			
080	568.11010011 STEEL ROD SAFETY RAILING	1,933.00	L.F.			

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# BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS PER C.Y.	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 C.F.S.
081	568.12010011 HANDRAIL	1,644.00	L.F.			
082	572.010001 STRUCTURAL STEEL PAINTING: SHOP APPLIED	17,656.00	S.F.			
083	572.010002 STRUCTURAL STEEL PAINT SYSTEM: SHOP APPLIED	7,569.00	S.F.			
084	580.01 REMOVAL OF STRUCTURAL CONCRETE	52.00	C.Y.			
085	586.0202 DRILLING AND GROUTING BOLTS OR REINFORCING BARS (WITH NON-DESTRUCTIVE INVESTIGATION)	384.00	EACH			
086	603.0202 NON REINFORCED CONCRETE PIPE (CLASS 1) 6 INCH DIAMETER	140.00	L.F.			
087	603.171016 GALVANIZED STEEL END SECTIONS-PIPE (2-2/3" X 1/2 CORRUGATIONS) 12 INCH DIAMETER, 16 GAUGE	9.00	EACH			
088	603.9812 SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 12 INCH DIAMETER	824.00	L.F.			



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## BID SCHEDULE FORM

COL 1	COL 2	COL 3	COL 4	COL 5	COL 6
SEQ. NO.	ITEM NUMBER AND DESCRIPTION	ENGINEERS ESTIMATE OF QUANTITY	UNIT	UNIT PRICE (CONTRACTORS TO FILL IN) DOLLARS CENTS	EXTENDED AMOUNT (CONTRACTORS TO FILL IN) DOLLARS CENTS
089	604.501123 SPECIAL DRAINAGE STRUCTURE	49.00	L.F.		
090	605.0901 UNDERDRAIN FILLER, TYPE 1	28.00	C.Y.		
091	605.1501 PERFORATED CORRUGATED POLYETHYLENE UNDERDRAIN TUBING, 4" DIAMETER	2,071.00	L.F.		
092	605.1502 PERFORATED CORRUGATED POLYETHYLENE UNDERDRAIN TUBING, 6 INCH DIAMETER	952.00	L.F.		
093	606.16 CORRUGATED BEAM GUIDE RAILING	25.00	L.F.		
094	607.03040439 CHAIN LINK FENCE SINGLE GATE - NYCDPR	6.00	EACH		
095	607.05040439 CHAIN LINK FENCE - NYCDPR	418.00	L.F.		
096	607.06400016 PEDESTRIAN FENCING FOR BRIDGES	295.00	L.F.		

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS - CENTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS - CENTS
097	607.30030010 STEEL CHAIN LINK FENCE WITH TOP RAIL, 8 ft HIGH	25.00	FOOT		
098	607.4017 OPTIONAL FENCE GATE (SINGLE LEAF 4 FEET OPENING 8 FEET HIGH)	1.00	EACH		
099	607.41010010 TEMPORARY PLASTIC BARRIER FENCE	3,110.00	L.F.		
100	607.45240011 ORNAMENTAL STEEL MESH FENCE 8 FT HIGH	1,548.00	L.F.		
101	607.46244911 DOUBLE ORNAMENTAL STEEL MESH GATE, 8FT HIGH, 16FT OPENING	2.00	EACH		
102	607.47000011 PRIVACY SLATS	6,574.00	S.F.		
103	607.96000008 REMOVE AND DISPOSE OF EXISTING FENCE	454.00	FOOT		
104	607.98010111 TEMPORARY CHAIN-LINK FENCE	3,199.00	L.F.		

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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
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## BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN DOLLARS)	COL 6 EXTENDED AMOUNT (IN DOLLARS)	COL 7 GTS
105	608.0101 CONCRETE SIDEWALKS AND DRIVEWAYS	19.00	C.Y.			
106	608.05000039 ASPHALT BLOCK PAVEMENT ON ASPHALT CONCRETE BASE	1,839.00	S.Y.			
107	608.11 GROUTED STONE BLOCK PAVED SIDEWALKS AND DRIVEWAYS (OPTIONAL CONCRETE SETTING BED)	168.00	S.Y.			
108	608.73166108 BOLLARD-REMOVABLE, WITHOUT LIGHTING, WIDTH OVER 11 INCHES, HEIGHT OVER 36 INCHES	2.00	EACH			
109	609.02120011 RAISED GRANITE CURB	311.00	L.F.			
110	609.02130011 FLUSH GRANITE CURB	36.00	L.F.			
111	609.04120011 CONCRETE CURB-NYCDPR	534.00	L.F.			
112	609.15100011 STEEL EDGING	700.00	L.F.			



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# BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS - CENTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS - CENTS
113	609.26020111 CONCRETE CURB FACED (NYC) TYPE D	50.00	L.F.		
114	610.1102 MULCH FOR PLANTING TYPE C - USDA-APHIS PROTOCOL WOOD CHIPS	96.00	C.Y.		
115	610.11041309 DECORATIVE STONE MULCH 4"-6" STONE SIZE	136.00	C.Y.		
116	610.1402 TOP SOIL - ROADSIDE	834.00	C.Y.		
117	610.1403 TOP SOIL - LAWNS	169.00	C.Y.		
118	610.1405 TOP SOIL - ACIDIC	2,990.00	C.Y.		
119	610.17 WILDFLOWER SEEDING	26,860.00	S.Y.		
120	610.18 SODDING	1,509.00	S.Y.		



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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (DOLLARS PER CUBIC YARD)	COL 6 EXTENDED AMOUNT (DOLLARS)	COL 7 GTS
121	610.21 MOWING	4,985.00	S.Y.			
122	610.22 MOWING LIMITS MARKERS	407.00	EACH			
123	611.0161 PLANTING - MAJOR DECIDUOUS TREES - 2 1/2 INCH CALIPER BALL & BURLAP, FIELD POTTED OR FIELD	2.00	EACH			
124	611.0191 PLANTING - MAJOR DECIDUOUS TREES - 4 INCH CALIPER BALL & BURLAP, FIELD POTTED OR FIELD	48.00	EACH			
125	611.0211 PLANTING - MINOR DECIDUOUS TREES - SIZE AS SPECIFIED BALL & BURLAP, FIELD POTTED OR FIELD	62.00	EACH			
126	611.0432 PLANTING - DECIDUOUS SHRUBS - 18 INCH HEIGHT/SPREAD CONTAINER OR BOX GROWN	3,912.00	EACH			
127	611.0441 PLANTING DECIDUOUS SHRUBS - 2 FOOT HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	42.00	EACH			
128	611.0451 PLANTING DECIDUOUS SHRUBS - 3 FOOT HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	1,209.00	EACH			

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# BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
129	611.0471 PLANTING DECIDUOUS SHRUBS - 5 FOOT HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	94.00	EACH		
130	611.0531 PLANTING EVERGREEN SHRUBS - 18 INCH HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	216.00	EACH		
131	611.0661 PLANTING - VINES, GROUNDCOVERS - NUMBER 2 CONTAINER - CONTAINER GROWN	265.00	EACH		
132	611.0731 PLANTING - HERBACEOUS PLANTS - NUMBER SP5 CONTAINER - CONTAINER GROWN	2,406.00	EACH		
133	611.19010024 POST PLANTING CARE WITH REPLACEMENT - MAJOR DECIDUOUS TREES	50.00	EACH		
134	611.19020024 POST PLANTING CARE WITH REPLACEMENT - MINOR DECIDUOUS TREES	62.00	EACH		
135	611.19040024 POST PLANTING CARE WITH REPLACEMENT - DECIDUOUS SHRUBS	5,473.00	EACH		
136	611.19050024 POST PLANTING CARE WITH REPLACEMENT - EVERGREEN SHRUBS	216.00	EACH		



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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS - CENTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS - CENTS
137	611.19070024 POST PLANTING CARE WITH REPLACEMENT - HERBACEOUS PLANTS	2,406.00	EACH		
138	614.0411 CARE OF TREES UP TO 12 INCHES DIAMETER AT BREAST HEIGHT - PRUNING	25.00	EACH		
139	614.0421 CARE OF TREES OVER 12 TO 24 INCHES DIAMETER AT BREAST HEIGHT - PRUNING	21.00	EACH		
140	614.0431 CARE OF TREES OVER 24 TO 36 INCHES DIAMETER AT BREAST HEIGHT - PRUNING	4.00	EACH		
141	614.060104 TREE REMOVAL OVER 4 INCHES TO 6 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	129.00	EACH		
142	614.060204 TREE REMOVAL OVER 6 INCHES TO 12 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	210.00	EACH		
143	614.060304 TREE REMOVAL OVER 12 INCHES TO 18 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	39.00	EACH		
144	614.060404 TREE REMOVAL OVER 18 INCHES TO 24 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	15.00	EACH		

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# BID SCHEDULE FORM

COL 1	COL 2	COL 3	COL 4	COL 5	COL 6
SEQ. NO	ITEM NUMBER AND DESCRIPTION	ENGINEER'S ESTIMATE OF QUANTITY	UNIT	UNIT PRICE (IN FIGURES) DOLLARS CTS	EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
145	614.060504 TREE REMOVAL OVER 24 INCHES TO 36 INCHES DIAMETER BREST HEIGHT - STUMPS GRUBBED	8.00	EACH		
146	614.09 TREE ROOT PRUNING	1,172.00	L.F.		
147	614.09010039 TREE ROOT PINNING - NYCDPR (TREE ROOT DIAMETER 1" AND GREATER)	440.00	EACH		
148	615.01000139 SKATEBOARD DETERRENT	144.00	EACH		
149	615.01010110 LITTER (TRASH) RECEPTACLE TYPE 1	10.00	EACH		
150	615.01080339 DRINKING FOUNTAIN TYPE "E" HI-LO WITH DOG BOWL - NYCDPR	1.00	EACH		
151	615.01080439 DRINKING FOUNTAIN TYPE "E" HI-LO WITH CHILD BOWL - NYCDPR	2.00	EACH		
152	615.08020239 1964 WORLD'S FAIR BENCH - RPL SLATS - BACK & ARMS (NYCDPR)	185.00	L.F.		



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## BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE DOLLARS - CENTS	COL 6 EXTENDED AMOUNT DOLLARS - CENTS
153	615.27020010 BICYCLE RACK (DESIGN CAPACITY 2 BICYCLES)	12.00	EACH		
154	615.33010011 TEMPORARY WOODEN TREE GUARD WITHOUT TREE WRAP - NYCDPR	7.00	EACH		
155	615.43000011 GROUND SURFACE PROTECTION MATS	7,728.00	S.F.		
156	615.92010011 PRECAST CONCRETE STEPS (STRAIGHT)	13.00	C.Y.		
157	615.92020011 PRECAST CONCRETE STEPS (RADIAL)	2.00	C.Y.		
158	615.99060104 LANDSCAPE BOULDERS TYPE 1	17.00	EACH		
159	615.99060204 LANDSCAPE BOULDERS TYPE 2	37.00	EACH		
160	615.99060304 LANDSCAPE BOULDERS TYPE 3	36.00	EACH		

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS PER	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 QTS.
161	615.99060404 LANDSCAPE BOULDERS TYPE 4	11.00	EACH			
162	617.01010024 CONTROLLING INVASIVE PLANT SPECIES WITH HERBICIDES	165,977.00	S.F.			
163	617.10000024 DISPOSAL OF MATERIAL CONTAINING INVASIVE PLANT SPECIES	5,193.00	C.Y.			
164	617.11000024 EQUIPMENT CLEANING FOR INVASIVE PLANT SPECIES	1.00	L.S.			
165	619.02970001 CONSTRUCTION SIGNS	14.00	EACH			
166	619.04 TYPE III CONSTRUCTION BARRICADE	30.00	EACH			
167	619.07010001 PLASTIC CONSTRUCTION DRUMS	35.00	EACH			
168	620.02 STONE FILLING (FINE)	25.00	C.Y.			



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COL 1 SEQ NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN DOLLARS)		COL 6 EXTENDED AMOUNT (IN DOLLARS)	COL 7 QTS
				PER	LS		
169	620.03 STONE FILLING (LIGHT)	50.00	C.Y.				
170	620.05 STONE FILLING (HEAVY)	61.00	C.Y.				
171	620.06010002 EXTRA HEAVY RIP-RAP	8.00	TONS				
172	620.14020009 EXTRA HEAVY STONE, TYPE B	347.00	C.Y.				
173	621.04 CLEANING DRAINAGE STRUCTURES	8.00	EACH				
174	623.10 SCREENED GRAVEL (IN-PLACE MEASURE)	5.00	C.Y.				
175	623.10010011 STONE SCREENINGS SURFACE-NYCDPR	22.00	S.Y.				
176	625.070001 SUPPLEMENTAL SITE SURVEY	1.00	L.S.				



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## BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CENTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CENTS
177	634.69000010 RODENT CONTROL SURVEY, BAITING AND MAINTENANCE	1.00	L.S.		
178	634.90030011 RODENT AND VERMIN CONTROL - INITIAL SURVEY, BAITING AND SANITATION	1.00	L.S.		
179	634.90040011 RODENT AND VERMIN CONTROL - MAINTENANCE PROGRAM	27.00	MONTH		
180	634.99020017 VIBRATION MONITORING (NONBLASTING)	1.00	L.S.		
181	637.03 CONCRETE CYLINDER CURING BOX	1.00	EACH		
182	637.14 ENGINEER'S FIELD OFFICE - TYPE 4	33.00	MONTH		
183	637.34 OFFICE TECHNOLOGY AND SUPPLIES PRICE BID SHALL BE FOR THE DOLLAR-CENTS OF \$ 10,000.00	1.00	DC	10,000 00	\$10,000 00



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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

PROJECT ID: P-1STARLP

CONTRACT PIN: 8502017HW0048C

5/21/2018 10:48 AM

## BID SCHEDULE FORM

COL 1	COL 2	COL 3	COL 4	COL 5	COL 6
SEQ. NO.	ITEM NUMBER AND DESCRIPTION	ENGINEER'S ESTIMATE OF QUANTITY	UNIT	UNIT PRICE (DOLLARS PER UNIT)	EXTENDED AMOUNT (DOLLARS)
184	645.35010010 INTERPRETIVE SIGN PANEL	9.00	S.F.		
185	645.5101 GROUND MOUNTED SIGN PANELS WITHOUT Z-BARS	21.00	S.F.		
186	645.5102 GROUND MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF WITH Z-BARS	16.00	S.F.		
187	645.5201 GROUND MOUNTED SIGN PANELS WITHOUT Z-BARS HIGH- VISIBILITY SHEETING	5.00	S.F.		
188	645.5202 GROUND-MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF, WITH Z-BARS, HIGH-VISIBILITY SHEETING	5.00	S.F.		
189	645.81 TYPE A SIGN POST	9.00	EACH		
190	645.81001039 PARK SIGN - IDENTIFICATION; ID-P - NYCDPR	4.00	EACH		
191	645.81002039 PARK SIGN - FEATURE; ID-F - NYCDPR	3.00	EACH		

5/21/2018 10:48 AM

# BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 CIS
192	645.81003039 PARK SIGN - ORIENTATION; O-P - NYCDPR	2.00	EACH			
193	645.81004039 PARK SIGN - DIRECTIONAL; DIR - NYCDPR	12.00	EACH			
194	645.8107 CONCRETE FOOTING FOR TYPE A, HIGH-CAPACITY TYPE A OR BREAKAWAY WOODEN SIGN POSTS WITH	9.00	EACH			
195	645.85 POLE MOUNTED SIGN SUPPORT SYSTEM (BAND MOUNTED)	8.00	EACH			
196	647.61 REMOVE AND DISPOSE SIGNS, GROUND MOUNTED TYPE A SIGN SUPPORTS AND FOUNDATION - SIZE	5.00	EACH			
197	648.01 DRILL HOLE, 2 1/2 INCH DIAMETER 0 TO 50 FEET DEPTH RANGE	264.00	FOOT			
198	648.15 ROCK CORE DRILLING NX	44.00	FOOT			
199	648.17 FURNISHING EQUIPMENT FOR MAKING BORINGS	1.00	EACH			



**Department of  
Design and  
Construction**

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COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (DOLLARS)	COL 6 EXTENDED AMOUNT (DOLLARS)
200	648.21 GROUTING 2 1/2 INCH BORE HOLE	308.00	FOOT		
201	651.01000111 HANDS FREE CALL BOX - BLUE LIGHT TOWER	2.00	EACH		
202	655.00110011 CAST COVER FOR MANHOLE (NYCDPR)	3.00	EACH		
203	655.08010010 CAST FRAME F1, WITHOUT CURB BOX AND WITH PARALLEL BAR GRATE 6 PCB	5.00	EACH		
204	660.97020111 STORM SEWER CLEANOUT ASSEMBLY	17.00	EACH		
205	663.0604 COPPER WATER SERVICE PIPE 1"	316.00	L.F.		
206	663.0606 COPPER WATER SERVICE PIPE 1 1/2"	2,382.00	L.F.		
207	663.12010039 PLUG VALVE - 1" NPS - NYCDPR	7.00	EACH		

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CENTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CENTS
208	663.13010039 GROUND HYDRANT - 1" DIA. NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION	4.00	EACH		
209	670.75020011 GROUND WIRE NUMBER 2 AWG	891.00	L.F.		
210	675.60000001 SPECIAL PROCEDURES FOR RAILROAD FACILITIES - TRACK MONITORING	260.00	CD		
211	685.01 WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 15 MILS	12,198.00	FOOT		
212	685.14 WHITE EPOXY REFLECTORIZED PAVEMENT SYMBOLS - 20 MILS	111.00	EACH		
213	697.03 FIELD CHANGE PAYMENT (Fixed Price) PRICE BID SHALL BE FOR THE DOLLAR-CENTS OF \$ 1,000,000.00	1.00	DC	1,000,000 00	\$1,000,000 00
214	SL-20.01.02 FURNISH AND INSTALL FOUNDATION FOR TYPE "WF" LAMPPOST, AS PER DRAWING E-5124	53.00	EACH		



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: P-1STARLP  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502017HW0048C

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## BID SCHEDULE FORM

COL 1	COL 2	COL 3	COL 4	COL 5	COL 6
SEQ. NO	ITEM NUMBER AND DESCRIPTION	ENGINEER'S ESTIMATE OF QUANTITY	UNIT	UNIT PRICE (NET COST)	EXTENDED AMOUNT (GROSS)
215	SL-20.02.02 FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION, AS PER DRAWING E-3788	1.00	EACH		
216	SL-21.03.23 FURNISH AND INSTALL FABRICATED STEEL TRANSFORMER BASE AND FABRICATED STEEL 25 FOOT SHAFT (TWIN ARMS AT 90 DEGREES OR 180 DEGREES)	1.00	EACH		
217	SL-21.04.55 FURNISH AND INSTALL TYPE "FLUSHING MEADOWS PARK" LAMPPOST AS PER STD. DWG. H-5305.	53.00	EACH		
218	SL-22.15.05 FURNISH AND INSTALL 70 WATT MAX LED "FLUSHING MEADOW PARK" TYPE LUMINAIRE AS PER SPECIFICATION 474	53.00	EACH		
219	SL-23.01.17 INSTALL UNDER DECK LUMINAIRE SPECIFICATION # 464, LAMP FURNISH BY CONTRACTOR	3.00	EACH		
220	SL-23.01.18 FURNISH LED UNDER DECK LUMINAIRE AS PER SPECIFICATION #464	3.00	EACH		
221	SL-24.02.09 FURNISH AND INSTALL TROUGH FOR THREE FLOODLIGHTS OR THREE PHOTOELECTRIC CONTROLS, AS PER DRAWING J-5229	1.00	EACH		
222	SL-26.01.04 FURNISH AND INSTALL LONG LIFE PHOTO ELECTRIC CONTROL WITH SURGE PROTECTION FOR LED LIGHT	3.00	EACH		

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEERS ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
223	SL-26.02.02 FURNISH AND INSTALL RECEPTACLE FOR PLUG-IN PHOTOELECTRIC CONTROL	3.00	EACH		
224	SL-27.01.01 FURNISH AND INSTALL ALUMINUM TAG ON A LAMPPOST, AS PER DRAWING D-2861	53.00	EACH		
225	SL-28.01.02 FURNISH AND INSTALL COPPER WELD GROUND ROD AND CLAMP IN DIRT AREA, BURIED BOX, SIDEWALK OR ROADWAY BOX, AS PER DRAWING H-5019.	13.00	EACH		
226	SL-33.01.01 FURNISH AND INSTALL NO. 12 AWG XLP COPPER WIRE OR EQUAL IN CONDUIT	370.00	L.F.		
227	SL-33.01.02 FURNISH AND INSTALL NO. 6 AWG XLP COPPER CABLE OR EQUAL IN CONDUIT	4,455.00	L.F.		
228	SL-33.01.03 FURNISH AND INSTALL NO. 2 AWG XLP COPPER CABLE OR EQUAL IN CONDUIT	18,277.00	L.F.		
229	SL-33.03.01 FURNISH AND INSTALL #6 BARE COPPER CONDUCTOR IN CONDUIT OR OVERHEAD.	7,026.00	L.F.		
230	SL-35.03.03 FURNISH AND INSTALL 1-1/2" HOT DIPPED GALVANIZED STEEL CONDUIT IN UNPAVED AREA	7.00	L.F.		

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[REVISION # 1]

## BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN DOLLARS)	COL 6 EXTENDED AMOUNT (IN DOLLARS)	COL 7 GTS
231	SL-35.03.04 FURNISH AND INSTALL 2" HOT DIPPED GALVANIZED STEEL CONDUIT IN UNPAVED AREA	6,428.00	L.F.			
232	SL-35.03.05 FURNISH AND INSTALL 3" HOT DIPPED GALVANIZED STEEL CONDUIT IN UNPAVED AREA.	209.00	L.F.			
233	SL-35.09.01 FURNISH AND INSTALL 3/4" HOT DIPPED GALVANIZED STEEL CONDUIT ON STRUCTURE.	185.00	L.F.			
234	SL-35.09.04 FURNISH AND INSTALL 2" HOT DIPPED GALVANIZED STEEL CONDUIT ON STRUCTURE	812.00	L.F.			
235	SL-37.01.02 FURNISH AND INSTALL A POLE MOUNTED STEEL BOX YP TO 1728 CUBIC INCHES MAXIMUM.	1.00	EACH			
236	SL-37.05.09 FURNISH AND INSTALL TYPE 2418 ROADWAY CONCRETE BOX WITH CAST IRON FRAME AND COVER WITH TAMPER PROOF BOLTS AS PER DWG J-3179B.	23.00	EACH			
237	SL-37.05.11 FURNISH AND INSTALL TYPE 3624 ROADWAY CONCRETE BOX WITH CAST IRON FRAME AND COVER WITH TAMPER PROOF BOLTS AS PER DWG J-3179B.	6.00	EACH			



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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
238	SL-37.08.04 FURNISH AND INSTALL 30"X18"X12" CAST IRON JUNCTION BOX FLUSH MOUNTED WITH FRAME AND COVER SIZE #4 AS PER DWG. D-2280	1.00	EACH		
239	SL-38.03.02 FURNISH AND INSTALL FLUSH MOUNTED OR PEDESTAL MOUNTED SIX (6) RELAY CONTROL CABINET AS PER DWGS H-3441, H-5078, H-5222A.	1.00	EACH		
240	SL-38.04.02 FURNISH AND INSTALL CONCRETE PEDESTAL FOR SIX (6) RELAY CONTROL CABINET AS PER DWG J-5078.	1.00	EACH		

SUB-TOTAL: \$

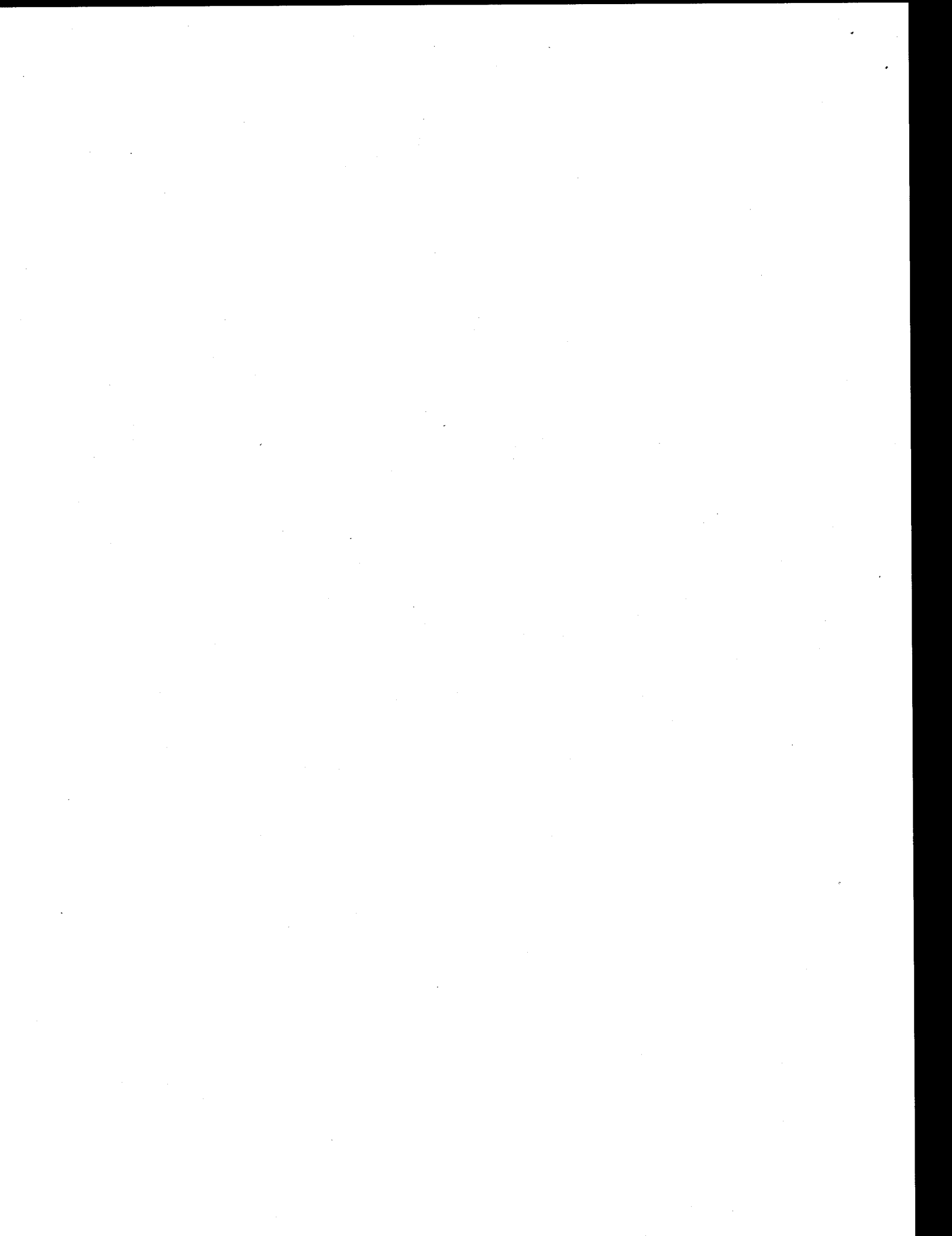
241	699.040001 MOBILIZATION BID PRICE OF MOBILIZATION SHALL NOT EXCEED 4% OF THE ABOVE SUB-TOTAL PRICE.	1.00	L.S.		
-----	--	------	------	--	--

TOTAL BID PRICE: \$

PLEASE BE SURE A LEGIBLE BID IS ENTERED FOR EACH ITEM.  
THE BIDDER SHALL INSERT THE TOTAL BID PRICE IN  
THE BID FORM ON PAGE C-4 OF THIS BID BOOKLET.

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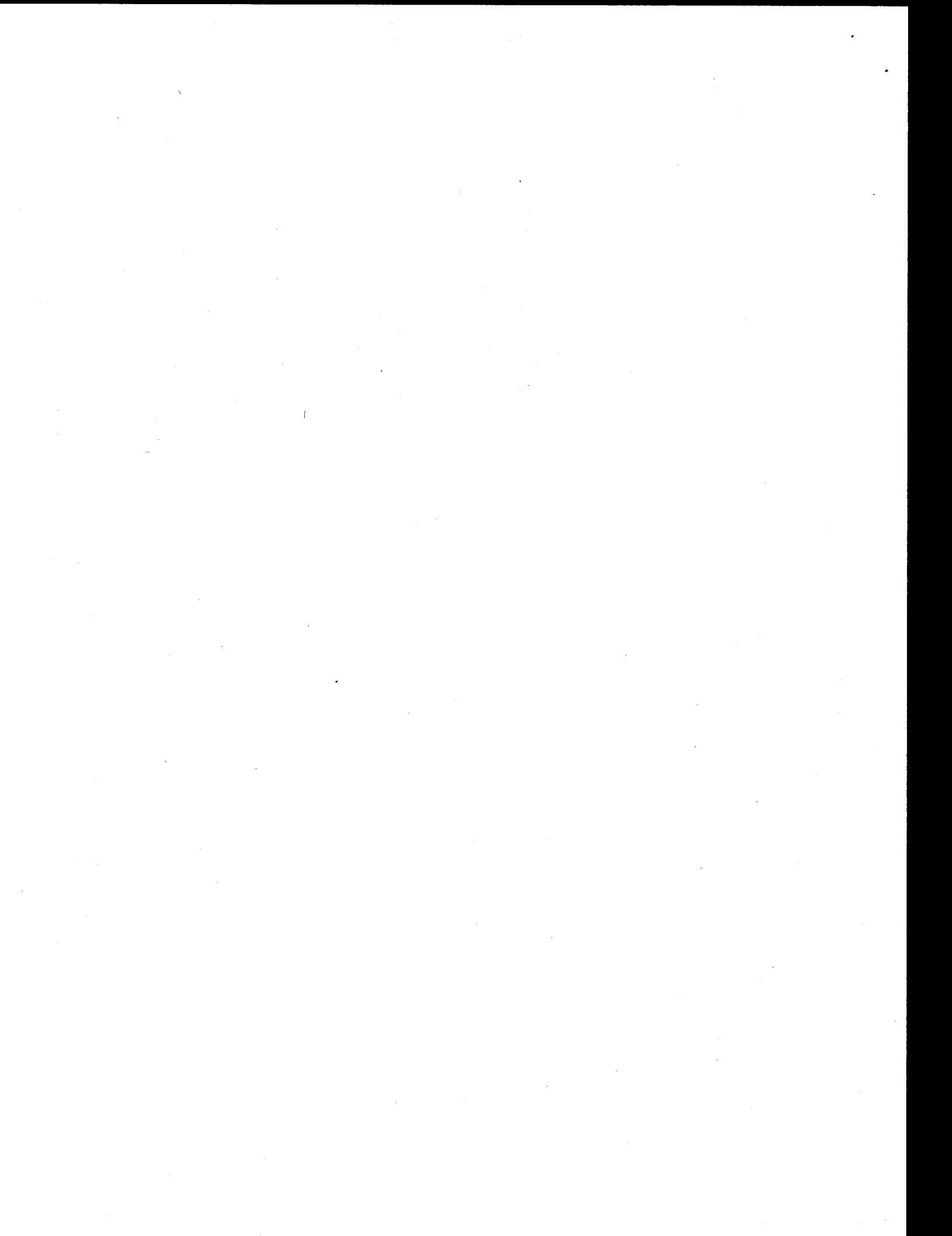
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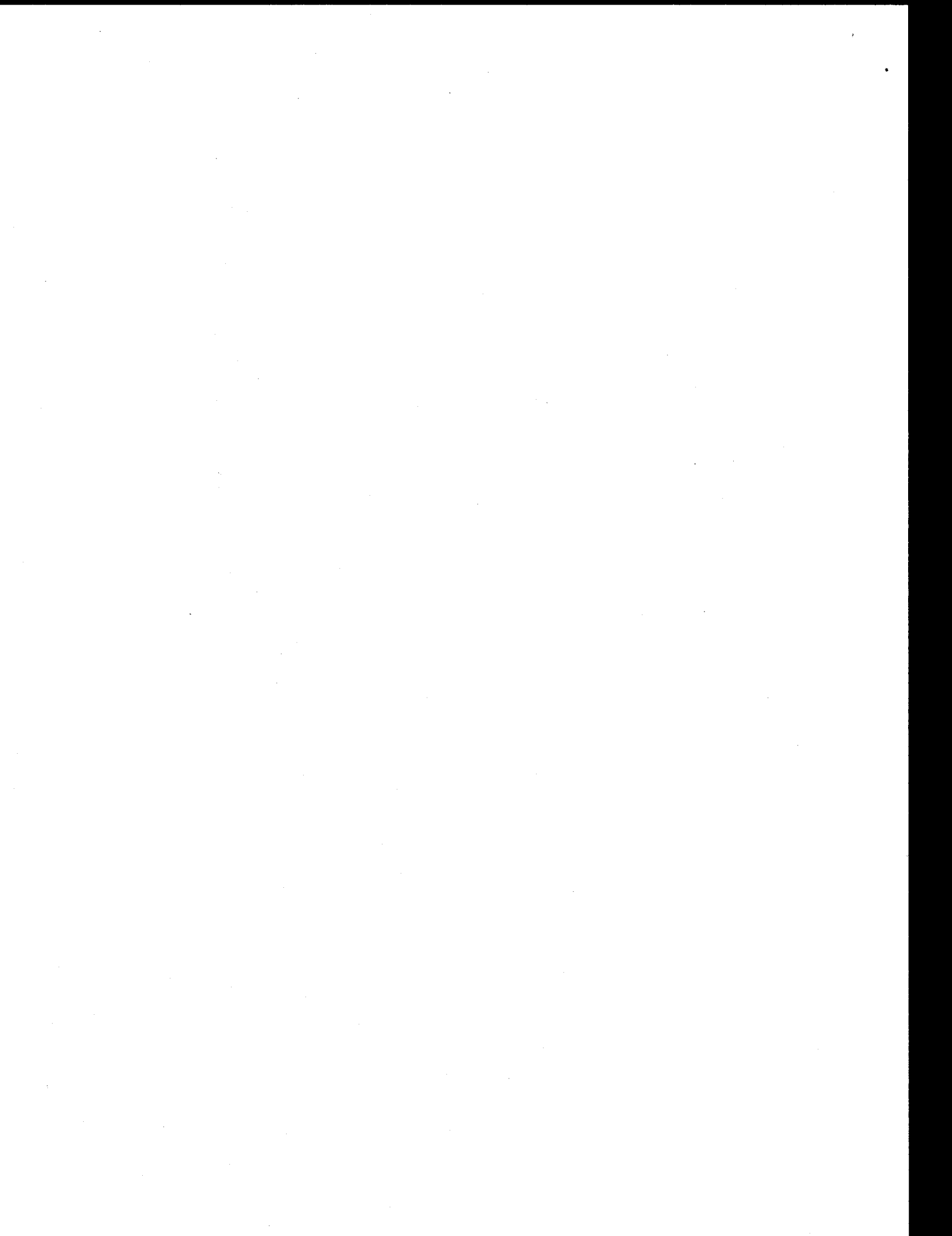


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**ITEM 675.60000001 – SPECIAL PROCEDURES FOR RAILROAD FACILITIES –  
TRACK MONITORING**

**DESCRIPTION:**

The work shall consist of furnishing and placing monitoring points on the main tracks for any construction activity within 50 feet of a track or within the influence line of track or where directed by the EIC and/or Amtrak Project Engineer and as per the attached Amtrak specification. Horizontal and vertical measurements shall be taken and recorded as indicated in the Amtrak specification.

**MATERIALS:**

Shall be in accordance with attached Amtrak Specifications.

**CONSTRUCTION DETAILS:**

Shall be in accordance with attached Amtrak Specifications.

**METHOD OF MEASUREMENT:**

This work will be measured as the number of calendar days that the track is monitored.

**BASIS OF PAYMENT:**

The unit price bid shall include the cost of all labor, material and equipment necessary to complete the work. It will be paid on a monthly basis for the number of calendar days that the monitoring is provided for in a month.

*Payment will be paid under:*

<b><u>Item No.</u></b>	<b><u>Item</u></b>	<b><u>Pay Unit</u></b>
675.60000001	Special Procedures for Railroad Facilities – Track Monitoring	CD (Calendar Day)



## Track Monitoring

**Scope:** If any work that could potentially affect the stability of the track is occurring within 50 feet of a track, or within the influence line of a track, then monitoring points shall be established along the track. The influence line descends from a point one foot horizontally away from the outside end of the tie bottom one unit vertically for every unit and a half horizontally.

**Safety:** All work close enough to foul a track must only be performed under the direction of qualified railroad personnel. People performing track monitoring are classified as Roadway Workers and must be trained in Roadway Worker Protection.

**Points:** Each location shall include a point on the top of rail marked with paint or crayon on the field side of the rail and used for vertical measurements, and a point on the tie for horizontal measurements. In wood ties, the point shall be marked with a PK nail or similar surveyor's marker; on concrete or steel ties the point shall be marked with paint.

**Point Locations:** Reference points shall be established along the track beginning at the point where the work is closest to the track. Points shall continue to be placed at intervals of 50 feet along the track to the point where the work ends or does not meet the conditions outlined above, and then at 50 feet, 100 feet, and 200 feet away from the end point(s). Where more than one track may be affected, points shall be established on each track that could be affected.

**Measurement Accuracy:** Monitoring points shall be established to within 0.01 feet, and monitoring shall be done to 0.01 feet.

**Monitoring:** Monitoring shall be performed at the beginning and end of every shift of work. Points shall be measured, the measurements recorded, and the numbers compared with previous measurements. All points shall be measured each time monitoring occurs, except for the points 200 feet away from the end of work; these points shall only be measured if any of the other measurements exceeds an allowable deviation.

**Allowable deviations:** If track is found to have moved either vertically or horizontally by more than one half of the Amtrak Maintenance limits as specified in Amtrak's MW-1000 for the particular class of track involved, then all work shall cease immediately and the contractor shall immediately notify the designated Amtrak Project Engineer. Work may not resume until the designated Amtrak Project Engineer has inspected the site and approved.

**Track Maintenance:** Deficiencies in track surface and alignment caused by construction activities shall be corrected solely by Amtrak forces at project expense.

TRACK CLASS	MAX. PASSENGER SPEED (MPH)	CROSS LEVEL (INCHES) The Difference in Cross Level Between Any Two Points Less Than		DEVIATION FROM UNIFORM PROFILE (INCHES)		DEVIATION FROM HORIZONTAL ALIGNMENT (INCHES)	DEVIATION FROM HORIZONTAL ALIGNMENT (INCHES)
		10'	62'	31' CHORD	62' CHORD	31' CHORD	62' CHORD
		MAINTENANCE LIMITS					
1	15	1	2 1/4	N/A	2 1/4	2 3/4	3 3/4
2	30	1	1 5/8	N/A	2	1 1/2	2 1/4
3	60	1	1 1/2	N/A	1 5/8	7/8	1 1/4
4	80	1	1 1/4	N/A	1 1/2	3/4	1
5	90	1	1 1/8	N/A	1	3/8	1/2
6	110	3/4	1	3/4	3/4	3/8	1/2
7	125	3/4	1	3/4	3/4	3/8	3/8
8	160	3/4	1	1/2	3/4	3/8	3/8
9	200	3/4	1	3/8	1/2	3/8	3/8
1/2 MAINTENANCE LIMITS							
1	15	1/2	1 1/8	N/A	1 1/8	1 3/8	1 7/8
2	30	1/2	13/16	N/A	1	3/4	1 1/8
3	60	1/2	3/4	N/A	13/16	7/16	5/8
4	80	1/2	5/8	N/A	3/4	3/8	1/2
5	90	1/2	9/16	N/A	1/2	3/16	1/4
6	110	3/8	1/2	3/8	3/8	3/16	1/4
7	125	3/8	1/2	3/8	3/8	3/16	3/16
8	160	3/8	1/2	1/4	3/8	3/16	3/16
9	200	3/8	1/2	3/16	1/4	3/16	3/16



Questions Submitted by Bidders and DDC's Responses

QUESTION #1:

Please reference bid item 697.03, what is the fixed allowance for this project?

DDC's RESPONSE:

*Refer to Article 1 of this Addendum.*

QUESTION #2:

Due to requests from our subcontractors, we kindly request that you extend the job due date for two weeks.

DDC's RESPONSE:

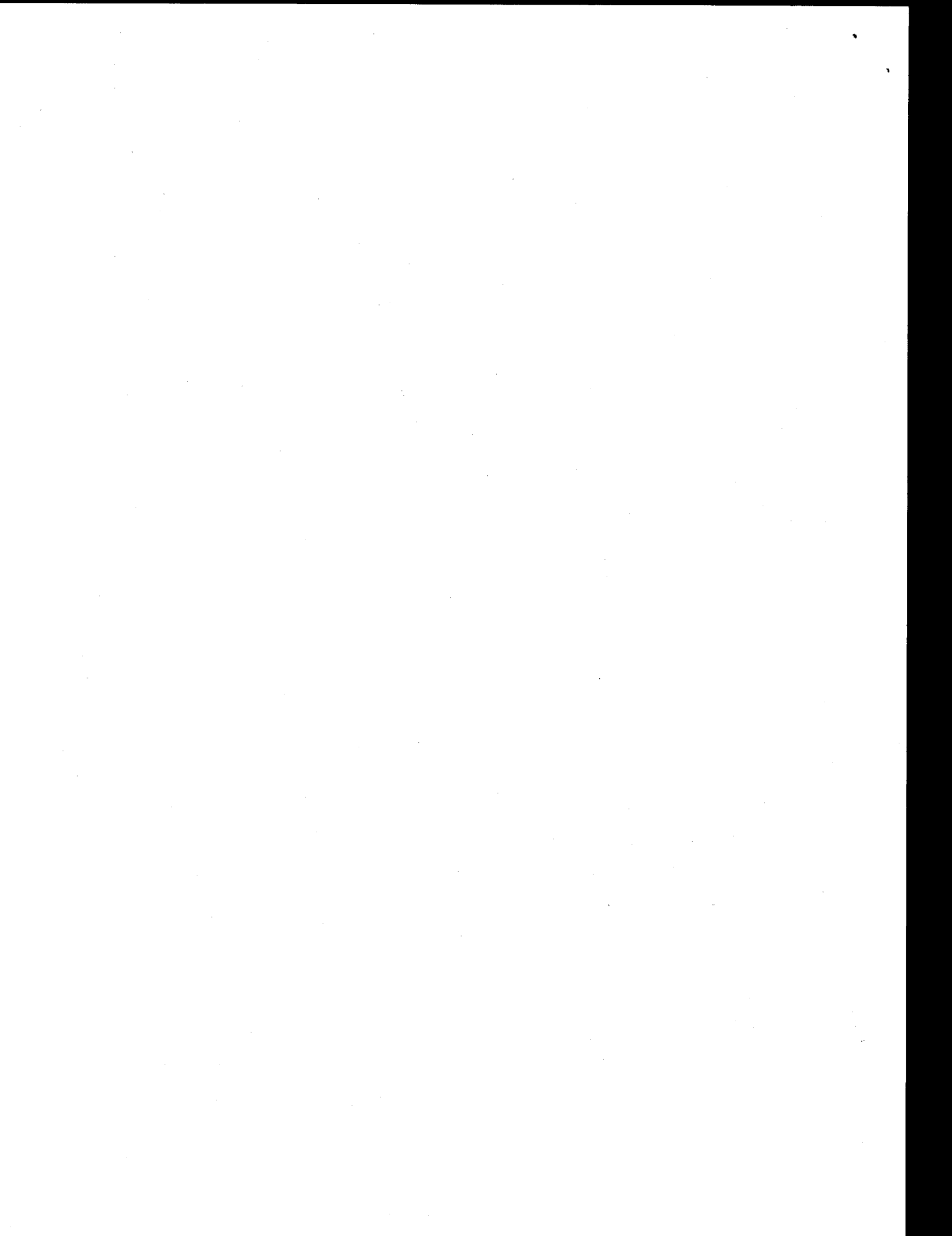
*No postponement will be allowed.*

QUESTION #3:

Will contaminated non- hazardous soil excavated on site be allowed as embankment and backfill on site?

DDC's RESPONSE:

*If the material in question has been properly sampled and tested to confirm it is non-hazardous per NYSDEC Soil Clean-Up Objectives, then a 2' cap of clean fill could be an acceptable method to allow the material for use as embankment and backfill on site.*



CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE

# ADDENDA CONTROL SHEET

BID OPENING DATE: **MAY 31, 2018**

PROJECT NO.: **P-1STARLP**

DESCRIPTION: **BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II,  
STAGE 2 BRIDGE THE CRITICAL SOUTH BRONX GAP**

Addendum		Addendum Contains:				
No.	Date	Revised Bid Date/Time	Revised Bid Schedule	Questions & Responses	Additional Ammendments	Drawings (number)
1	5/23/2018	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (2)
2	5/25/2018	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)

The Table above is a guide. Refer to the referenced Addendum for specific information.



ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: P-1STARLP

BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II, STAGE 2 BRIDGE THE CRITICAL SOUTH BRONX GAP  
BETWEEN WESTCHESTER AVENUE AND EAST 174TH STREET

INCLUDING CONSTRUCTION OF EAST 172ND STREET PEDESTRIAN BRIDGE OVER AMTRAK (BIN#: 2-24124-0), SOUTH GREENWAY PEDESTRIAN BRIDGE OVER BRONX RIVER (BIN#: 2-26990-0), DRAINAGE, RETAINING STRUCTURES, GREENWAY, STREET LIGHTING, LANDSCAPING AND TRAFFIC WORK

Together With All Work Incidental Thereto

BOROUGH OF THE BRONX  
CITY OF NEW YORK

ADDENDUM NO. 2

DATED: MAY 25, 2018

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. **Refer** to the Bid and Contract Documents, Volume 1 of 3;  
**Delete** Bid Schedule pages B-3 [REVISION # 1] through B-34 [REVISION # 1] in their entirety;  
**Insert** attached revised Bid Schedule pages B-3 [REVISION # 2] through B-64 [REVISION # 2].  
**NOTE: ITEM 553.020003 DELETED**
2. **Refer** to the Contract Drawings, DWG. ECD3, Detail 10 COFFERDAM;  
**Delete** ITEM NO. 553.020003 from the drawing.
3. **Refer** to the Contract Drawings, DWG. ECD3, COFFERDAM NOTES, 10-5(C);  
**Delete** COFFERDAM #3, ITEM NO. 553.020003 from the drawing.
4. **Refer** to the Contract Drawings, DWG. ST1-8, LEGEND, COFFERDAM TYPE 2, ITEM 553.020001;  
**Delete** ITEM NO 553.020001 from the drawing and replace it with ITEM 553.020002.

5. For additional information, see the attached FOUR (4) pages of "Questions Submitted by Bidders and DDC's Responses".

**END OF ADDENDUM NO. 2**

**By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of TWO (2) pages, and attachments consisting of SIXTY-SIX (66) pages.**

**THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID**

MLJ Contracting Corp  
Name of Bidder

By: [Signature]

[Signature]

HOW SHEEN PAU, P.E.  
Assistant Commissioner

Questions Submitted by Bidders and DDC's Responses

QUESTION #1:

Will Amtrak and CSX field forces (flagging, ET) be able to support the work on this project such that they will not interrupt or delay our operations. Does the 820 CCD schedule allow for any delays caused by Amtrak or CSX to the 820 day schedule?

DDC's RESPONSE:

*It is anticipated that Amtrak and CSXT will provide the flagging services & track outages during construction. Close coordination will be required between the contractor, Amtrak, CSXT, and DDC to complete the contract within the allocated duration.*

QUESTION #2:

Under which item will Sampling and Testing of Soil be made and what is the quantity?

DDC's RESPONSE:

*Refer to drawing RMP1, Note #24. Items will be paid under Item No. 205.050101 and Item No. 205.050201.*

QUESTION #3:

We request that a 2 week extension be granted to the May 31st bid date. This request is being made so that several of our critical suppliers and subcontractors may have additional time to prepare estimates.

DDC's RESPONSE:

*There will be no extension in the bid opening date.*

QUESTION #4:

On Section A-A of Drawing SP2-2 (Sheet 232), the existing stone retaining wall (residence side) is to be removed prior to installation of the soldier piles. From Drawing SP2-1 (Sheet 231), from A1 to A21 the existing grade of the residence is higher than the existing pathway elevation up to approximately 8 feet. For this reason, the existing stone retaining wall must remain in place as it is retaining the residence side soil. The following questions are provided below.

- a. Are localized portions of the existing retaining allowed to be removed in order to locate soldier pile drill holes?
- b. Is the existing retaining wall to be demolished as lagging proceeds, essentially replacing stone wall with lagging boards? If not, is the contractor responsible for designing a connection from the soldier pile to the stone wall?
- c. Are as-builts available for the existing retaining walls?

DDC's RESPONSE:

- a. *Contractor to decide its construction means & methods in consultation with the Engineer.*
- b. *Contractor to decide its construction means & methods in consultation with the Engineer.*
- c. *There are no as-built drawings for the existing retaining walls.*

QUESTION #5:

The soldier pile schedule on drawings SP2-2 has a minimum pile embedment into rock. If rock is not encountered, please provide a maximum depth in soil only.

DDC's RESPONSE:

*The contract drawings are based on geotechnical boring data collected during design. Refer to Retaining Wall General Note 9 on drawing RWNOT and Note 3 on drawing SP2-2.*

QUESTION #6:

The soldier pile schedule on drawings SP2-2 has a minimum pile embedment into rock. If rock is deeper than the assumed elevations shown on the drawings, will splices be permitted for the soldier pile?

DDC's RESPONSE:

*Please follow Section 552-2.05 of NYSDOT Standard Specification instructions regarding soldier pile splices.*

QUESTION #7:

Does this project fall under the "Buy America" provision?

DDC's RESPONSE:

*Refer to TF pages in BID BOOKLET VOLUME 3 OF 3.*

QUESTION #8:

Note on drawing C1 (pg 63) Indicates work to be completed under a different contract (Phase II Stage 1) Please provide a completion date of this Phase and Stage.

DDC's RESPONSE:

*This project is still under construction. Appropriate coordination between the two contractors of Stage 1 & 2 is required during construction.*

QUESTION #9:

Please provide any and all as built from Phase II Stage 1, that may have bearing on previous work completed and incomplete conditions

DDC's RESPONSE:

*There are no as-builts from Stage 1 at this time.*

QUESTION #10:

Is an Arborist required?

DDC's RESPONSE:

*Yes, refer to DWG. G6, TRN-1 THROUGH TMT-8.*

QUESTION #11:

If an Arborist is required, under which bid item should the cost be placed?

DDC's RESPONSE:

*Refer to GENERAL NOTE on DWG. TMD-1. Payment is included into corresponding bid item identified under Section 614.*

QUESTION #12:

Is the underground conduit to be PVC Coated Rigid Galvanized Steel?

DDC's RESPONSE:

*As stated in the notes on DWG. SLP1, the underground conduit is to be hot dipped galvanized steel.*

QUESTION #13:

Please provide wire type to be installed in the Underground Conduit? USE/XLP or THHN?

DDC's RESPONSE:

*As stated in the notes on DWG. SLP1, the wire type is to be XLP*

QUESTION #14:

Are there any restrictions regarding using the existing section of park between E177th St and the northern end of Phase 2 to gain access to the portion of the project between the Bronx River and Amtrak in order to haul in and out materials needed to construct this section? What would the necessary restoration involve?

DDC's RESPONSE:

*Refer to MPT drawing MPT-4, showing the schematic location of a temporary access roadway, to be constructed by the contractor for the purposes of bringing materials/equipment into and out of the site. Additionally refer to notes 3.05 thru 3.08 on drawing MPT-1. It is anticipated the temporary access road follows the alignment of the permanent greenway path, and so restoration for the temporary access road should be the permanent path, along with any other restoration as required and directed by the Engineer for disturbance/damage outside the envelope of construction and / or outside of project limits to its pre-existing condition or better, due to the contractors activities, at no cost to the City. Contractor is required to get the entry permits from appropriate agencies.*

QUESTION #15:

What is the maximum equipment surcharge load allowed for the existing stone retaining walls (Amtrak side and residence side)?

DDC's RESPONSE:

*As-built drawings of existing retaining walls are not available, therefore, maximum equipment surcharge loads were not calculated. Contractor to utilize appropriate construction means and methods around existing infrastructures.*

QUESTION #16:

Landscape Boulders item 614.99060404 line 2, Detail 2, drawing LD 1 on sheet 130 of 339, States "Boulders shall be native selected boulders and stones typical of the region" but does not specify what region, or type of stone needed.?

DDC's RESPONSE:

*Boulders shall be stone from NYSDOT region 11.*

QUESTION #17:

Additionally, in Book 3 of 3, provided by NYC DDC, page 131, Section Materials, Line 1 reads *"The boulder and bedding material shall be described in the contract documents in a special note entitled "Landscape Boulders."*

This Note does not exist, unless referring to the detail 2 on drawing LD 1, then clarity is needed.?

DDC's RESPONSE:

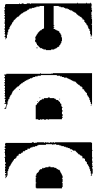
The special note refers to the "Landscape Boulder Notes" on Detail 2 on DWG. LD1.

QUESTION #18:

Will a protective coating be required on the soldier piles?

DDC's RESPONSE:

No protective coating is required for the soldier piles. Piles shall conform to materials as specified in Soldier Pile and Lagging Wall, Note #2 on drawing RWNOT.



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502017HW0048C  
Project ID P-1STARLP

BID SCHEDULE

- NOTE:
- (1) The Agency may reject a bid if it contains unbalanced bid prices. An unbalanced bid is considered to be one containing lump sum or unit items which do not reflect reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated for the performance of the items in question.
  - (2) The following bid prices on Unit Price Contracts are to be paid for the actual quantities of the several classes of work in the completed work or structure, and they cover the cost of all work, labor, material, tools, plant and appliances of every description necessary to complete the entire work, as specified, and the removal of all debris, temporary work and appliances.
  - (3) PLEASE BE SURE A LEGIBLE BID IS ENTERED, IN INK, FOR EACH ITEM. Alterations must be initialed in ink by the bidder.
  - (4) The Extended Amount entered in Column 5 shall be the product of the Estimated Quantity in Column 2 times the Unit Price Bid in Column 4.
  - (5) Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished them. The pages of this Bid Schedule are numbered consecutively, as follows: B-3 through B-64 [REVISION #2]

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BID PAGES



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN

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Project ID

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COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
201.07 (001)	1.0 ACRE	CLEARING AND GRUBBING	\$	—	\$	—
203.02 (002)	3,105.0 C.Y.	UNCLASSIFIED EXCAVATION AND DISPOSAL	\$	—	\$	—
203.02990006 (003)	681.0 S.F.	PAVEMENT EXCAVATION	\$	—	\$	—
203.03 (004)	23,394.0 C.Y.	EMBANKMENT IN PLACE	\$	—	\$	—



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			DOLLARS	CTS	DOLLARS	CTS
203.07 (005)	547.0 C.Y.	SELECT GRANULAR FILL	\$	—	\$	—
203.21 (006)	2,937.0 C.Y.	SELECT STRUCTURAL FILL	\$	—	\$	—
203.25 (007)	661.0 C.Y.	SAND BACKFILL	\$	—	\$	—
203.30020063 (008)	500.0 C.Y.	EXCAVATION AND DISPOSAL OF ROCK, EMERGENCY CONTRACT STANDBY WORK, QUANTITY RANGE 2 (131 to 650)	\$	—	\$	—

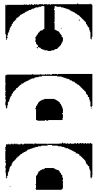
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			DOLLARS	CTS	DOLLARS	CTS
205.0201 (009)	1.0 L.S.	SEGREGATION AND STORAGE OF CONTAMINATED SOIL	\$	—	\$	—
205.050101 (010)	105.0 TONS	DISPOSAL OF CONTAMINATED HAZARDOUS WASTE SOIL	\$	—	\$	—
205.050201 (011)	36.0 TONS	DISPOSAL OF CONTAMINATED NON-HAZARDOUS SOIL	\$	—	\$	—
206.01 (012)	10,091.0 C.Y.	STRUCTURE EXCAVATION	\$	—	\$	—



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			DOLLARS	CTS	DOLLARS	CTS
206.0201 (013)	3,176.0 C.Y.	TRENCH AND CULVERT EXCAVATION	\$	—	\$	—
206.04010011 (014)	1,172.0 L.F.	PNEUMATIC EXCAVATION AND BACKFILL OF TRENCHES	\$	—	\$	—
206.05 (015)	2.0 EACH	TEST PIT EXCAVATION	\$	—	\$	—
207.20 (016)	1,439.0 S.Y.	GEOTEXTILE BEDDING	\$	—	\$	—

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			DOLLARS	CTS	DOLLARS	CTS
207.21 (017)	467.0 S.Y.	GEOTEXTILE SEPARATION	\$		\$	
207.22 (018)	26,785.0 S.Y.	GEOTEXTILE DRAINAGE	\$		\$	
207.26 (019)	1,178.0 S.Y.	PREFABRICATED COMPOSITE STRUCTURAL DRAIN	\$		\$	
207.96000017 (020)	12,177.0 S.F.	GEOSYNTHETIC REINFORCEMENT	\$		\$	



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			DOLLARS	CTS	DOLLARS	CTS
208.01001139 (021)	490.0 C.Y.	RAIN GARDEN SOIL MIX (NYCDPR)	\$		\$	
209.11010011 (022)	5.0 EACH	TEMPORARY CATCH BASIN INSERTS FOR DRAINAGE STRUCTURES TRASH, SEDIMENT AND DEBRIS REMOVAL	\$		\$	
209.110101 (023)	51.0 EACH	CHECK DAM (DITCH BOTTOM WIDTH 0.0 TO 3'), STONE - TEMPORARY	\$		\$	
209.1202 (024)	671.0 FOOT	STRAWBALE DIKE- TEMPORARY	\$		\$	

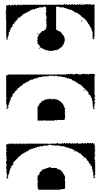
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			DOLLARS	CTS	DOLLARS	CTS
209.13 (025)	8,557.0 L.F.	SILT FENCE-TEMPORARY	\$	—	\$	—
209.140101 (026)	4.0 EACH	SEDIMENT TRAP, EARTH BERM - TEMPORARY	\$	—	\$	—
209.1501 (027)	2,750.0 L.F.	TURBIDITY CURTAIN - TEMPORARY	\$	—	\$	—
209.190201 (028)	2,090.0 S.Y.	ROLLED EROSION CONTROL PRODUCT, CLASS II TYPE B, INTERMEDIATE	\$	—	\$	—



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			DOLLARS	CTS	DOLLARS	CTS
209.20120010 (029)	5,660.0 L.F.	BIO-FIBER ROLLS 12 INCH	\$	.	\$	.
209.22 (030)	183.0 S.Y.	CONSTRUCTION ENTRANCE	\$	.	\$	.
211.10 (031)	2.0 EACH	GROUTED TIEBACKS (TEMPORARY)	\$	.	\$	.
304.11 (032)	12.0 C.Y.	SUBBASE COURSE, TYPE 1	\$	.	\$	.

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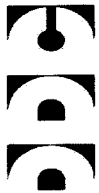
COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
304.12 (033)	1,954.0 C.Y.	SUBBASE COURSE, TYPE 2	\$	—	\$	—
402.127103 (034)	592.0 TONS	12.5 F1 TOP COURSE HMA, 70 SERIES COMPACTION	\$	—	\$	—
402.257903 (035)	811.0 TONS	25 F9 BINDER COURSE HMA, 70 SERIES COMPACTION	\$	—	\$	—
402.377903 (036)	1,091.0 TONS	37.5 F9 BASE COURSE HMA, 70 SERIES COMPACTION	\$	—	\$	—



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			DOLLARS	CTS	DOLLARS	CTS
407.0102 (037)	631.0 GAL.	DILUTED TACK COAT	\$		\$	
551.010042 (038)	1,562.0 L.F.	STEEL H-PILES (HP 10X42)	\$		\$	
551.12 (039)	71.0 EACH	SPLICES FOR STEEL H-PILES	\$		\$	
552.17 (040)	150.0 S.F.	SHIELDS AND SHORING	\$		\$	

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			DOLLARS	CTS	DOLLARS	CTS
552.2001 (041)	853.0 L.F.	HOLES IN EARTH FOR SOLDIER PILE AND LAGGING WALL	\$	—	\$	—
552.2101 (042)	303.0 L.F.	ROCK SOCKETS FOR SOLDIER PILE AND LAGGING WALL	\$	—	\$	—
552.2201 (043)	693.0 L.F.	SOLDIER PILES FOR SOLDIER PILE AND LAGGING WALL	\$	—	\$	—
552.2202 (044)	451.0 L.F.	SOLDIER PILES FOR SOLDIER PILE AND LAGGING WALL	\$	—	\$	—

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			DOLLARS	CTS	DOLLARS	CTS
552.230201 (045)	3,163.0 S.F.	UNTREATED WOOD LAGGING FOR SOLDIER PILE AND LAGGING WALL	\$		\$	
553.020001 (046)	1.0 EACH	COFFERDAMS (TYPE 2)	\$		\$	
553.020002 (047)	1.0 EACH	COFFERDAMS (TYPE 2)	\$		\$	
554.40 (048)	440.0 S.F.	FILL TYPE RETAINING WALL (0 - 6 FT)	\$		\$	

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			DOLLARS	CTS	
554.41 (049)	4,125.0 S.F.	FILL TYPE RETAINING WALL (GREATER THAN 6FT. - 12FT.)	\$ _____	_____	\$ _____
554.42 (050)	8,910.0 S.F.	FILL TYPE RETAINING WALL (GREATER THAN 12FT. - 18FT.)	\$ _____	_____	\$ _____
554.43 (051)	6,710.0 S.F.	FILL TYPE RETAINING WALL (GREATER THAN 18FT. - 24FT.)	\$ _____	_____	\$ _____
554.44 (052)	825.0 S.F.	FILL TYPE RETAINING WALL (GREATER THAN 24FT. - 30FT.)	\$ _____	_____	\$ _____

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COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
554.53 (053)	25,850.0 S.F.	FILL TYPE RETAINING WALL AESTHETIC TREATMENT -OTHER; AS SHOWN ON THE CONTRACT DOCUMENTS	\$	—	\$	—
555.0104 (054)	171.0 C.Y.	FOOTING CONCRETE CLASS A (NO CONCRETE CLASS SUBSTITUTIONS PERMITTED, EXCEPT CLASS H WHERE FOOTING IS 3 FT THICK OR LESS)	\$	—	\$	—
555.08 (055)	645.0 C.Y.	FOOTING CONCRETE, CLASS HP	\$	—	\$	—
555.09 (056)	1,354.0 C.Y.	CONCRETE FOR STRUCTURES, CLASS HP	\$	—	\$	—

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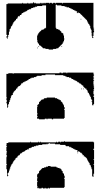
Contract PIN 8502017HW0048C

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COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
555.72940001 (057)	1,320.0 S.F.	ARCHITECTURAL TREATMENT - VERTICAL CONCRETE SURFACES	\$	—	\$	—
556.0202 (058)	111,973.0 LBS.	EPOXY- COATED BAR REINFORCEMENT FOR STRUCTURES	\$	—	\$	—
556.0203 (059)	40,966.0 LBS.	GALVANIZED BAR REINFORCEMENT FOR STRUCTURES	\$	—	\$	—
556.03 (060)	1,927.0 EACH	STUD SHEAR CONNECTORS FOR BRIDGES	\$	—	\$	—

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			DOLLARS	CTS	DOLLARS	CTS
557.0109 (061)	621.0 S.Y.	SUPERSTRUCTURE SLAB WITH INTEGRAL WEARING SURFACE - BOTTOM FORMWORK REQUIRED - TYPE 9 FRICTION	\$		\$	
557.2009 (062)	85.0 S.Y.	STRUCTURAL APPROACH SLAB WITH INTEGRAL WEARING SURFACE - TYPE 9 FRICTION	\$		\$	
559.16960118 (063)	9,528.0 S.F.	PROTECTIVE SEALING OF STRUCTURAL CONCRETE	\$		\$	
559.18960118 (064)	6,691.0 S.F.	PROTECTIVE SEALING OF STRUCTURAL CONCRETE ON NEW BRIDGE DECKS AND BRIDGE DECK OVERLAYS	\$		\$	

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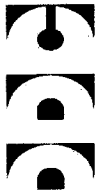
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			DOLLARS	CTS	DOLLARS	CTS
559.19010011 (065)	2,530.0 S.F.	PAINTING EXISTING CONCRETE SURFACES	\$	—	\$	—
560.01 (066)	341.0 S.F.	DIMENSION STONE MASONRY	\$	—	\$	—
560.01010011 (067)	7.0 C.Y.	GRANITE COPING (STRAIGHT)	\$	—	\$	—
560.01020011 (068)	22.0 C.Y.	GRANITE COPING (RADIAL)	\$	—	\$	—





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			DOLLARS	CTS	DOLLARS	CTS
560.01030011 (069)	4.0 C.Y.	GRANITE ENTRY PIER	\$		\$	
560.01040011 (070)	20.0 C.Y.	GRANITE WALL	\$		\$	
560.06 (071)	1,527.0 C.F.	RUBBLE STONE MASONRY LAID DRY	\$		\$	
560.07 (072)	708.0 L.F.	PRECAST CONCRETE COPING	\$		\$	

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			DOLLARS	CTS	DOLLARS	CTS
564.510001 (073)	508,510.0 LBS.	STRUCTURAL STEEL	\$		\$	
565.2022 (074)	2.0 EACH	TYPE E.B. FIXED BEARING (56K TO 111K)	\$		\$	
565.2024 (075)	2.0 EACH	TYPE E.B. FIXED BEARING (169K TO 225K)	\$		\$	
565.2032 (076)	2.0 EACH	TYPE E.B. EXPANSION BEARING (56 TO 111 KIPS)	\$		\$	



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			DOLLARS	CTS	DOLLARS	CTS
565.2034 (077)	2.0 EACH	TYPE E.B. EXPANSION BEARING (169K TO 225K)	\$		\$	
567.60 (078)	42.0 FOOT	ARMORLESS BRIDGE JOINT SYSTEM	\$		\$	
568.11010011 (079)	1,933.0 L.F.	STEEL ROD SAFETY RAILING	\$		\$	
568.12010011 (080)	1,644.0 L.F.	HANDRAIL	\$		\$	

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			DOLLARS	CTS	DOLLARS	CTS
572.010001 (081)	17,656.0 S.F.	STRUCTURAL STEEL PAINTING: SHOP APPLIED	\$	—	\$	—
572.010002 (082)	7,569.0 S.F.	STRUCTURAL STEEL PAINT SYSTEM: SHOP APPLIED	\$	—	\$	—
580.01 (083)	52.0 C.Y.	REMOVAL OF STRUCTURAL CONCRETE	\$	—	\$	—
586.0202 (084)	384.0 EACH	DRILLING AND GROUTING BOLTS OR REINFORCING BARS (WITH NON-DESTRUCTIVE INVESTIGATION)	\$	—	\$	—

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			DOLLARS	CTS	DOLLARS	CTS
603.0202 (085)	140.0 L.F.	NON REINFORCED CONCRETE PIPE (CLASS 1) 6 INCH DIAMETER	\$		\$	
603.171016 (086)	9.0 EACH	GALVANIZED STEEL END SECTIONS-PIPE (2-2/3" X 1/2 CORRUGATIONS) 12 INCH DIAMETER, 16 GAUGE	\$		\$	
603.9812 (087)	824.0 L.F.	SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 12 INCH DIAMETER	\$		\$	
604.501123 (088)	49.0 L.F.	SPECIAL DRAINAGE STRUCTURE	\$		\$	

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			DOLLARS	CTS	DOLLARS	CTS
605.0901 (089)	28.0 C.Y.	UNDERDRAIN FILLER, TYPE 1	\$	—	\$	—
605.1501 (090)	2,071.0 L.F.	PREFORATED CORRUGATED POLYETHYLENE UNDERDRAIN TUBING, 4" DIAMETER	\$	—	\$	—
605.1502 (091)	952.0 L.F.	PERFORATED CORRUGATED POLYETHYLENE UNDERDRAIN TUBING, 6 INCH DIAMETER	\$	—	\$	—
606.16 (092)	25.0 L.F.	CORRUGATED BEAM GUIDE RAILING	\$	—	\$	—



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			DOLLARS	CTS	DOLLARS	CTS
607.03040439 (093)	6.0 EACH	CHAIN LINK FENCE SINGLE GATE - NYCDPR	\$		\$	
607.05040439 (094)	418.0 L.F.	CHAIN LINK FENCE - NYCDPR	\$		\$	
607.06400016 (095)	295.0 L.F.	PEDESTRIAN FENCING FOR BRIDGES	\$		\$	
607.30030010 (096)	25.0 FOOT	STEEL CHAIN LINK FENCE WITH TOP RAIL, 8 ft HIGH	\$		\$	



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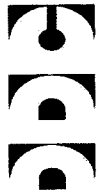
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			DOLLARS	CTS	DOLLARS	CTS
607.4017 (097)	1.0 EACH	OPTIONAL FENCE GATE (SINGLE LEAF 4 FEET OPENING 8 FEET HIGH)	\$	—	\$	—
607.41010010 (098)	3,110.0 L.F.	TEMPORARY PLASTIC BARRIER FENCE	\$	—	\$	—
607.45240011 (099)	1,548.0 L.F.	ORNAMENTAL STEEL MESH FENCE 8 FT HIGH	\$	—	\$	—
607.46244911 (100)	2.0 EACH	DOUBLE ORNAMENTAL STEEL MESH GATE, 8FT HIGH, 16FT OPENING	\$	—	\$	—



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			DOLLARS	CTS	DOLLARS	CTS
607.47000011 (101)	6,574.0 S.F.	PRIVACY SLATS	\$		\$	
607.96000008 (102)	454.0 FOOT	REMOVE AND DISPOSE OF EXISTING FENCE	\$		\$	
607.98010111 (103)	3,199.0 L.F.	TEMPORARY CHAIN-LINK FENCE	\$		\$	
608.0101 (104)	19.0 C.Y.	CONCRETE SIDEWALKS AND DRIVEWAYS	\$		\$	

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			DOLLARS	CTS	DOLLARS	CTS
608.05000039 (105)	1,839.0 S.Y.	ASPHALT BLOCK PAVEMENT ON ASPHALT CONCRETE BASE	\$	—	\$	—
608.11 (106)	168.0 S.Y.	GROUTED STONE BLOCK PAVED SIDEWALKS AND DRIVEWAYS (OPTIONAL CONCRETE SETTING BED)	\$	—	\$	—
608.73166108 (107)	2.0 EACH	BOLLARD-REMOVABLE, WITHOUT LIGHTING, WIDTH OVER 11 INCHES, HEIGHT OVER 36 INCHES	\$	—	\$	—
609.02120011 (108)	311.0 L.F.	RAISED GRANITE CURB	\$	—	\$	—

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			DOLLARS	CTS	DOLLARS	CTS
609.02130011 (109)	36.0 L.F.	FLUSH GRANITE CURB	\$	—	\$	—
609.04120011 (110)	534.0 L.F.	CONCRETE CURB-NYCDPR	\$	—	\$	—
609.15100011 (111)	700.0 L.F.	STEEL EDGING	\$	—	\$	—
609.26020111 (112)	50.0 L.F.	CONCRETE CURB FACED (NYC) TYPE D	\$	—	\$	—

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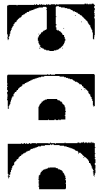
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			DOLLARS	CTS	DOLLARS	CTS
610.1102 (113)	96.0 C.Y.	MULCH FOR PLANTING TYPE C - USDA-APHIS PROTOCOL WOOD CHIPS	\$		\$	
610.11041309 (114)	136.0 C.Y.	DECORATIVE STONE MULCH 4"- 6" STONE SIZE	\$		\$	
610.1402 (115)	834.0 C.Y.	TOPSOIL - ROADSIDE	\$		\$	
610.1403 (116)	169.0 C.Y.	TOP SOIL - LAWNS	\$		\$	

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			DOLLARS	CTS	DOLLARS	CTS
610.1405 (117)	2,990.0 C.Y.	TOP SOIL - ACIDIC	\$	—	\$	—
610.17 (118)	26,860.0 S.Y.	WILDFLOWER SEEDING	\$	—	\$	—
610.18 (119)	1,509.0 S.Y.	SODDING	\$	—	\$	—
610.21 (120)	4,985.0 S.Y.	MOWING	\$	—	\$	—



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			DOLLARS	CTS	DOLLARS	CTS
610.22 (121)	407.0 EACH	MOWING LIMITS MARKERS	\$	—	\$	—
611.0161 (122)	2.0 EACH	PLANTING - MAJOR DECIDUOUS TREES - 2 1/2 INCH CALIPER BALL & BURLAP, FIELD POTTED OR FIELD	\$	—	\$	—
611.0191 (123)	48.0 EACH	PLANTING - MAJOR DECIDUOUS TREES - 4 INCH CALIPER BALL & BURLAP, FIELD POTTED OR FIELD	\$	—	\$	—
611.0211 (124)	62.0 EACH	PLANTING - MINOR DECIDUOUS TREES - SIZE AS SPECIFIED BALL & BURLAP, FIELD POTTED OR FIELD	\$	—	\$	—

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			DOLLARS	CTS	DOLLARS	CTS
611.0432 (125)	3,912.0 EACH	PLANTING - DECIDUOUS SHRUBS - 18 INCH HEIGHT/SPREAD CONTAINER OR BOX GROWN	\$	—	\$	—
611.0441 (126)	42.0 EACH	PLANTING DECIDUOUS SHRUBS - 2 FOOT HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	\$	—	\$	—
611.0451 (127)	1,209.0 EACH	PLANTING DECIDUOUS SHRUBS - 3 FOOT HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	\$	—	\$	—
611.0471 (128)	94.0 EACH	PLANTING DECIDUOUS SHRUBS - 5 FOOT HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	\$	—	\$	—

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			DOLLARS	CTS	DOLLARS	CTS
611.0531 (129)	216.0 EACH	PLANTING EVERGREEN SHRUBS - 18 INCH HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	\$	—	\$	—
611.0661 (130)	265.0 EACH	PLANTING - VINES, GROUNDCOVERS - NUMBER 2 CONTAINER - CONTAINER GROWN	\$	—	\$	—
611.0731 (131)	2,406.0 EACH	PLANTING - HERBACEOUS PLANTS - NUMBER SP5 CONTAINER - CONTAINER GROWN	\$	—	\$	—
611.19010024 (132)	50.0 EACH	POST PLANTING CARE WITH REPLACEMENT - MAJOR DECIDUOUS TREES	\$	—	\$	—





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			DOLLARS	CTS	DOLLARS	CTS
611.19020024 (133)	62.0 EACH	POST PLANTING CARE WITH REPLACEMENT - MINOR DECIDUOUS TREES	\$	—	\$	—
611.19040024 (134)	5,473.0 EACH	POST PLANTING CARE WITH REPLACEMENT - DECIDUOUS SHRUBS	\$	—	\$	—
611.19050024 (135)	216.0 EACH	POST PLANTING CARE WITH REPLACEMENT - EVERGREEN SHRUBS	\$	—	\$	—
611.19070024 (136)	2,406.0 EACH	POST PLANTING CARE WITH REPLACEMENT - HERBACEOUS PLANTS	\$	—	\$	—

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			DOLLARS	CTS	DOLLARS	CTS
614.0411 (137)	25.0 EACH	CARE OF TREES UP TO 12 INCHES DIAMETER AT BREAST HEIGHT - PRUNING	\$	—	\$	—
614.0421 (138)	21.0 EACH	CARE OF TREES OVER 12 TO 24 INCHES DIAMETER AT BREAST HEIGHT - PRUNING	\$	—	\$	—
614.0431 (139)	4.0 EACH	CARE OF TREES OVER 24 TO 36 INCHES DIAMETER AT BREAST HEIGHT - PRUNING	\$	—	\$	—
614.060104 (140)	129.0 EACH	TREE REMOVAL OVER 4 INCHES TO 6 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	\$	—	\$	—

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			DOLLARS	CTS	DOLLARS	CTS
614.060204 (141)	210.0 EACH	TREE REMOVAL OVER 6 INCHES TO 12 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	\$	—	\$	—
614.060304 (142)	39.0 EACH	TREE REMOVAL OVER 12 INCHES TO 18 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	\$	—	\$	—
614.060404 (143)	15.0 EACH	TREE REMOVAL OVER 18 INCHES TO 24 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	\$	—	\$	—
614.060504 (144)	8.0 EACH	TREE REMOVAL OVER 24 INCHES TO 36 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	\$	—	\$	—

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			DOLLARS	CTS	DOLLARS	CTS
614.09 (145)	1,172.0 L.F.	TREE ROOT PRUNING	\$		\$	
614.09010039 (146)	440.0 EACH	TREE ROOT PINNING - NYCDPR (TREE ROOT DIAMETER 1" AND GREATER)	\$		\$	
615.01000139 (147)	144.0 EACH	SKATEBOARD DETERRENT	\$		\$	
615.01010110 (148)	10.0 EACH	LITTER (TRASH) RECEPTACLE TYPE 1	\$		\$	



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COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
615.01080339 (149)	1.0 EACH	DRINKING FOUNTAIN TYPE "E" HI-LO WITH DOG BOWL - NYCDPR	\$		\$	
615.01080439 (150)	2.0 EACH	DRINKING FOUNTAIN TYPE "E" HI-LO WITH CHILD BOWL - NYCDPR	\$		\$	
615.08020239 (151)	185.0 L.F.	1964 WORLD'S FAIR BENCH - RPL SLATS - BACK & ARMS (NYCDPR)	\$		\$	
615.27020010 (152)	12.0 EACH	BICYCLE RACK (DESIGN CAPACITY 2 BICYCLES)	\$		\$	

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			DOLLARS	CTS	DOLLARS	CTS
615.33010011 (153)	7.0 EACH	TEMPORARY WOODEN TREE GUARD WITHOUT TREE WRAP - NYCDPR	\$	—	\$	—
615.43000011 (154)	7,728.0 S.F.	GROUND SURFACE PROTECTION MATS	\$	—	\$	—
615.92010011 (155)	13.0 C.Y.	PRECAST CONCRETE STEPS (STRAIGHT)	\$	—	\$	—
615.92020011 (156)	2.0 C.Y.	PRECAST CONCRETE STEPS (RADIAL)	\$	—	\$	—



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			DOLLARS	CTS	DOLLARS	CTS
615.99060104 (157)	17.0 EACH	LANDSCAPE BOULDERS TYPE 1	\$		\$	
615.99060204 (158)	37.0 EACH	LANDSCAPE BOULDERS TYPE 2	\$		\$	
615.99060304 (159)	36.0 EACH	LANDSCAPE BOULDERS TYPE 3	\$		\$	
615.99060404 (160)	11.0 EACH	LANDSCAPE BOULDERS TYPE 4	\$		\$	

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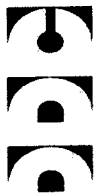


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			DOLLARS	CTS	DOLLARS	CTS
617.01010024 (161)	165,977.0 S.F.	CONTROLLING INVASIVE PLANT SPECIES WITH HERBICIDES	\$		\$	
617.10000024 (162)	5,193.0 C.Y.	DISPOSAL OF MATERIAL CONTAINING INVASIVE PLANT SPECIES	\$		\$	
617.11000024 (163)	1.0 L.S.	EQUIPMENT CLEANING FOR INVASIVE PLANT SPECIES	\$		\$	
619.02970001 (164)	14.0 EACH	CONSTRUCTION SIGNS	\$		\$	





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			DOLLARS	CTS	DOLLARS	CTS
619.04 (165)	30.0 EACH	TYPE III CONSTRUCTION BARRICADE	\$	—	\$	—
619.07010001 (166)	35.0 EACH	PLASTIC CONSTRUCTION DRUMS	\$	—	\$	—
620.02 (167)	25.0 C.Y.	STONE FILLING (FINE)	\$	—	\$	—
620.03 (168)	50.0 C.Y.	STONE FILLING (LIGHT)	\$	—	\$	—

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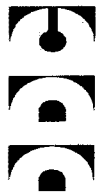


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			DOLLARS	CTS	DOLLARS	CTS
620.05 (169)	61.0 C.Y.	STONE FILLING (HEAVY)	\$	—	\$	—
620.06010002 (170)	8.0 TONS	EXTRA HEAVY RIP-RAP	\$	—	\$	—
620.14020009 (171)	347.0 C.Y.	EXTRA HEAVY STONE, TYPE B	\$	—	\$	—
621.04 (172)	8.0 EACH	CLEANING DRAINAGE STRUCTURES	\$	—	\$	—



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			DOLLARS	CTS	DOLLARS	CTS
623.10 (173)	5.0 C.Y.	SCREENED GRAVEL (IN-PLACE MEASURE)	\$	—	\$	—
623.10010011 (174)	22.0 S.Y.	STONE SCREENINGS SURFACE-NYCDPR	\$	—	\$	—
625.070001 (175)	1.0 L.S.	SUPPLEMENTAL SITE SURVEY	\$	—	\$	—
634.69000010 (176)	1.0 L.S.	RODENT CONTROL SURVEY, BAITING AND MAINTENANCE	\$	—	\$	—



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			DOLLARS	CTS	DOLLARS	CTS
634.90030011 (177)	1.0 L.S.	RODENT AND VERMIN CONTROL - INITIAL SURVEY, BAITING AND SANITATION	\$		\$	
634.90040011 (178)	27.0 MONTH	RODENT AND VERMIN CONTROL - MAINTENANCE PROGRAM	\$		\$	
634.99020017 (179)	1.0 L.S.	VIBRATION MONITORING (NONBLASTING)	\$		\$	
637.03 (180)	1.0 EACH	CONCRETE CYLINDER CURING BOX	\$		\$	

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			DOLLARS	CTS	DOLLARS	CTS
637.14 (181)	33.0 MONTH	ENGINEER'S FIELD OFFICE - TYPE 4	\$		\$	
637.34 (182)	1.0 DC	OFFICE TECHNOLOGY AND SUPPLIES	\$		\$	
645.35010010 (183)	9.0 S.F.	INTERPRETIVE SIGN PANEL	\$		\$	
645.5101 (184)	21.0 S.F.	GROUND MOUNTED SIGN PANELS WITHOUT Z-BARS	\$		\$	



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			DOLLARS	CTS	DOLLARS	CTS
645.5102 (185)	16.0 S.F.	GROUND MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF WITH Z-BARS	\$	—	\$	—
645.5201 (186)	5.0 S.F.	GROUND MOUNTED SIGN PANELS WITHOUT Z-BARS HIGH-VISIBILITY SHEETING	\$	—	\$	—
645.5202 (187)	5.0 S.F.	GROUND-MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF, WITH Z-BARS, HIGH-VISIBILITY SHEETING	\$	—	\$	—
645.81 (188)	9.0 EACH	TYPE A SIGN POST	\$	—	\$	—



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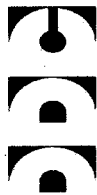
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			DOLLARS	CTS	DOLLARS	CTS
645.81001039 (189)	4.0 EACH	PARK SIGN - IDENTIFICATION; ID-P - NYCDPR	\$	—	\$	—
645.81002039 (190)	3.0 EACH	PARK SIGN - FEATURE; ID-F - NYCDPR	\$	—	\$	—
645.81003039 (191)	2.0 EACH	PARK SIGN - ORIENTATION; O-P - NYCDPR	\$	—	\$	—
645.81004039 (192)	12.0 EACH	PARK SIGN - DIRECTIONAL; DIR - NYCDPR	\$	—	\$	—



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			DOLLARS	CTS	DOLLARS	CTS
645.8107 (193)	9.0 EACH	CONCRETE FOOTING FOR TYPE A, HIGH-CAPACITY TYPE A OR BREAKAWAY WOODEN SIGN POSTS WITH	\$		\$	
645.85 (194)	8.0 EACH	POLE MOUNTED SIGN SUPPORT SYSTEM (BAND MOUNTED)	\$		\$	
647.61 (195)	5.0 EACH	REMOVE AND DISPOSE SIGNS, GROUND MOUNTED TYPE A SIGN SUPPORTS AND FOUNDATION - SIZE	\$		\$	
648.01 (196)	264.0 FOOT	DRILL HOLE, 2 1/2 INCH DIAMETER 0 TO 50 FEET DEPTH RANGE	\$		\$	





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			DOLLARS	CTS	DOLLARS	CTS
648.15 (197)	44.0 FOOT	ROCK CORE DRILLING NX	\$	—	\$	—
648.17 (198)	1.0 EACH	FURNISHING EQUIPMENT FOR MAKING BORINGS	\$	—	\$	—
648.21 (199)	308.0 FOOT	GROUTING 2 1/2 INCH BORE HOLE	\$	—	\$	—
651.01000111 (200)	2.0 EACH	HANDS FREE CALL BOX - BLUE LIGHT TOWER	\$	—	\$	—

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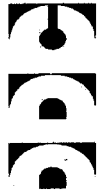
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			DOLLARS	CTS	DOLLARS	CTS
655.00110011 (201)	3.0 EACH	CAST COVER FOR MANHOLE (NYCDPR)	\$	—	\$	—
655.08010010 (202)	5.0 EACH	CAST FRAME F1, WITHOUT CURB BOX AND WITH PARALLEL BAR GRATE 6 PCB	\$	—	\$	—
660.97020111 (203)	17.0 EACH	STORM SEWER CLEANOUT ASSEMBLY	\$	—	\$	—
663.0604 (204)	316.0 L.F.	COPPER WATER SERVICE PIPE 1"	\$	—	\$	—

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			DOLLARS	CTS	DOLLARS	CTS
663.0606 (205)	2,382.0 L.F.	COPPER WATER SERVICE PIPE 1 1/2"	\$		\$	
663.12010039 (206)	7.0 EACH	PLUG VALVE - 1" NPS - NYCDPR	\$		\$	
663.13010039 (207)	4.0 EACH	GROUND HYDRANT - 1" DIA. NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION	\$		\$	
670.75020011 (208)	891.0 L.F.	GROUND WIRE NUMBER 2 AWG	\$		\$	



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			DOLLARS	CTS	DOLLARS	CTS
675.60000001 (209)	260.0 CD	SPECIAL PROCEDURES FOR RAILROAD FACILITIES - TRACK MONITORING	\$		\$	
685.01 (210)	12,198.0 FOOT	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 15 MILS	\$		\$	
685.14 (211)	111.0 EACH	WHITE EPOXY REFLECTORIZED PAVEMENT SYMBOLS - 20 MILS	\$		\$	
697.03 (212)	1.0 DC	FIELD CHANGE PAYMENT (Fixed Price)	\$		\$	



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			DOLLARS	CTS	DOLLARS	CTS
SL-20.01.02 (213)	53.0 EACH	FURNISH AND INSTALL FOUNDATION FOR TYPE "WF" LAMPEPOST, AS PER DRAWING E-5124	\$	—	\$	—
SL-20.02.02 (214)	1.0 EACH	FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION, AS PER DRAWING E-3788	\$	—	\$	—
SL-21.03.23 (215)	1.0 EACH	FURNISH AND INSTALL FABRICATED STEEL TRANSFORMER BASE AND FABRICATED STEEL 25 FOOT SHAFT (TWIN ARMS AT 90 DEGREES OR 180 DEGREES)	\$	—	\$	—
SL-21.04.55 (216)	53.0 EACH	FURNISH AND INSTALL TYPE "FLUSHING MEADOWS PARK" LAMPEPOST AS PER STD. DWG. H-5305.	\$	—	\$	—



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			DOLLARS	CTS	DOLLARS	CTS
SL-22.15.05 (217)	53.0 EACH	FURNISH AND INSTALL 70 WATT MAX LED "FLUSHING MEADOW PARK" TYPE LUMINAIRE AS PER SPECIFICATION 474	\$	—	\$	—
SL-23.01.17 (218)	3.0 EACH	INSTALL UNDER DECK LUMINAIRE SPECIFICATION # 464, LAMP FURNISH BY CONTRACTOR	\$	—	\$	—
SL-23.01.18 (219)	3.0 EACH	FURNISH LED UNDER DECK LUMINAIRE AS PER SPECIFICATION #464	\$	—	\$	—
SL-24.02.09 (220)	1.0 EACH	FURNISH AND INSTALL TROUGH FOR THREE FLOODLIGHTS OR THREE PHOTOELECTRIC CONTROLS, AS PER DRAWING J-5229	\$	—	\$	—



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			DOLLARS	CTS	DOLLARS	CTS
SL-26.01.04 (221)	3.0 EACH	FURNISH AND INSTALL LONG LIFE PHOTO ELECTRIC CONTROL WITH SURGE PROTECTION FOR LED LIGHT	\$		\$	
SL-26.02.02 (222)	3.0 EACH	FURNISH AND INSTALL RECEPTACLE FOR PLUG-IN PHOTOELECTRIC CONTROL	\$		\$	
SL-27.01.01 (223)	53.0 EACH	FURNISH AND INSTALL ALUMINUM TAG ON A LAMPPOST, AS PER DRAWING D-2861	\$		\$	
SL-28.01.02 (224)	13.0 EACH	FURNISH AND INSTALL COPPER WELD GROUND ROD AND CLAMP IN DIRT AREA, BURIED BOX, SIDEWALK OR ROADWAY BOX, AS PER DRAWING H-5019.	\$		\$	

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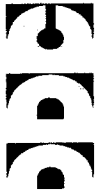
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			DOLLARS	CTS	DOLLARS	CTS
SL-33.01.01 (225)	370.0 L.F.	FURNISH AND INSTALL NO. 12 AWG XLP COPPER WIRE OR EQUAL IN CONDUIT	\$	—	\$	—
SL-33.01.02 (226)	4,455.0 L.F.	FURNISH AND INSTALL NO. 6 AWG XLP COPPER CABLE OR EQUAL IN CONDUIT	\$	—	\$	—
SL-33.01.03 (227)	18,277.0 L.F.	FURNISH AND INSTALL NO. 2 AWG XLP COPPER CABLE OR EQUAL IN CONDUIT	\$	—	\$	—
SL-33.03.01 (228)	7,026.0 L.F.	FURNISH AND INSTALL #6 BARE COPPER CONDUCTOR IN CONDUIT OR OVERHEAD.	\$	—	\$	—





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			DOLLARS	CTS	DOLLARS	CTS
SL-35.03.03 (229)	7.0 L.F.	FURNISH AND INSTALL 1-1/2" HOT DIPPED GALVANIZED STEEL CONDUIT IN UNPAVED AREA	\$	—	\$	—
SL-35.03.04 (230)	6,428.0 L.F.	FURNISH AND INSTALL 2" HOT DIPPED GALVANIZED STEEL CONDUIT IN UNPAVED AREA	\$	—	\$	—
SL-35.03.05 (231)	209.0 L.F.	FURNISH AND INSTALL 3" HOT DIPPED GALVANIZED STEEL CONDUIT IN UNPAVED AREA.	\$	—	\$	—
SL-35.09.01 (232)	185.0 L.F.	FURNISH AND INSTALL 3/4" HOT DIPPED GALVANIZED STEEL CONDUIT ON STRUCTURE.	\$	—	\$	—

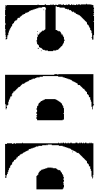


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			DOLLARS	CTS	DOLLARS	CTS
SL-35.09.04 (233)	812.0 L.F.	FURNISH AND INSTALL 2" HOT DIPPED GALVANIZED STEEL CONDUIT ON STRUCTURE	\$	—	\$	—
SL-37.01.02 (234)	1.0 EACH	FURNISH AND INSTALL A POLE MOUNTED STEEL BOX YP TO 1728 CUBIC INCHES MAXIMUM.	\$	—	\$	—
SL-37.05.09 (235)	23.0 EACH	FURNISH AND INSTALL TYPE 2418 ROADWAY CONCRETE BOX WITH CAST IRON FRAME AND COVER WITH TAMPER PROOF BOLTS AS PER DWG J-3179B.	\$	—	\$	—
SL-37.05.11 (236)	6.0 EACH	FURNISH AND INSTALL TYPE 3624 ROADWAY CONCRETE BOX WITH CAST IRON FRAME AND COVER WITH TAMPER PROOF BOLTS AS PER DWG J-3179B.	\$	—	\$	—



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BID PAGES

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502017HW0048C  
Project ID P-1STARLP

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
SL-37.08.04 (237)	1.0 EACH	FURNISH AND INSTALL 30"X18"X12" CAST IRON JUNCTION BOX FLUSH MOUNTED WITH FRAME AND COVER SIZE #4 AS PER DWG. D-2280	\$		\$	
SL-38.03.02 (238)	1.0 EACH	FURNISH AND INSTALL FLUSH MOUNTED OR PEDESTAL MOUNTED SIX (6) RELAY CONTROL CABINET AS PER DWGS H-3441, H-5078, H-5222A.	\$		\$	
SL-38.04.02 (239)	1.0 EACH	FURNISH AND INSTALL CONCRETE PEDESTAL FOR SIX (6) RELAY CONTROL CABINET AS PER DWG J-5078.	\$		\$	



05/25/2018  
3:12PM  
BID PAGES

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
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COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
			SUB-TOTAL:		\$ _____	
699.040001 (240)	1.0 LUMP SUM	MOBILIZATION  PRICE BID SHALL NOT EXCEED 4% OF THE ABOVE SUB-TOTAL PRICE.			\$ _____	
			TOTAL BID PRICE:		\$ _____	

PLEASE BE SURE A LEGIBLE BID IS ENTERED FOR EACH ITEM.

THE BIDDER SHALL INSERT THE TOTAL BID PRICE IN  
THE BID FORM ON PAGE C-4 OF THIS BID BOOKLET.



CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE

# ADDENDA CONTROL SHEET

BID OPENING DATE: MAY 31, 2018

PROJECT NO.: P-1STARLP

DESCRIPTION: BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II,  
STAGE 2 BRIDGE THE CRITICAL SOUTH BRONX GAP

Addendum		Addendum Contains:				
No.	Date	Revised Bid Date/Time	Revised Bid Schedule	Questions & Responses	Additional Amendments	Drawings (number)
1	5/23/2018	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (2)
2	5/25/2018	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
3	5/29/2018	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)

The Table above is a guide. Refer to the referenced Addendum for specific information.

ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: P-1STARLP

BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II, STAGE 2 BRIDGE THE CRITICAL SOUTH BRONX GAP  
BETWEEN WESTCHESTER AVENUE AND EAST 174TH STREET

INCLUDING CONSTRUCTION OF EAST 172ND STREET PEDESTRIAN BRIDGE OVER AMTRAK (BIN#: 2-24124-0), SOUTH GREENWAY PEDESTRIAN BRIDGE OVER BRONX RIVER (BIN#: 2-26990-0), DRAINAGE, RETAINING STRUCTURES, GREENWAY, STREET LIGHTING, LANDSCAPING AND TRAFFIC WORK

Together With All Work Incidental Thereto

BOROUGH OF THE BRONX  
CITY OF NEW YORK

ADDENDUM NO. 3

DATED: MAY 29, 2018

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Refer to the Bid and Contract Documents, Volume 1 of 3;  
Delete Bid Schedule pages B-3 [REVISION # 2] through B-64 [REVISION # 2] in their entirety;  
Insert attached revised Bid Schedule pages B-3 [REVISION # 3] through B-34 [REVISION # 3].  
**NOTE: Restoring information missing on the previous Addendum No. 2**  
**(REVISED UNIT PRICE FOR ITEM NOs. 637.34 and ITEM 697.03)**
2. For additional information, see the attached "Questions Submitted by Bidders and DDC's Responses".

END OF ADDENDUM NO. 3

By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of ONE (1) page and attachments consisting of thirty-three (33) pages.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID

MW Contracting Corp  
Name of Bidder

By: [Signature]

[Signature]  
for HOW SHEEN PAU, P.E.  
Assistant Commissioner

Questions Submitted by Bidders and DDC's Responses

QUESTION #1:

Note 5.3 on structural general notes drawing sheet 250 of 339 call for AWS D1.1 and NY steel construction manual with is bound by D1.5.

Can we get clarification if we're bound to D1.1 or D1.5?

**5.3. ALL WELDING SHALL CONFORM TO THE AWS D1.1 WELDING CODE AS WELL AS THE NEW YORK STATE STEEL CONSTRUCTION MANUAL DATED OCTOBER 2013, WITH CURRENT ADDITIONS AND MODIFICATIONS. ALL WELDERS MUST BE QUALIFIED IN ACCORDANCE WITH THE NYSSCM.**

DDC's RESPONSE:

*All welding shall conform to the New York State Steel Construction Manual, current edition*

QUESTION #2:

On drawing sheet 269 of 339, the following note is referring to section 1105 of the NY steel construction manual but this section does not exist. Can this be clarified?

**\*ALL CONNECTIONS SHALL BE ASSEMBLED IN ACCORDANCE WITH SECTION 1105 OF THE STEEL CONSTRUCTION MANUAL.**

DDC's RESPONSE:

*The note response refers to the NYS Steel Construction Manual Section 10.*

QUESTION #3:

On drawing 268 of 339, Fracture critical members are including the angles and structural tees for main members. We can get them charpy tested from the service centers, but the originating mills will not guarantee that they did not perform weld repairs on the materials, therefore they can't reach FCM requirements. Can this be clarified?

FRACTURE CRITICAL MEMBERS
TIE BEAM (T1)
ALL FLOOR BEAMS
ALL CABLES AND BRIDGE HANGER ASSEMBLIES
ALL GUSSET AND SPLICE PLATES, ANGLES, AND STRUCTURAL TEES FOR MAIN MEMBER CONNECTIONS

DDC's RESPONSE:

*NYCDOT Bridges requires that all the members as shown in the table on Drawing 268 are to be considered Fracture Critical Members and material to be sourced accordingly.*



## BID SCHEDULE

**NOTE:**

- (1) The Agency may reject a bid if it contains unbalanced bid prices. An unbalanced bid is considered to be one containing lump sum or unit items which do not reflect reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated for the performance of the items in question.
- (2) The following bid prices on Unit Price Contracts are to be paid for the actual quantities of the item numbers in the completed work or structure, and they cover the cost of all work, labor, material, tools, plant and appliances of every description necessary to complete the entire work, as specified, and the removal of all debris, temporary work and appliances.
- (3) PLEASE BE SURE A LEGIBLE BID IS ENTERED, IN INK, FOR EACH ITEM.  
Alterations must be initialed in ink by the bidder.
- (4) The Extended Amount entered in Column 6 shall be the product of the Estimated Quantity in Column 3 times the Unit Price Bid in Column 5.
- (5) Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished them. The pages of this Bid Schedule are numbered consecutively, as follows:  
B - 3 [REVISION # 3] Through B - 34 [REVISION # 3]

PLEASE BE SURE A LEGIBLE BID IS ENTERED FOR EACH ITEM.  
THE BIDDER SHALL INSERT THE TOTAL BID PRICE IN  
THE BID FORM ON PAGE C-4 OF THIS BID BOOKLET.



Department of  
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

PROJECT ID: P-1STARLP  
CONTRACT PIN: 8502017HW0048C

5/29/2018 12:35 PM

## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
001	201.07 CLEARING AND GRUBBING	1.00	ACRE				
002	203.02 UNCLASSIFIED EXCAVATION AND DISPOSAL	3,105.00	C.Y.				
003	203.02990006 PAVEMENT EXCAVATION	681.00	S.F.				
004	203.03 EMBANKMENT IN PLACE	23,394.00	C.Y.				
005	203.07 SELECT GRANULAR FILL	547.00	C.Y.				
006	203.21 SELECT STRUCTURAL FILL	2,937.00	C.Y.				
007	203.25 SAND BACKFILL	661.00	C.Y.				
008	203.30020063 EXCAVATION AND DISPOSAL OF ROCK, EMERGENCY CONTRACT STANDBY WORK, QUANTITY RANGE 2 (131 to 650)	500.00	C.Y.				

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# BID SCHEDULE FORM

COL. 1 SEQ. NO	COL. 2 ITEM NUMBER and DESCRIPTION	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 UNIT PRICE (IN FIGURES)		COL. 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
009	205.0201 SEGREGATION AND STORAGE OF CONTAMINATED SOIL	1.00	L.S.				
010	205.050101 DISPOSAL OF CONTAMINATED HAZARDOUS WASTE SOIL	105.00	TONS				
011	205.050201 DISPOSAL OF CONTAMINATED NON-HAZARDOUS SOIL	36.00	TONS				
012	206.01 STRUCTURE EXCAVATION	10,091.00	C.Y.				
013	206.0201 TRENCH AND CULVERT EXCAVATION	3,176.00	C.Y.				
014	206.04010011 PNEUMATIC EXCAVATION AND BACKFILL OF TRENCHES	1,172.00	L.F.				
015	206.05 TEST PIT EXCAVATION	2.00	EACH				
016	207.20 GEOTEXTILE BEDDING	1,439.00	S.Y.				



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				DOLLARS	CTS	DOLLARS	CTS
017	207.21 GEOTEXTILE SEPARATION	467.00	S.Y.				
018	207.22 GEOTEXTILE DRAINAGE	26,785.00	S.Y.				
019	207.26 PREFABRICATED COMPOSITE STRUCTURAL DRAIN	1,178.00	S.Y.				
020	207.96000017 GEOSYNTHETIC REINFORCEMENT	12,177.00	S.F.				
021	208.01001139 RAIN GARDEN SOIL MIX (NYCDPR)	490.00	C.Y.				
022	209.11010011 TEMPORARY CATCH BASIN INSERTS FOR DRAINAGE STRUCTURES TRASH, SEDIMENT AND DEBRIS REMOVAL	5.00	EACH				
023	209.110101 CHECK DAM (DITCH BOTTOM WIDTH 0.0 TO 3'), STONE - TEMPORARY	51.00	EACH				
024	209.1202 STRAWBALE DIKE- TEMPORARY	671.00	FOOT				

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# BID SCHEDULE FORM

COL 1	COL 2	COL 3	COL 4	COL 5	COL 6
SEQ. NO	ITEM NUMBER and DESCRIPTION	ENGINEER'S ESTIMATE OF QUANTITY	UNIT	UNIT PRICE (IN FIGURES) DOLLARS CTS	EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
025	209.13 SILT FENCE-TEMPORARY	8,557.00	L.F.		
026	209.140101 SEDIMENT TRAP, EARTH BERM - TEMPORARY	4.00	EACH		
027	209.1501 TURBIDITY CURTAIN - TEMPORARY	2,750.00	L.F.		
028	209.190201 ROLLED EROSION CONTROL PRODUCT, CLASS II TYPE B, INTERMEDIATE	2,090.00	S.Y.		
029	209.20120010 BIO-FIBER ROLLS 12 INCH	5,660.00	L.F.		
030	209.22 CONSTRUCTION ENTRANCE	183.00	S.Y.		
031	211.10 GROUTED TIEBACKS (TEMPORARY)	2.00	EACH		
032	304.11 SUBBASE COURSE, TYPE 1	12.00	C.Y.		

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[REVISION # 3]



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COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
033	304.12 SUBBASE COURSE, TYPE 2	1,954.00	C.Y.				
034	402.127103 12.5 F1 TOP COURSE HMA, 70 SERIES COMPACTION	592.00	TONS				
035	402.257903 25 F9 BINDER COURSE HMA, 70 SERIES COMPACTION	811.00	TONS				
036	402.377903 37.5 F9 BASE COURSE HMA, 70 SERIES COMPACTION	1,091.00	TONS				
037	407.0102 DILUTED TACK COAT	631.00	GAL.				
038	551.010042 STEEL H-PILES (HP 10X42)	1,562.00	L.F.				
039	551.12 SPICES FOR STEEL H-PILES	71.00	EACH				
040	552.17 SHIELDS AND SHORING	150.00	S.F.				

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# BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
041	552.2001 HOLES IN EARTH FOR SOLDIER PILE AND LAGGING WALL	853.00	L.F.				
042	552.2101 ROCK SOCKETS FOR SOLDIER PILE AND LAGGING WALL	303.00	L.F.				
043	552.2201 SOLDIER PILES FOR SOLDIER PILE AND LAGGING WALL	693.00	L.F.				
044	552.2202 SOLDIER PILES FOR SOLDIER PILE AND LAGGING WALL	451.00	L.F.				
045	552.230201 UNTREATED WOOD LAGGING FOR SOLDIER PILE AND LAGGING WALL	3,163.00	S.F.				
046	553.020001 COFFERDAMS (TYPE 2)	1.00	EACH				
047	553.020002 COFFERDAMS (TYPE 2)	1.00	EACH				
048	554.40 FILL TYPE RETAINING WALL (0 - 6 FT)	440.00	S.F.				



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COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
049	554.41 FILL TYPE RETAINING WALL (GREATER THAN 6FT. - 12FT.)	4,125.00	S.F.				
050	554.42 FILL TYPE RETAINING WALL (GREATER THAN 12FT. - 18FT.)	8,910.00	S.F.				
051	554.43 FILL TYPE RETAINING WALL (GREATER THAN 18FT. - 24FT.)	6,710.00	S.F.				
052	554.44 FILL TYPE RETAINING WALL (GREATER THAN 24FT. - 30FT.)	825.00	S.F.				
053	554.53 FILL TYPE RETAINING WALL AESTHETIC TREATMENT - OTHER; AS SHOWN ON THE CONTRACT DOCUMENTS	25,850.00	S.F.				
054	555.0104 FOOTING CONCRETE CLASS A (NO CONCRETE CLASS SUBSTITUTIONS PERMITTED, EXCEPT CLASS H WHERE FOOTING IS 3 FT THICK OR LESS)	171.00	C.Y.				
055	555.08 FOOTING CONCRETE, CLASS HP	645.00	C.Y.				
056	555.09 CONCRETE FOR STRUCTURES, CLASS HP	1,354.00	C.Y.				



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COL 1 SEQ. NO.	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS : CTS		COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS : CTS	
057	555.72940001 ARCHITECTURAL TREATMENT - VERTICAL CONCRETE SURFACES	1,320.00	S.F.				
058	556.0202 EPOXY- COATED BAR REINFORCEMENT FOR STRUCTURES	111,973.00	LBS.				
059	556.0203 GALVANIZED BAR REINFORCEMENT FOR STRUCTURES	40,966.00	LBS.				
060	556.03 STUD SHEAR CONNECTORS FOR BRIDGES	1,927.00	EACH				
061	557.0109 SUPERSTRUCTURE SLAB WITH INTEGRAL WEARING SURFACE - BOTTOM FORMWORK REQUIRED - TYPE 9 FRICTION	621.00	S.Y.				
062	557.2009 STRUCTURAL APPROACH SLAB WITH INTEGRAL WEARING SURFACE - TYPE 9 FRICTION	85.00	S.Y.				
063	559.16960118 PROTECTIVE SEALING OF STRUCTURAL CONCRETE	9,528.00	S.F.				
064	559.18960118 PROTECTIVE SEALING OF STRUCTURAL CONCRETE ON NEW BRIDGE DECKS AND BRIDGE DECK OVERLAYS	6,691.00	S.F.				



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				DOLLARS	CTS	DOLLARS	CTS
065	559.19010011 PAINTING EXISTING CONCRETE SURFACES	2,530.00	S.F.				
066	560.01 DIMENSION STONE MASONRY	341.00	S.F.				
067	560.01010011 GRANITE COPING (STRAIGHT)	7.00	C.Y.				
068	560.01020011 GRANITE COPING (RADIAL)	22.00	C.Y.				
069	560.01030011 GRANITE ENTRY PIER	4.00	C.Y.				
070	560.01040011 GRANITE WALL	20.00	C.Y.				
071	560.06 RUBBLE STONE MASONRY LAID DRY	1,527.00	C.F.				
072	560.07 PRECAST CONCRETE COPING	708.00	L.F.				

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## BID SCHEDULE FORM

COL 1	COL 2	COL 3	COL 4	COL 5	COL 6
SEQ. NO	ITEM NUMBER and DESCRIPTION	ENGINEER'S ESTIMATE OF QUANTITY	UNIT	UNIT PRICE (IN FIGURES) DOLLARS : CTS	EXTENDED AMOUNT (IN FIGURES) DOLLARS : CTS
073	564.510001 STRUCTURAL STEEL	508,510.00	LBS.		
074	565.2022 TYPE E.B. FIXED BEARING (56K TO 111K)	2.00	EACH		
075	565.2024 TYPE E.B. FIXED BEARING (169K TO 225K)	2.00	EACH		
076	565.2032 TYPE E.B. EXPANSION BEARING (56 TO 111 KIPS)	2.00	EACH		
077	565.2034 TYPE E.B. EXPANSION BEARING (169K TO 225K)	2.00	EACH		
078	567.60 ARMORLESS BRIDGE JOINT SYSTEM	42.00	FOOT		
079	568.11010011 STEEL ROD SAFETY RAILING	1,933.00	L.F.		
080	568.12010011 HANDRAIL	1,644.00	L.F.		



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SEQ. NO	ITEM NUMBER and DESCRIPTION	ENGINEER'S ESTIMATE OF QUANTITY	UNIT	UNIT PRICE (IN FIGURES) DOLLARS : CTS	EXTENDED AMOUNT (IN FIGURES) DOLLARS : CTS
081	572.010001 STRUCTURAL STEEL PAINTING: SHOP APPLIED	17,656.00	S.F.		
082	572.010002 STRUCTURAL STEEL PAINT SYSTEM: SHOP APPLIED	7,569.00	S.F.		
083	580.01 REMOVAL OF STRUCTURAL CONCRETE	52.00	C.Y.		
084	586.0202 DRILLING AND GROUTING BOLTS OR REINFORCING BARS (WITH NON-DESTRUCTIVE INVESTIGATION)	384.00	EACH		
085	603.0202 NON REINFORCED CONCRETE PIPE (CLASS 1) 6 INCH DIAMETER	140.00	L.F.		
086	603.171016 GALVANIZED STEEL END SECTIONS-PIPE (2-23" X 1/2 CORRUGATIONS) 12 INCH DIAMETER, 16 GAUGE	9.00	EACH		
087	603.9812 SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 12 INCH DIAMETER	824.00	L.F.		
088	604.501123 SPECIAL DRAINAGE STRUCTURE	49.00	L.F.		

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				DOLLARS	CTS	DOLLARS	CTS
089	605.0901 UNDERDRAIN FILLER, TYPE 1	28.00	C.Y.				
090	605.1501 PERFORATED CORRUGATED POLYETHYLENE UNDERDRAIN TUBING, 4" DIAMETER	2,071.00	L.F.				
091	605.1502 PERFORATED CORRUGATED POLYETHYLENE UNDERDRAIN TUBING, 6 INCH DIAMETER	952.00	L.F.				
092	606.16 CORRUGATED BEAM GUIDE RAILING	25.00	L.F.				
093	607.03040439 CHAIN LINK FENCE SINGLE GATE - NYCDPR	6.00	EACH				
094	607.05040439 CHAIN LINK FENCE - NYCDPR	418.00	L.F.				
095	607.06400016 PEDESTRIAN FENCING FOR BRIDGES	295.00	L.F.				
096	607.30030010 STEEL CHAIN LINK FENCE WITH TOP RAIL, 8 ft HIGH	25.00	FOOT				

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[REVISION # 3]



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COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
097	607.4017 OPTIONAL FENCE GATE (SINGLE LEAF 4 FEET OPENING 8 FEET HIGH)	1.00	EACH				
098	607.41010010 TEMPORARY PLASTIC BARRIER FENCE	3,110.00	L.F.				
099	607.45240011 ORNAMENTAL STEEL MESH FENCE 8 FT HIGH	1,548.00	L.F.				
100	607.46244911 DOUBLE ORNAMENTAL STEEL MESH GATE, 8FT HIGH, 16FT OPENING	2.00	EACH				
101	607.47000011 PRIVACY SLATS	6,574.00	S.F.				
102	607.96000008 REMOVE AND DISPOSE OF EXISTING FENCE	454.00	FOOT				
103	607.98010111 TEMPORARY CHAIN-LINK FENCE	3,199.00	L.F.				
104	608.0101 CONCRETE SIDEWALKS AND DRIVEWAYS	19.00	C.Y.				

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## BID SCHEDULE FORM

COL 1	COL 2	COL 3	COL 4	COL 5	COL 6
SEQ. NO	ITEM NUMBER and DESCRIPTION	ENGINEER'S ESTIMATE OF QUANTITY	UNIT	UNIT PRICE (IN FIGURES) DOLLARS : CTS	EXTENDED AMOUNT (IN FIGURES) DOLLARS : CTS
105	608.05000039 ASPHALT BLOCK PAVEMENT ON ASPHALT CONCRETE BASE	1,839.00	S.Y.		
106	608.11 GROUTED STONE BLOCK PAVED SIDEWALKS AND DRIVEWAYS (OPTIONAL CONCRETE SETTING BED)	168.00	S.Y.		
107	608.73166108 BOLLARD-REMOVABLE, WITHOUT LIGHTING, WIDTH OVER 11 INCHES, HEIGHT OVER 36 INCHES	2.00	EACH		
108	609.02120011 RAISED GRANITE CURB	311.00	L.F.		
109	609.02130011 FLUSH GRANITE CURB	36.00	L.F.		
110	609.04120011 CONCRETE CURB-NYCDPR	534.00	L.F.		
111	609.15100011 STEEL EDGING	700.00	L.F.		
112	609.26020111 CONCRETE CURB FACED (NYC) TYPE D	50.00	L.F.		



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## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
113	610.1102 MULCH FOR PLANTING TYPE C - USDA-APHIS PROTOCOL WOOD CHIPS	96.00	C.Y.				
114	610.11041309 DECORATIVE STONE MULCH 4"- 6" STONE SIZE	136.00	C.Y.				
115	610.1402 TOPSOIL - ROADSIDE	834.00	C.Y.				
116	610.1403 TOP SOIL - LAWNS	169.00	C.Y.				
117	610.1405 TOP SOIL - ACIDIC	2,990.00	C.Y.				
118	610.17 WILDFLOWER SEEDING	26,860.00	S.Y.				
119	610.18 SODDING	1,509.00	S.Y.				
120	610.21 MOWING	4,985.00	S.Y.				



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## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
121	610.22 MOWING LIMITS MARKERS	407.00	EACH				
122	611.0161 PLANTING - MAJOR DECIDUOUS TREES - 2 1/2 INCH CALIPER BALL & BURLAP, FIELD POTTED OR FIELD	2.00	EACH				
123	611.0191 PLANTING - MAJOR DECIDUOUS TREES - 4 INCH CALIPER BALL & BURLAP, FIELD POTTED OR FIELD	48.00	EACH				
124	611.0211 PLANTING - MINOR DECIDUOUS TREES - SIZE AS SPECIFIED BALL & BURLAP, FIELD POTTED OR FIELD	62.00	EACH				
125	611.0432 PLANTING - DECIDUOUS SHRUBS - 18 INCH HEIGHT/SPREAD CONTAINER OR BOX GROWN	3,912.00	EACH				
126	611.0441 PLANTING DECIDUOUS SHRUBS - 2 FOOT HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	42.00	EACH				
127	611.0451 PLANTING DECIDUOUS SHRUBS - 3 FOOT HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	1,209.00	EACH				
128	611.0471 PLANTING DECIDUOUS SHRUBS - 5 FOOT HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	94.00	EACH				



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COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
129	611.0531 PLANTING EVERGREEN SHRUBS - 18 INCH HEIGHT/SPREAD BALL & BURLAP, FIELD POTTED OR FIELD BOXED	216.00	EACH				
130	611.0661 PLANTING - VINES, GROUNDCOVERS - NUMBER 2 CONTAINER - CONTAINER GROWN	265.00	EACH				
131	611.0731 PLANTING - HERBACEOUS PLANTS - NUMBER SP5 CONTAINER - CONTAINER GROWN	2,406.00	EACH				
132	611.19010024 POST PLANTING CARE WITH REPLACEMENT - MAJOR DECIDUOUS TREES	50.00	EACH				
133	611.19020024 POST PLANTING CARE WITH REPLACEMENT - MINOR DECIDUOUS TREES	62.00	EACH				
134	611.19040024 POST PLANTING CARE WITH REPLACEMENT - DECIDUOUS SHRUBS	5,473.00	EACH				
135	611.19050024 POST PLANTING CARE WITH REPLACEMENT - EVERGREEN SHRUBS	216.00	EACH				
136	611.19070024 POST PLANTING CARE WITH REPLACEMENT - HERBACEOUS PLANTS	2,406.00	EACH				

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## BID SCHEDULE FORM

COL. 1 SEQ. NO.	COL. 2 ITEM NUMBER and DESCRIPTION	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 UNIT PRICE (IN FIGURES)		COL. 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS.	DOLLARS	CTS.
137	614.0411 CARE OF TREES UP TO 12 INCHES DIAMETER AT BREAST HEIGHT - PRUNING	25.00	EACH				
138	614.0421 CARE OF TREES OVER 12 TO 24 INCHES DIAMETER AT BREAST HEIGHT - PRUNING	21.00	EACH				
139	614.0431 CARE OF TREES OVER 24 TO 36 INCHES DIAMETER AT BREAST HEIGHT - PRUNING	4.00	EACH				
140	614.060104 TREE REMOVAL OVER 4 INCHES TO 6 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	129.00	EACH				
141	614.060204 TREE REMOVAL OVER 6 INCHES TO 12 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	210.00	EACH				
142	614.060304 TREE REMOVAL OVER 12 INCHES TO 18 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	39.00	EACH				
143	614.060404 TREE REMOVAL OVER 18 INCHES TO 24 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	15.00	EACH				
144	614.060504 TREE REMOVAL OVER 24 INCHES TO 36 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	8.00	EACH				

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COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
145	614.09 TREE ROOT PRUNING	1,172.00	L.F.				
146	614.09010039 TREE ROOT PINNING - NYCDPR (TREE ROOT DIAMETER 1" AND GREATER)	440.00	EACH				
147	615.01000139 SKATEBOARD DETERRENT	144.00	EACH				
148	615.01010110 LITTER (TRASH) RECEPTACLE TYPE 1	10.00	EACH				
149	615.01080339 DRINKING FOUNTAIN TYPE "E" HI-LO WITH DOG BOWL - NYCDPR	1.00	EACH				
150	615.01080439 DRINKING FOUNTAIN TYPE "E" HI-LO WITH CHILD BOWL - NYCDPR	2.00	EACH				
151	615.08020239 1964 WORLD'S FAIR BENCH - RPL SLATS - BACK & ARMS (NYCDPR)	185.00	L.F.				
152	615.27020010 BICYCLE RACK (DESIGN CAPACITY 2 BICYCLES)	12.00	EACH				

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## BID SCHEDULE FORM

COL. 1 SEQ. NO	COL. 2 ITEM NUMBER and DESCRIPTION	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 UNIT PRICE (IN FIGURES) DOLLARS CTS		COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS	
				DOLLARS	CTS	DOLLARS	CTS
153	615.33010011 TEMPORARY WOODEN TREE GUARD WITHOUT TREE WRAP - NYCDPR	7.00	EACH				
154	615.43000011 GROUND SURFACE PROTECTION MATS	7,728.00	S.F.				
155	615.92010011 PRECAST CONCRETE STEPS (STRAIGHT)	13.00	C.Y.				
156	615.92020011 PRECAST CONCRETE STEPS (RADIAL)	2.00	C.Y.				
157	615.99060104 LANDSCAPE BOULDERS TYPE 1	17.00	EACH				
158	615.99060204 LANDSCAPE BOULDERS TYPE 2	37.00	EACH				
159	615.99060304 LANDSCAPE BOULDERS TYPE 3	36.00	EACH				
160	615.99060404 LANDSCAPE BOULDERS TYPE 4	11.00	EACH				

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## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
161	617.01010024 CONTROLLING INVASIVE PLANT SPECIES WITH HERBICIDES	165,977.00	S.F.				
162	617.10000024 DISPOSAL OF MATERIAL CONTAINING INVASIVE PLANT SPECIES	5,193.00	C.Y.				
163	617.11000024 EQUIPMENT CLEANING FOR INVASIVE PLANT SPECIES	1.00	L.S.				
164	619.02970001 CONSTRUCTION SIGNS	14.00	EACH				
165	619.04 TYPE III CONSTRUCTION BARRICADE	30.00	EACH				
166	619.07010001 PLASTIC CONSTRUCTION DRUMS	35.00	EACH				
167	620.02 STONE FILLING (FINE)	25.00	C.Y.				
168	620.03 STONE FILLING (LIGHT)	50.00	C.Y.				

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# BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
169	620.05 STONE FILLING (HEAVY)	61.00	C.Y.				
170	620.06010002 EXTRA HEAVY RIP-RAP	8.00	TONS				
171	620.14020009 EXTRA HEAVY STONE, TYPE B	347.00	C.Y.				
172	621.04 CLEANING DRAINAGE STRUCTURES	8.00	EACH				
173	623.10 SCREENED GRAVEL (IN-PLACE MEASURE)	5.00	C.Y.				
174	623.10010011 STONE SCREENINGS SURFACE-NYCDPR	22.00	S.Y.				
175	625.070001 SUPPLEMENTAL SITE SURVEY	1.00	L.S.				
176	634.69000010 RODENT CONTROL SURVEY, BAITING AND MAINTENANCE	1.00	L.S.				



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COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS : CTS		COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS : CTS	
177	634.90030011 RODENT AND VERMIN CONTROL - INITIAL SURVEY, BAITING AND SANITATION	1.00	L.S.				
178	634.90040011 RODENT AND VERMIN CONTROL - MAINTENANCE PROGRAM	27.00	MONTH				
179	634.99020017 VIBRATION MONITORING (NONBLASTING)	1.00	L.S.				
180	637.03 CONCRETE CYLINDER CURING BOX	1.00	EACH				
181	637.14 ENGINEER'S FIELD OFFICE - TYPE 4	33.00	MONTH				
182	637.34 OFFICE TECHNOLOGY AND SUPPLIES PRICE BID SHALL BE FOR THE DOLLAR-CENTS OF \$ 10,000.00	1.00	DC	10,000	00	\$10,000	00
183	645.35010010 INTERPRETIVE SIGN PANEL	9.00	S.F.				



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COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEERS ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
184	645.5101 GROUND MOUNTED SIGN PANELS WITHOUT Z-BARS	21.00	S.F.				
185	645.5102 GROUND MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF WITH Z-BARS	16.00	S.F.				
186	645.5201 GROUND MOUNTED SIGN PANELS WITHOUT Z-BARS HIGH- VISIBILITY SHEETING	5.00	S.F.				
187	645.5202 GROUND-MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF. WITH Z-BARS. HIGH-VISIBILITY SHEETING	5.00	S.F.				
188	645.81 TYPE A SIGN POST	9.00	EACH				
189	645.81001039 PARK SIGN - IDENTIFICATION; ID-P - NYCDPR	4.00	EACH				
190	645.81002039 PARK SIGN - FEATURE; ID-F - NYCDPR	3.00	EACH				
191	645.81003039 PARK SIGN - ORIENTATION; O-P - NYCDPR	2.00	EACH				

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				DOLLARS	CTS	DOLLARS	CTS
192	645.81004039 PARK SIGN - DIRECTIONAL; DIR - NYCDPR	12.00	EACH				
193	645.8107 CONCRETE FOOTING FOR TYPE A, HIGH-CAPACITY TYPE A OR BREAKAWAY WOODEN SIGN POSTS WITH	9.00	EACH				
194	645.85 POLE MOUNTED SIGN SUPPORT SYSTEM (BAND MOUNTED)	8.00	EACH				
195	647.61 REMOVE AND DISPOSE SIGNS, GROUND MOUNTED TYPE A SIGN SUPPORTS AND FOUNDATION - SIZE	5.00	EACH				
196	648.01 DRILL HOLE, 2 1/2 INCH DIAMETER 0 TO 50 FEET DEPTH RANGE	264.00	FOOT				
197	648.15 ROCK CORE DRILLING NX	44.00	FOOT				
198	648.17 FURNISHING EQUIPMENT FOR MAKING BORINGS	1.00	EACH				
199	648.21 GROUTING 2 1/2 INCH BORE HOLE	308.00	FOOT				

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# BID SCHEDULE FORM

COL 1	COL 2	COL 3	COL 4	COL 5	COL 6
SEQ. NO	ITEM NUMBER and DESCRIPTION	ENGINEER'S ESTIMATE OF QUANTITY	UNIT	UNIT PRICE (IN FIGURES) DOLLARS : CTS	EXTENDED AMOUNT (IN FIGURES) DOLLARS : CTS
200	651.01000111 HANDS FREE CALL BOX - BLUE LIGHT TOWER	2.00	EACH		
201	655.00110011 CAST COVER FOR MANHOLE (NYCDPR)	3.00	EACH		
202	655.08010010 CAST FRAME F1, WITHOUT CURB BOX AND WITH PARALLEL BAR GRATE 6 PCB	5.00	EACH		
203	660.97020111 STORM SEWER CLEANOUT ASSEMBLY	17.00	EACH		
204	663.0604 COPPER WATER SERVICE PIPE 1"	316.00	L.F.		
205	663.0606 COPPER WATER SERVICE PIPE 1 1/2"	2,382.00	L.F.		
206	663.12010039 PLUG VALVE - 1" NPS - NYCDPR	7.00	EACH		
207	663.13010039 GROUND HYDRANT - 1" DIA. NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION	4.00	EACH		



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				DOLLARS	CTS	DOLLARS	CTS
208	670.75020011 GROUND WIRE NUMBER 2 AWG	891.00	L.F.				
209	675.60000001 SPECIAL PROCEDURES FOR RAILROAD FACILITIES - TRACK MONITORING	260.00	CD				
210	685.01 WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 15 MILS	12,198.00	FOOT				
211	685.14 WHITE EPOXY REFLECTORIZED PAVEMENT SYMBOLS - 20 MILS	111.00	EACH				
212	697.03 FIELD CHANGE PAYMENT (Fixed Price) PRICE BID SHALL BE FOR THE DOLLAR-CENTS OF \$ 1,000,000.00	1.00	DC	1,000,000	00	\$1,000,000	00
213	SL-20.01.02 FURNISH AND INSTALL FOUNDATION FOR TYPE "WF" LAMPPOST, AS PER DRAWING E-5124	53.00	EACH				
214	SL-20.02.02 FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION, AS PER DRAWING E-3788	1.00	EACH				

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COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
215	SL-21.03.23 FURNISH AND INSTALL FABRICATED STEEL TRANSFORMER BASE AND FABRICATED STEEL 25 FOOT SHAFT (TWIN ARMS AT 90 DEGREES OR 180 DEGREES)	1.00	EACH				
216	SL-21.04.55 FURNISH AND INSTALL TYPE "FLUSHING MEADOWS PARK" LAMPPOST AS PER STD. DWG. H-5305.	53.00	EACH				
217	SL-22.15.05 FURNISH AND INSTALL 70 WATT MAX LED "FLUSHING MEADOW PARK" TYPE LUMINAIRE AS PER SPECIFICATION 474	53.00	EACH				
218	SL-23.01.17 INSTALL UNDER DECK LUMINAIRE SPECIFICATION # 464, LAMP FURNISH BY CONTRACTOR	3.00	EACH				
219	SL-23.01.18 FURNISH LED UNDER DECK LUMINAIRE AS PER SPECIFICATION #464	3.00	EACH				
220	SL-24.02.09 FURNISH AND INSTALL TROUGH FOR THREE FLOODLIGHTS OR THREE PHOTOELECTRIC CONTROLS, AS PER DRAWING J-5229	1.00	EACH				
221	SL-26.01.04 FURNISH AND INSTALL LONG LIFE PHOTO ELECTRIC CONTROL WITH SURGE PROTECTION FOR LED LIGHT	3.00	EACH				
222	SL-26.02.02 FURNISH AND INSTALL RECEPTACLE FOR PLUG-IN PHOTOELECTRIC CONTROL	3.00	EACH				



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				DOLLARS	CTS	DOLLARS	CTS
223	SL-27.01.01 FURNISH AND INSTALL ALUMINUM TAG ON A LAMPPOST, AS PER DRAWING D-2861	53.00	EACH				
224	SL-28.01.02 FURNISH AND INSTALL COPPER WELD GROUND ROD AND CLAMP IN DIRT AREA, BURIED BOX, SIDEWALK OR ROADWAY BOX, AS PER DRAWING H-5019.	13.00	EACH				
225	SL-33.01.01 FURNISH AND INSTALL NO. 12 AWG XLP COPPER WIRE OR EQUAL IN CONDUIT	370.00	L.F.				
226	SL-33.01.02 FURNISH AND INSTALL NO. 6 AWG XLP COPPER CABLE OR EQUAL IN CONDUIT	4,455.00	L.F.				
227	SL-33.01.03 FURNISH AND INSTALL NO. 2 AWG XLP COPPER CABLE OR EQUAL IN CONDUIT	18,277.00	L.F.				
228	SL-33.03.01 FURNISH AND INSTALL #6 BARE COPPER CONDUCTOR IN CONDUIT OR OVERHEAD.	7,026.00	L.F.				
229	SL-35.03.03 FURNISH AND INSTALL 1-1/2" HOT DIPPED GALVANIZED STEEL CONDUIT IN UNPAVED AREA	7.00	L.F.				
230	SL-35.03.04 FURNISH AND INSTALL 2" HOT DIPPED GALVANIZED STEEL CONDUIT IN UNPAVED AREA	6,428.00	L.F.				

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COL. 1 SEQ. NO.	COL. 2 ITEM NUMBER and DESCRIPTION	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 UNIT PRICE (IN FIGURES)		COL. 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
231	SL-35.03.05 FURNISH AND INSTALL 3" HOT DIPPED GALVANIZED STEEL CONDUIT IN UNPAVED AREA.	209.00	L.F.				
232	SL-35.09.01 FURNISH AND INSTALL 3/4" HOT DIPPED GALVANIZED STEEL CONDUIT ON STRUCTURE.	185.00	L.F.				
233	SL-35.09.04 FURNISH AND INSTALL 2" HOT DIPPED GALVANIZED STEEL CONDUIT ON STRUCTURE	812.00	L.F.				
234	SL-37.01.02 FURNISH AND INSTALL A POLE MOUNTED STEEL BOX YP TO 1728 CUBIC INCHES MAXIMUM.	1.00	EACH				
235	SL-37.05.09 FURNISH AND INSTALL TYPE 2418 ROADWAY CONCRETE BOX WITH CAST IRON FRAME AND COVER WITH TAMPER PROOF BOLTS AS PER DWG J-3179B.	23.00	EACH				
236	SL-37.05.11 FURNISH AND INSTALL TYPE 3624 ROADWAY CONCRETE BOX WITH CAST IRON FRAME AND COVER WITH TAMPER PROOF BOLTS AS PER DWG J-3179B.	6.00	EACH				
237	SL-37.08.04 FURNISH AND INSTALL 30"x18"x12" CAST IRON JUNCTION BOX FLUSH MOUNTED WITH FRAME AND COVER SIZE #4 AS PER DWG. D- 2280	1.00	EACH				



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				DOLLARS	CTS	
238	SL-38.03.02 FURNISH AND INSTALL FLUSH MOUNTED OR PEDESTAL MOUNTED SIX (6) RELAY CONTROL CABINET AS PER DWGS H-3441, H-5078, H- 5222A.	1.00	EACH			
239	SL-38.04.02 FURNISH AND INSTALL CONCRETE PEDESTAL FOR SIX (6) RELAY CONTROL CABINET AS PER DWG J-5078.	1.00	EACH			

SUB-TOTAL: \$

240	699.040001 MOBILIZATION BID PRICE OF MOBILIZATION SHALL NOT EXCEED 4% OF THE ABOVE SUB-TOTAL PRICE.	1.00	L.S.		
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TOTAL BID PRICE: \$

PLEASE BE SURE A LEGIBLE BID IS ENTERED FOR EACH ITEM.  
THE BIDDER SHALL INSERT THE TOTAL BID PRICE IN  
THE BID FORM ON PAGE C-4 OF THIS BID BOOKLET.







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INFRASTRUCTURE DIVISION  
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VOLUME 1 OF 3

PROJECT ID: P-1STARLP

BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II, STAGE 2 BRIDGE THE  
CRITICAL SOUTH BRONX GAP

BETWEEN WESTCHESTER AVENUE AND EAST 174TH STREET

INCLUDING CONSTRUCTION OF EAST 172ND STREET PEDESTRIAN BRIDGE OVER  
AMTRAK (BIN#: 2-24124-0), SOUTH GREENWAY PEDESTRIAN BRIDGE OVER THE  
BRONX RIVER (BIN#: 2-26990-0), DRAINAGE, RETAINING STRUCTURES,  
GREENWAY, STREET LIGHTING, LANDSCAPING AND TRAFFIC WORK

Together With All Work Incidental Thereto

BOROUGH OF THE BRONX  
CITY OF NEW YORK

---

*Contractor.*

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Dated \_\_\_\_\_, 20\_\_\_\_

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**Department of  
Design and  
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**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

30-30 THOMSON AVENUE  
LONG ISLAND CITY, NEW YORK 11101-3045  
TELEPHONE (718) 391-1000  
WEBSITE [www1.nyc.gov/site/ddc/index.page](http://www1.nyc.gov/site/ddc/index.page)

**VOLUME 2 OF 3**

**INFORMATION FOR BIDDERS  
CONTRACT  
PERFORMANCE AND PAYMENT BONDS  
PREVAILING WAGE SCHEDULE**

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND  
REQUIRED FOR:

**PROJECT ID: P-1STARLP**

**BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II, STAGE 2  
BRIDGE THE CRITICAL SOUTH BRONX GAP**

**BETWEEN WESTCHESTER AVENUE AND EAST 174TH STREET**

**INCLUDING CONSTRUCTION OF EAST 172ND STREET PEDESTRIAN  
BRIDGE OVER AMTRAK (BIN#: 2-24124-0), SOUTH GREENWAY  
PEDESTRIAN BRIDGE OVER THE BRONX RIVER (BIN#: 2-26990-0),  
DRAINAGE, RETAINING STRUCTURES, GREENWAY, STREET  
LIGHTING, LANDSCAPING AND TRAFFIC WORK**

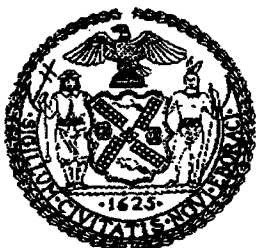
Together With All Work Incidental Thereto

**BOROUGH OF THE BRONX  
CITY OF NEW YORK**

FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY  
*THE RBA GROUP*

**MAY 22, 2017**

NYS DOT PIN X027.08  
Fed. Aid Project No. \_\_\_\_\_



8-065



**Department of  
Design and  
Construction**

**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

30-30 THOMSON AVENUE  
LONG ISLAND CITY, NEW YORK 11101-3045  
TELEPHONE (718) 391-1000  
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**VOLUME 2 OF 3**

**INFORMATION FOR BIDDERS  
CONTRACT  
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PREVAILING WAGE SCHEDULE**

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:



FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY

*IN HOUSE DESIGN*

**MARCH 15, 2017**

**CITY OF NEW YORK**  
**DEPARTMENT OF**  
**DESIGN AND CONSTRUCTION**  
**DIVISION OF INFRASTRUCTURES**

**INFORMATION FOR BIDDERS**

**JUNE 2015**

(NO TEXT ON THIS PAGE)

*CITY OF NEW YORK CITY  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFORMATION FOR BIDDERS*

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## INFORMATION FOR BIDDERS

### 1. Description and Location of Work

The description and location of the work for which bids are requested are specified in Attachment 1, "Bid Information". Attachment 1 is included as page A-1 of the Bid Booklet.

### 2. Time and Place for Receipt of Bids

Sealed bids shall be received on or before the date and hour specified in Attachment 1, at which time they will be publicly opened and read aloud in the presence of the Commissioner or his or her representative, and any bidders who may desire to be present.

### 3. Definitions

The definitions set forth in the Procurement Policy Board Rules shall apply to this Invitation For Bids.

### 4. Invitation For Bids and Contract Documents

(A) Except for titles, sub-titles, headings, running headlines, tables of contents and indices (all of which are printed herein merely for convenience) the following, except for such portions thereof as may be specifically excluded, shall be deemed to be part of the Contract and the Invitation for Bids.

- (1) All provisions required by law to be inserted in this Contract, whether actually inserted or not
- (2) The Contract Drawings and Specifications
- (3) The General Conditions, the General Requirements and the Special Conditions, if any
- (4) The Contract
- (5) The Information for Bidders; Request for Proposals; Notice of Solicitation and Proposal For Bids; Bid or Proposal, and, if used, the Bid Booklet
- (6) The Budget Director's Certificate; all Addenda issued prior to the receipt of the bids; the Notice of Award; Performance and Payment Bonds, if required; and the Notice to Proceed with the Work.

(B) For particulars as to this procurement, including quantity and quality of the purchase, extent of the work or labor to be performed, delivery and performance schedule, and any other special instructions, prospective bidders are referred to the Invitation For Bids Documents. A copy of such documents can be obtained at the location set forth in Attachment 1.

(C) Deposit for Copy of Invitation For Bids Documents: Prospective bidders may obtain a copy of the Invitation For Bids Documents by complying with the conditions set forth in the Notice of Solicitation. The deposit must be in the form of a check or money order made payable to the City of New York, and drawn upon a state or national bank or trust company, or a check of such bank or trust company signed by a duly authorized officer thereof.

(D) Return of Invitation For Bids Documents: All Invitation For Bids Documents must be returned to the Department upon request. If the bidder elects not to submit a bid thereunder, the

Invitation For Bids Documents shall be returned to the Department, along with a statement that no bid will be submitted.

(E) Return of Deposit: Such deposit will be returned within 30 days after the award of the contract or the rejection of all bids as set forth in the advertisement, provided the Invitation For Bids Documents are returned to the location specified in Attachment 1, in physical condition satisfactory to the Commissioner.

(F) Additional Copies: Additional copies of the Invitation For Bids Documents may be obtained, subject to the conditions set forth in the advertisement for bids.

5. Pre-Bid Conference

A pre-bid conference shall be held as set forth in Attachment 1. Nothing stated at the pre-bid conference shall change the terms or conditions of the Invitation For Bids Documents, unless a change is made by written amendment as provided in Section 9 below. Failure to attend a mandatory pre-bid conference shall constitute grounds for the rejection of the bid.

6. Agency Contact

Any questions or correspondence relating to this bid solicitation shall be addressed to the Agency Contact person specified in Attachment 1.

7. Bidder's Oath

(A) The bid shall be properly signed by an authorized representative of the bidder and the bid shall be verified by the written oath of the authorized representative who signed the bid, that the several matters stated and information furnished therein are in all aspects true.

(B) A materially false statement willfully or fraudulently made in connection with the bid or any of the forms completed and submitted with the bid may result in the termination of any Contract between the City and the Bidder. As a result, the Bidder may be barred from participating in future City contracts as well as be subject to possible criminal prosecution.

8. Examination and Viewing of Site

(A) Pre-Bidding (Investigation) Viewing of Site -Bidders must carefully view and examine the site of the proposed work, as well as its adjacent area, and seek other usual sources of information, for they will be conclusively presumed to have full knowledge of any and all conditions on, about or above the site relating to or affecting in any way the performance of the work to be done under the Contract which were or should have been indicated to a reasonably prudent bidder. To arrange a date for visiting the work site, bidders are to contact the Agency Contact person specified in Attachment 1.

(B) Should the contractor encounter during the progress of the work subsurface conditions at the site materially differing from any shown on the Contract Drawings or indicated in the Specifications or such subsurface conditions as could not reasonably have been anticipated by the contractor and were not anticipated by the City, which conditions will materially affect the cost of the work to be done under the

Contract, the attention of the Commissioner must be called immediately to such conditions before they are disturbed. The Commissioner shall thereupon promptly investigate the conditions. If he finds that they do so materially differ, or that they could not have been reasonably anticipated by the contractor and were not anticipated by the City, the Contract may be modified with his written approval.

9. Examination of Proposed Contract

(A) Request for Interpretation or Correction: Prospective bidders must examine the Contract Documents carefully and before bidding must request the Commissioner in writing for an interpretation or correction of every patent ambiguity, inconsistency or error therein which should have been discovered by a reasonably prudent bidder. Such interpretation or correction, as well as any additional contract provisions the Commissioner may decide to include, will be issued in writing by the Commissioner as an addendum to the Contract, which will be transmitted to each person recorded as having received a copy of the Contract Documents from the Department. Transmission of such addendum will be by mail, e-mail, facsimile or hand delivery. Such addendum will also be posted at the place where the Contract Documents are available for the inspection of prospective bidders. Upon transmission as provided for herein, such addendum shall become a part of the Contract Documents, and binding on all bidders, whether or not actual notice of such addendum is shown.

(B) Only Commissioner's Interpretation or Correction Binding: Only the written interpretation or correction so given by the Commissioner shall be binding, and prospective bidders are warned that no other officer, agent or employee of the City is authorized to give information concerning, or to explain or interpret, the Contract.

(C) Documents given to a subcontractor for the purpose of soliciting the subcontractor's bid shall include either a copy of the bid cover sheet or a separate information sheet setting forth the project name, the Contract number (if available), the contracting agency and the Project's location.

10. Form of Bid

Each bid must be submitted upon the prescribed form and must contain: a) the name, residence and place of business of the person or persons making the same; b) the names of all persons interested therein, and if no other person is so interested, such fact must be distinctly stated; c) a statement to the effect that it is made without any connection with any other person making a bid for the same purpose and that it is in all respects fair and without collusion or fraud; d) a statement that no Council member or other officer or employee or person whose salary is payable in whole or part from the City Treasury is directly or indirectly interested therein or in the supplies, materials or equipment and work or labor to which it relates, or in any portion of the profits thereof; e) a statement that the bidder is not in arrears to the City or to any agency upon a debt or contract or taxes, and is not a defaulter as surety or otherwise upon any obligation to the City to any agency thereof, except as set forth in the bid.

THE BID SHALL BE TYPEWRITTEN OR WRITTEN LEGIBLY IN INK. THE BID SHALL BE SIGNED IN INK. ERASURES OR ALTERATIONS SHALL BE INITIALED BY THE SIGNER IN INK. FAILURE TO CONFORM TO THE REQUIREMENTS OF THIS SECTION 10 SHALL RESULT IN THE REJECTION OF THE BID.

11. Irrevocability of Bid

The prices set forth in the bid cannot be revoked and shall be effective until the award of the Contract, unless the bid is withdrawn as provided for in Sections 15 and 18 below.

12. Acknowledgment of Amendments

The receipt of any amendment to the Contract Documents shall be acknowledged by the bidder in its bid submission.

13. Bid Samples and Descriptive Literature

Bid samples and descriptive literature shall not be submitted by the bidder, unless expressly requested elsewhere in the Contract or Contract Documents. Any unsolicited bid samples or descriptive literature which are submitted shall not be examined or tested and shall not be deemed to vary any of the provisions of this Contract.

14. Proprietary Information/Trade Secrets

(A) The bidder shall identify those portions of the bid which it deems to be confidential, proprietary information or trade secrets, and provide justification why such materials shall not be disclosed by the City. All such materials shall be clearly indicated by stamping the pages on which such information appears, at the top and bottom thereof with the word "Confidential". Such materials stamped "Confidential" must be easily separable from the non-confidential sections of the bid.

(B) All such materials so indicated shall be reviewed by the Agency and any decision not to honor a request for confidentiality shall be communicated in writing to the bidder. For those bids which are unsuccessful, all such confidential materials shall be returned to the bidder. Prices, makes and model or catalog numbers of the items offered, deliveries, and terms of payment shall be publicly available after bid opening, regardless of any designation of confidentiality made by the bidder.

15. Pre-Opening Modification or Withdrawal of Bids

Bids may be modified or withdrawn by written notice received in the office designated in Attachment 1, before the time and date set for the bid opening. If a bid is withdrawn in accordance with this Section, the bid security, if any, shall be returned to the bidder.

16. Bid Evaluation and Award

In accordance with the New York City Charter, the Procurement Policy Board Rules and the terms and conditions of this Invitation For Bids, this Contract shall be awarded, if at all, to the responsible bidder whose bid meets the requirements and evaluation criteria set forth in the Invitation For Bids, and whose bid price is either the most favorable bid price or, if the Invitation For Bids so states, the most favorable evaluated bid price. A bid may not be evaluated for any requirement or criterion that is not disclosed in the Invitation For Bids.

Restriction: No negotiations with any bidder shall be allowed to take place except under the circumstances and in the manner set forth in Section 21. Nothing in this Section shall be deemed to permit a contract award to a bidder submitting a higher quality item than that designated in the Invitation For Bids, if that bid is not also the most favorable bid.

17. Late Bids, Late Withdrawals and Late Modifications

Any bid received at the place designated in the solicitation after the time and date set for receipt of bids is late and shall not be considered. Any request for withdrawal or modification received at the place designated in the solicitation after the time and date set for receipt of bids is late and shall not be considered. The exception to this provision is that a late modification of a successful bid that makes the bid terms more favorable to the City shall be considered at any time it is received.

18. Withdrawal of Bids.

Except as provided for in Section 15, above, a bidder may not withdraw its bid before the expiration of forty-five (45) days after the date of the opening of bids; thereafter, a bidder may withdraw its bid only in writing and in advance of an actual award. If within sixty (60) days after the execution of the Contract, the Commissioner fails to fix the date for commencement of work by written notice to the bidder, the bidder, at his option, may ask to be relieved of his obligation to perform the work called for by written notice to the Commissioner. If such notice is given to the Commissioner, and the request to withdraw is granted, the bidder waives all claims in connection with this Contract.

19. Mistake in Bids

(A) Mistake Discovered Before Bid Opening: A bidder may correct mistakes discovered before the time and date set for bid opening by withdrawing or correcting the bid as provided in Section 15 above.

(B) Mistakes Discovered Before Award

(1) In accordance with General Municipal Law (Section 103, subdivision .11), where a unilateral error or mistake is discovered in a bid, such bid may be withdrawn upon written approval of the Agency Chief Contracting Officer if the following conditions are met:

- (a) The mistake is known or made known to the agency prior to the awarding of the Contract or within 3 days after the opening of the bid, whichever period is shorter; and
- (b) The price bid was based upon an error of such magnitude that enforcement would be unconscionable; and
- (c) The bid was submitted in good faith and the bidder submits credible evidence that the mistake was a clerical error as opposed to a judgment error; and
- (d) The error in the bid is actually due to an unintentional and substantial arithmetic error or an unintentional omission of a substantial quantity of work, labor, material or services made directly in the compilation of the bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of the original work paper, documents, or materials used in the preparation of the bid sought to be withdrawn; and
- (e) It is possible to place the agency in the same position as existed prior to the bid.

(2) Unless otherwise required by law, the sole remedy for a bid mistake in accordance with this Article shall be withdrawal of the bid, and the return of the bid bond, or other security, if any, to the bidder. Thereafter, the agency may, in its discretion, award the Contract to the next lowest bidder or rebid the Contract. Any amendment to or reformation of a bid or a Contract to rectify such an error or mistake

therein is strictly prohibited.

(3) If the mistake and the intended correct bid are clearly evident on the face of the bid document, the bid shall be corrected to the intended correct bid and may not be withdrawn. Examples of mistakes that may be corrected are typographical errors, errors in extending unit prices, transposition errors and arithmetical errors.

20. Low Tie Bids

(A) When two or more low responsive bids from responsible bidders are identical in price, meeting all the requirements and criteria set forth in the Invitation For Bids, the Agency Chief Contracting Officer will break the tie in the following manner and order of priority:

- (1) Award to a certified New York City small, minority or woman-owned business entity bidder;
- (2) Award to a New York City bidder;
- (3) Award to a certified New York State small, minority or woman-owned business bidder;
- (4) Award to a New York State bidder.

(B) If two or more bidders still remain equally eligible after application of paragraph (A) above, award shall be made by a drawing by lot limited to those bidders. The bidders involved shall be invited to attend the drawing. A witness shall be present to verify the drawing and shall certify the results on the bid tabulation sheet.

21. Rejection of Bids

(A) Rejection of Individual Bids: The Agency may reject a bid if:

- (1) The bidder fails to furnish any of the information required pursuant to Section 24 or 28 hereof; or if
- (2) The bidder is determined to be not responsible pursuant to the Procurement Policy Board Rules; or if
- (3) The bid is determined to be non-responsive pursuant to the Procurement Policy Board Rules; or if
- (4) The bid, in the opinion of the Agency Chief Contracting Officer, contains unbalanced bid prices and is thus non-responsive, unless the bidder can show that the prices are not unbalanced for the probable required quantity of items, or if the imbalance is corrected pursuant to Section 15.

(B) Rejection of All Bids: The Agency, upon written approval by the Agency Chief Contracting Officer, may reject all bids and may elect to resolicit bids if in its sole opinion it shall deem it in the best interest of the City so to do.

(C) Rejection of All Bids and Negotiation With All Responsible Bidders: The Agency Head may determine that it is appropriate to cancel the Invitation For Bids after bid opening and before award and to complete the acquisition by negotiation. This determination shall be based on one of the following reasons:

- (1) All otherwise acceptable bids received are at unreasonable prices, or only one bid is received and the Agency Chief Contracting Officer cannot determine the reasonableness of the bid price, or no responsive bid has been received from a responsible bidder; or
- (2) In the judgment of the Agency Chief Contracting Officer, the bids were not independently arrived at in open competition, were collusive, or were submitted in bad faith.

(D) When the Agency has determined that the Invitation for Bids is to be canceled and that use of negotiation is appropriate to complete the acquisition, the contracting officer may negotiate and award the Contract without issuing a new solicitation, subject to the following conditions:

- (1) prior notice of the intention to negotiate and a reasonable opportunity to negotiate have been given by the contracting officer to each responsible bidder that submitted a bid in response to the Invitation for Bids;
- (2) the negotiated price is the lowest negotiated price offered by a responsible bidder; and
- (3) the negotiated price is lower than the lowest rejected bid price of a responsible bidder that submitted a bid in response to the Invitation for Bids.

22. Right to Appeal Determinations of Non-Responsiveness or Non-Responsibility and Right to Protest Solicitations and Award

The bidder has the right to appeal a determination of non-responsiveness or non-responsibility and has the right to protest a solicitation and award. For further information concerning these rights, the bidder is directed to the Procurement Policy Board Rules.

23. Affirmative Action and Equal Employment Opportunity

This Invitation For Bids is subject to applicable provisions of Federal, State and Local Laws and executive orders requiring affirmative action and equal employment opportunity.

24. VENDEX Questionnaires

(A) Requirement: Pursuant to Administrative Code Section 6-116.2 and the PPB Rules, bidders may be obligated to complete and submit VENDEX Questionnaires. Generally, if this bid is \$100,000 or more, or if this bid when added to the sum total of all contracts, concessions and franchises the bidder has received from the City and any subcontracts received from City contractors over the past twelve months, equals or exceeds \$100,000, Vendex Questionnaires must be completed. If required, Vendex Questionnaires must be completed and submitted before any award of contract may be made or before approval is given for a proposed subcontractor. Non-compliance with these submission requirements may result in the disqualification of the bid, disapproval of a subcontractor, subsequent withdrawal of approval for the use of an approved subcontractor, or the cancellation of the contract after its award.

(B) Submission: Vendex Questionnaires must be submitted directly to the Mayor's Office of Contract Services, ATTN: Vendex, 253 Broadway, 9th Floor, New York, New York 10007. In addition, the bidder must submit a Confirmation of Vendex Compliance to the agency. A form for this confirmation is set forth in the Bid Booklet.

(C) Obtaining Forms: Vendex Questionnaires, as well as detailed instructions, may be obtained at [www.nyc.gov/vendex](http://www.nyc.gov/vendex). The bidder may also obtain Vendex forms and instructions by contacting the

Agency Chief Contracting Office or the contract person for this contract.

25. Complaints About the Bid Process

The New York City Comptroller is charged with the audit of contracts in New York City. Any vendor who believes that there has been unfairness, favoritism or impropriety in the bid process should inform the Comptroller, Office of Contract Administration, One Centre Street, Room 835, New York, New York; telephone number (212)669-2797.

26. Bid, Performance and Payment Security

(A) Bid Security: Each bid must be accompanied by bid security in an amount and type specified in Attachment 1 (page A-1 of the Bid Booklet). The bid security shall assure the City of New York of the adherence of the bidder to its proposal, the execution of the Contract, and the furnishing of Performance and Payment Bonds by the bidder, if required in Attachment 1. Bid security shall be returned to the bidder as follows:

- (1) Within ten (10) days after the bid opening, the Comptroller will be notified to return the deposits of all but the three (3) lowest bidders. Within five (5) days after the award, the Comptroller will be notified to return the deposits of the remaining two unsuccessful bidders.
- (2) Within five (5) days after the execution of the Contract and acceptance of the Contractor's bonds, the Comptroller will be notified to return the bid security of the successful bidder or, if performance and payment bonds are not required, only after the sum retained under Article 21 of the Contract equals the amount of the bid security.
- (3) Where all bids are rejected, the Comptroller will be notified to return the deposit of the three (3) lowest bidders at the time of rejection.

(B) Performance and Payment Security: Performance and Payment Security must be provided in an amount and type specified in Attachment 1 (page A-1 of the Bid Booklet). The performance and payment security shall be delivered by the contractor prior to or at the time of execution of the Contract. If a contractor fails to deliver the required performance and payment security, its bid security shall be enforced, and an award of Contract may be made to the next lowest responsible and responsive bidder, or the contract may be rebid.

(C) Acceptable Types of Security: Acceptable types of security for bids, performance, and payment shall be limited to the following:

- (1) a one-time bond in a form satisfactory to the City;
- (2) a bank certified check or money order;
- (3) obligations of the City of New York; or
- (4) other financial instruments as determined by the Office of Construction in consultation with the Comptroller.

Whenever the successful bidder deposits obligations of the City of New York as performance and payment security, the Comptroller may sell and use the proceeds thereof for any purpose for which the principal or surety on such bond would be liable under the terms of the Contract. If the money is deposited with the Comptroller, the successful bidder shall not be entitled to receive interest on such money from the City.



(D) Form of Bonds: Security provided in the form of bonds must be prepared on the form of bonds authorized by the City of New York. Forms for bid, performance, and payment bonds are included in the Invitation for Bids Documents. Such bonds must have as surety thereunder such surety company or companies as are: (1) approved by the City of New York; (2) authorized to do business in the State of New York, and (3) approved by the Department of the Treasury of the United States. Premiums for any required bonds must be included in the base bid.

The bidder is advised that submission of a bid bond where the surety on such bond fails to meet the criteria set forth herein, shall result in the rejection of the bid as non-responsive.

The Department of the Treasury of the United States advises that information concerning approved surety companies may be obtained as follows: (1) from the Government Printing Office at 202-512-1800; (2) through the Internet at <http://www.fms.treas.gov/c570/index.html>, and (3) through a computerized public bulletin board, which can be accessed by using your computer modem and dialing 202-874-6887.

(E) Power of Attorney: Attorneys in fact who sign bid, performance, or payment bonds must file with each bond a certified copy of their power of attorney to sign said bonds.

27. Failure to Execute Contract

In the event of failure of the successful bidder to execute the Contract and furnish the required security within ten (10) days after notice of the award of the Contract, the deposit of the successful bidder or so much thereof as shall be applicable to the amount of the award made shall be retained by the City, and the successful bidder shall be liable for and hereby agrees to pay on demand the difference between the price bid and the price for which such Contract shall be subsequently awarded, including the cost of any required reletting and less the amount of such deposit. No plea of mistake in such accepted bid shall be available to the bidder for the recovery of the deposit or as a defense to any action based upon such accepted bid. Further, should the bidder's failure to comply with this Section cause any funding agency, body or group (Federal, State, City, Public, Private, etc.) to terminate, cancel or reduce the funding on this project, the bidder in such event shall be liable also to the City for the amount of actual funding withdrawn by such agency on this project, less the amount of the forfeited deposit.

28. Bidder Responsibilities and Qualifications

(A) Bidders must include with their bids all information necessary for a determination of bidder responsibility, as set forth in the Specifications.

(B) The Agency may require any bidder or prospective bidder to furnish all books of account, records, vouchers, statements or other information concerning the bidder's financial status for examination as may be required by the Agency to ascertain the bidder's responsibility and capability to perform the Contract. If required, a bidder must also submit a sworn statement setting forth such information as the Agency may require concerning present and proposed plant and equipment, the personnel and qualifications of his working organizations, prior experience and performance record.

(C) Oral Examination on Qualifications: In addition thereto, and when directed by the Agency, the bidder, or a responsible officer, agent or employee of the bidder, must submit to an oral examination to be conducted by the Agency in relation to his proposed tentative plan and schedule of

operations, and such other matters as the Agency may deem necessary in order to determine the bidder's ability and responsibility to perform the work in accordance with the Contract. Each person so examined must sign and verify a stenographic transcript of such examination noting thereon such corrections as such person may desire to make.

(D) If the bidder fails or refuses to supply any of the documents or information set forth in paragraph (B) hereof or fails to comply with any of the requirements thereof, the Agency may reject the bid.

29. Employment Report

In accordance with Executive Order No. 50 (1980) as modified by Executive Order 108 (1986), the filing of a completed Employment Report (ER) is a requirement of doing business with the City of New York for construction contractors with contracts of \$1,000,000 or more and subcontractors with construction subcontracts of \$750,000 or more. The required forms and information are included in the Bid Booklet.

30. Labor Law Requirements

(A) General: The successful bidder will be required to comply strictly with all Federal, State and local labor laws and regulations.

(B) New York State Labor Law: This Contract is subject to New York State Labor Law Section 220, which requires that construction workers on the site be paid prevailing wages and supplements. The Contractor is reminded that all wage provisions of this Contract will be enforced strictly and failure to comply will be considered when evaluating performance. Noncompliance may result in the contractor being debarred by the City from future contracts. Complaints filed with the Comptroller may result in decisions which may debar a contractor from bidding contracts with any state governmental entity and other political subdivisions.

(C) Records: The Contractor is expected to submit accurate payroll reports and other required documents and verify attendance and job classifications being utilized in compliance with the law, Contract provisions and agency procedures.

31. Insurance

(A) Bidders are advised that the insurance requirements contained herein are regarded as material terms of the Contract. As required by Article 22 of the Contract, the contractor must effect and maintain with companies licensed and authorized to do business in the State of New York, the types of insurance set forth therein, when required by and in the amounts set forth in Schedule A of the General Conditions. Such required insurance must be provided from the date the contractor is ordered to commence work and up to the date of final acceptance of all required work.

(B) The contractor must, within ten days of receipt of the notice of award, submit the following insurance documentation: (a) original certificate of insurance for general liability in the amount required by Schedule A of the General Conditions, and (b) original certificates of insurance or other proof of coverage for workers' compensation and disability benefits, as required by Section 57 of the New York State Workers' Compensation Law and Section 220 of the Disability Benefits Law.

32. Lump Sum Contracts

(A) Comparison of Bids: Bids on Lump Sum Contracts will be compared on the basis of the lump sum price bid, adjusted for alternate prices bid, if any.

(B) Lump Sum Bids for "General Construction Work" which include excavation shall include all necessary excavation work defined in the Specifications as being included in the lump sum bid. The bidder shall also bid a unit price for the additional cost of excavating material which is defined in the Specifications as excavation for which additional payment will be made. The total estimated additional cost of removing such material will be taken as the quantity set forth in the Engineer's Estimate multiplied by the unit price bid. This total estimated cost of additional excavation shall be added to the lump sum bid for the General Construction Work for the purpose of comparing bids to determine the low bidder.

(C) Variations from Engineer's Estimate: The Engineer's Estimate of the quantity of excavation for which additional payment will be made is approximate only and is given solely to be used as a uniform basis for the comparison of bids and such estimate is not to be considered as part of this contract. The quantities actually required to complete the contract work may be more or less than the quantities in the Engineer's Estimate and, if so, no action for damages or for loss of profits shall accrue to the contractor by reason thereof.

33. Unit Price Contracts

(A) Comparison of Bids: Bids on Unit Price Contracts will be compared on the basis of a total estimated price, arrived at by taking the sum of the estimated quantities of such items, in accordance with the Engineer's Estimate of Quantities set forth in the Bid Schedule, multiplied by the corresponding unit prices, and including any lump sum bids on individual items.

(B) Variations from Engineer's Estimate: Bidders are warned that the Engineer's Estimate of Quantities on the various items of work and materials is approximate only, given solely to be used as a uniform basis for the comparison of bids, and is not be considered part of this contract. The quantities actually required to complete the contract work may be less or more than so estimated, and if so, no action for damages or for loss of profits shall accrue to the contractor by reason thereof.

(C) Overruns: The terms and conditions applicable to overruns of unit price items are set forth in Article 26 of the Contract.

34. Excise Tax

Bidders are referred to the Specifications for information on Federal Excise Tax exemptions.

35. Licenses and Permits

The successful bidder will be required to obtain all necessary licenses and permits necessary to perform the work.

36. Multiple Prime Contractors

If more than one prime contractor will be involved on this project, all contractors are required to examine the Invitation for Bid packages for all other parts of the project.

37. Locally Based Enterprise Requirements (LBE)

This Contract is subject to the requirements of Administrative Code, Section 6-108.1, and the regulations promulgated thereunder. No construction contract will be awarded unless and until these requirements have been complied with in their entirety. The bidder is advised of the provisions set forth below, as well as the provisions with respect to the Locally Based Enterprise Program contained in Article 67 of the Contract. The contractor is advised that:

(A) If any portion of the Contract is subcontracted, not less than ten percent of the total dollar amount of the contract shall be awarded to locally based enterprises ("LBEs"); except, where less than ten percent of the total dollar amount of the Contract is subcontracted, such lesser percentage shall be so awarded.

(B) No contractor shall require performance and payment bonds from LBE subcontractors.

(C) No Contract shall be awarded unless the contractor first identifies in its bid:

- (1) the percentage, dollar amount and type of work to be subcontracted; and
- (2) the percentage, dollar amount and type of work to be subcontracted to LBEs.

(D) Within ten calendar days after notification of low bid, the apparent low bidder shall submit an "LBE Participation Schedule" to the contracting agency. If such schedule does not identify sufficient LBE subcontractors to meet the requirements of Administrative Code Section 6-108.1, the apparent low bidder shall submit documentation of its good faith efforts to meet such requirements.

(1) The "LBE Participation Schedule" shall include:

- (a) the name and address of each LBE that will be given a subcontract,
- (b) the percentage, dollar amount and type of work to be subcontracted to the LBE, and
- (c) the dates when the LBE subcontract work will commence and end.

(2) The following documents shall be attached to the "LBE Participation Schedule":

- (a) verification letters from each subcontractor listed in the "LBE Participation Schedule" stating that the LBE will enter into a formal agreement for work,
- (b) certification documents of any proposed LBE subcontractor which is not on the LBE certified list, and
- (c) copies of the certification letter of any proposed subcontractor which is an LBE.

(3) Documentation of good faith efforts to achieve the required LBE percentage shall include as appropriate but not limited to the following:

- (a) attendance at prebid meetings, when scheduled by the agency, to advise bidders of contract requirements;

- (b) advertisement where appropriate in general circulation media, trade association publications and small business media of the specific subcontracts that would be at least equal to the percentage goal for LBE utilization specified by the contractor;
- (c) written notification to association of small, minority and women contractors soliciting specific subcontractors;
- (d) written notification by certified mail to LBE firms that their interest in the contract is solicited for specific work items and their estimated values;
- (e) demonstration of efforts made to select portions of the work for performance by LBE firms in order to increase the likelihood of achieving the stated goal;
- (f) documented efforts to negotiate with LBE firms for specific subcontracts, including at a minimum:
  - (i) The names, address and telephone numbers of LBE firms that are contacted;
  - (ii) A description of the information provided to LBE firms regarding the plans and specifications for portions of the work to be performed;
  - (iii) Documentation showing that no reasonable price can be obtained from LBE firms;
  - (iv) A statement of why agreements with LBE firms were not reached;
- (g) a statement of the reason for rejecting any LBE firm which the contractor deemed to be unqualified; and
- (h) documentation of efforts made to assist the LBE firms contacted that needed assistance in obtaining required insurance.

(E) Unless otherwise waived by the Commissioner with the approval of the Office of Economic and Financial Opportunity, failure of a proposed contractor to provide the information required by paragraphs (C) and (D) above may render the bid non-responsive and the Contract may not be awarded to the bidder. If the contractor states that it will subcontract a specific portion of the work, but can demonstrate despite good faith efforts it cannot achieve its required LBE percentage for subcontracted work until after award of Contract, the Contract may be awarded, subject to a letter of compliance from the contractor stating that it will comply with Administrative Code Section 6-108.1 and subject to approval by the Commissioner. If the contractor has not met its required LBE percentage prior to award, the contractor shall demonstrate that a good faith effort has been made subsequent to award to obtain LBEs on each subcontract until it meets the required percentage.

(F) When a bidder indicates prior to award that no work will be subcontracted, no work may be subcontracted without the prior written approval of the Commissioner, which shall be granted only if the contractor in good faith seeks LBE subcontractors at least six weeks prior to the start of work.

(G) The contractor may not substitute or change any LBE which was identified prior to award of the contract without the written permission of the Commissioner. The contractor shall make a written application to the Commissioner for permission to make such substitution or change, explaining why the contractor needs to change its LBE subcontractor and how the contractor will meet its LBE subcontracting requirement. Copies of such application must be served on the originally identified LBE by certified mail return receipt requested, as well as the proposed substitute LBE. The Commissioner shall determine whether or not to grant the contractor's request for substitution.

### 38. Bid Submission Requirements

The following forms, all of which are contained in the Bid Booklet, are to be completed and submitted with the bid:

- (1) Bid Schedule and Bid Form, including Affirmation
- (2) Bid Security (if required, see Attachment 1 on Page A-1)
- (3) M/WBE Subcontractor Utilization Plan (if participation goals have been established)

**FAILURE TO SUBMIT ITEMS (1), (2) AND (3)  
WILL RESULT IN THE DISQUALIFICATION OF THE BID.**

- (4) Safety Questionnaire
- (5) Construction Employment Report (if bid is \$1,000,000 or more)
- (6) Contract Certificate (if bid is less than \$1,000,000)
- (7) Confirmation of Vendex Compliance
- (8) Special Experience Requirements (if applicable to this contract)
- (9) Apprenticeship Program Questionnaire (if applicable)

**FAILURE TO SUBMIT ITEMS (4) THROUGH (9)  
MAY RESULT IN THE DISQUALIFICATION OF THE BID.**

39. Comptroller's Certificate

This Contract shall not be binding or of any force unless it is registered by the Comptroller in accordance with Section 328 of the City Charter and the Procurement Policy Board Rules. This Contract shall continue in force only after annual appropriation of funds by the City of New York and certification as hereinabove set forth.

40. Procurement Policy Board Rules

This Invitation For Bids is subject to the Rules of the Procurement Policy Board of the City of New York. In the event of a conflict between said Rules and a provision of this Invitation For Bids, the Rules shall take precedence.

41. DDC Safety Requirements

The DDC Safety Requirements apply to the work to be performed pursuant to the Contract. The DDC Safety Requirements are set forth on the following pages.

**CITY OF NEW YORK**  
**DEPARTMENT OF DESIGN AND CONSTRUCTION**  
**SAFETY REQUIREMENTS**

June 2015

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*THE DDC SAFETY REQUIREMENTS INCLUDE THE FOLLOWING SECTIONS:*

- I. POLICY ON SITE SAFETY
- II. PURPOSE
- III. DEFINITIONS
- IV. RESPONSIBILITIES
- V. SAFETY QUESTIONNAIRE
- VI. SAFETY PROGRAM AND SITE SAFETY PLAN
- VII. KICK-OFF/PRE-CONSTRUCTION MEETINGS AND SAFETY REVIEW
- VIII. EVALUATION DURING WORK IN PROGRESS
- IX. SAFETY PERFORMANCE EVALUATION

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Safety and Site Support- Quality Assurance and Construction Safety

## I. POLICY ON SITE SAFETY

The City of New York Department of Design and Construction (DDC) is committed to a policy of injury and illness prevention and risk management for construction work that will ensure the safety and health of the workers engaged in the projects and the protection of the general public. Therefore, it is DDC's policy that work carried out by Contractors on DDC jobsites must, at a minimum, comply with applicable federal, state and city laws, rules and regulations, including without limitation:

- ❑ U. S. Department of Labor 29 Code of Federal Regulations (CFR) Part 1926 and applicable Sub-parts of Part 1910 – U.S. Occupational Safety and Health Administration (OSHA); New York State Department of Labor Industrial Code Rule 23 – Protection in Construction, Demolition and Excavation;
- ❑ New York City Construction Codes, Title 28
- ❑ NYC Department of Transportation Title 34 Chapter 2 – Highway Rules
- ❑ New York State Department of Labor Industrial Code Rule 16 NYCRR Part 753
- ❑ Title 15 of the Rules of the City of New York, Chapter 13 Citywide Construction Dust Mitigation
- ❑ Manual on Uniform Traffic Control Devices (MUTCD)
- ❑ Title 15 of the Rules of the City of New York, Chapter 28 Citywide Construction Noise Mitigation

## II. PURPOSE

The purpose of this policy is to ensure that Contractors perform their work and supervise their employees in accordance with all applicable federal, state and city rules and regulations. Further, Contractors will be expected to minimize or eliminate jobsite and public hazards, through a planning, inspection, auditing and corrective action process. The goal is to control risks so that injuries, illnesses and accidents to contractors' employees, DDC employees and the general public, as well as damage to city-owned and private property, are reduced to the lowest level feasible.

## III. DEFINITIONS

**Agency Chief Contracting Officer (ACCO):** The ACCO shall mean the person delegated authority by the Commissioner to organize and supervise the procurement activity of subordinate Agency staff in conjunction with the CCPO.

**Competent Person:** As defined by OSHA, an individual who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees or the general public, and who has authorization to take prompt corrective measures to eliminate them.

**Construction Safety Auditor:** A representative of the QA&CS Construction Safety Unit who provides inspection and assessment services to enhance health and safety on all DDC construction projects. The activities of the Construction Safety Auditor include performing site surveys, reviewing health and safety plans, reviewing construction permits, and rendering technical advice and assistance to DDC Resident Engineers and Project Managers.

**Construction Safety Unit:** A part of QA&CS within the Division of Program Management/ Safety & Site Support that assesses contractor safety on DDC jobsites and advises responsible parties of needed corrective actions.



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**Construction Superintendent:** A representative of the contractor responsible for overseeing performance of the required construction work. This individual must engage in sound construction practices, and is responsible to maintain a safe work site. In the case of a project involving the demolition, alteration or new construction of buildings, the Construction Superintendent must be licensed by the NYC Department of Buildings.

**Contractor:** For purposes of these Safety Requirements, the term "Contractor" shall mean any person or entity that enters into a contract for the performance of construction work on a DDC project. The term "Contractor" shall include any person or entity which enters into any of the following types of contracts: (1) a prime construction contract for a specific project, (2) a prime construction contract using the Job Order Contracting System ("JOCS Contract"), and (3) a subcontract with a CM/Builder ("First Tier Subcontract").

**Daily Safety Job Briefing:** Daily jobsite safety meetings, giving to all jobsite personnel by contractor, with the purpose of discussing project specific safety procedures for the scheduled construction work.

**Director - Quality Assurance and Construction Safety (QA&CS):** Responsible for the operations of the QACS Construction Safety Unit and the DDC Site Safety management programs.

**Job Hazard Analysis (JHA):** A process of identifying the major job steps and any potential site-specific hazards that may be present during construction and establishing the means and methods to eliminate or control those hazards.

**Qualified Person:** As defined by OSHA, an individual who, by possession of a recognized degree, certificate, license or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his or her ability to solve problems relating to the subject matter, the work, or the project. Qualified Persons are required under regulation to address issues pertaining, but without limit, to fall protection, scaffold design and trenching and shoring, among others.

**Project Site:** Those areas indicated in the Contract Documents where the Work is to be performed.

**Project Safety Representative:** The designated project safety representative shall have completed an authorized 30 hour OSHA Construction Safety Course and other safety training applicable to Contractor's/subcontractor's project work. Except in instances where a dedicated Project Safety Manager is required, a Project Safety Representative may also function as a superintendent, foreman or crew leader on the Project, but must have sufficient experience and authority to undertake corrective actions and must qualify to be a competent person. No work is to be performed on site when a Project Safety Representative is not present.

**Project Safety Manager:** A dedicated, full-time project safety manager may be a contractual requirement on large projects or projects deemed by DDC to be particularly high risk. This would be in addition or in lieu of a Contractor's Project Safety Representative. This individual shall not have any other assigned duties. This individual shall have received, at a minimum an authorized 30 hour OSHA Construction Safety Course. Other examples of acceptable training are OSHA Safety and Health Standards for the Construction Industry training program (OSHA 510), Certified Safety Professional (CSP), Certified Industrial Hygienist (CIH) or a degree/certificate in a safety and health from a college-level curriculum.

A Project Safety Manager shall possess the additional training, years of experience, and skills necessary to thoroughly understand the health and safety hazards and controls for large construction projects, including the full scope of the specific Work.

**QA&CS - Quality Assurance and Construction Safety of the New York City Department of Design and Construction.**

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**Resident Engineer (RE) / Construction Project Manager (CPM):** Representative of the Commissioner duly designated by the Commissioner to be his/her representative at the site of the work. (The RE/CPM may be a third-party consultant, including a Construction Management firm, retained by DDC)

**Safety Program:** Established by the Contractor that covers all operations of that Contractor and establishes the Contractor's overall safety policy, regulatory compliance plan and minimum safety standards. The Safety Program must be submitted prior to the commencement of work at the site and is subject to review and acceptance by the Construction Safety Unit.

**Safety Questionnaire:** Used by DDC to evaluate Contractor's current and past safety performance. It is required to be completed by all Contractors initially when submitting bids for Construction work, or when being pre-qualified and updated annually or as requested by the DDC.

**Site Safety Manager:** For certain projects, as defined in NYC Construction Codes – Title 28, the Contractor shall provide a Site Safety Manager with a Site Safety Manager License issued by the NYC Department of Building.

**Site Safety Plan:** A site-specific safety plan developed by the Contractor for a specific project. The Site Safety Plan must identify hazards associated with the project, and include specific safety procedures and training appropriate and necessary to complete the work. The Site Safety Plan must be submitted prior to the commencement of work at the site and is subject to review and acceptance by the Construction Safety Unit.

**Unsafe or Unhealthy Condition:** A condition that could be potentially hazardous to the health and safety of personnel or the public, and/or damaging to equipment, machinery, property or the environment.

**Weekly Safety Meetings:** Weekly documented jobsite safety meetings, given to all jobsite personnel by contractor, with the purpose of discussing general safety topics and job specific requirements encountered at the DDC work site.

**Work:** The construction required by the Contract Documents whether completed or partially completed, performed by the Contractor/ subcontractors. Work refers to the furnishing of labor, furnishing and incorporating materials and equipment into the construction and providing any service required by the Contract Documents to fulfill the Contractor's obligation to complete the Project.

#### IV. RESPONSIBILITIES

All persons who manage, perform, and provide support for construction projects shall conduct operations in compliance with the requirements identified in this Policy and all applicable governing regulatory agency requirements and guidelines pertaining to safety in construction.

##### A. DDC or CM Resident Engineer / Construction Project Manager

- Monitors the issuance of safety-related permits, approvals and drawings and maintains copies on site.
- Monitors construction-related work activities to confirm that they are conducted in accordance with DDC policies and all applicable regulations that pertain to construction safety.
- Maintains documentation and periodically attends weekly safety meetings and daily safety job briefings.
- Notifies the Construction Safety Unit and the ACCO's Insurance and Risk Management Unit of project-related accidents and emergencies, as per DDC's Construction Safety Emergency and Accident Notification and Response Protocol.
- Gathers facts related to all accidents and prepares DDC Construction Accident Report.

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- Notifies the Construction Safety Unit within two (2) hours of the start of an inspection by any outside regulatory agency personnel, including OSHA, NYC DOB or others and forwards a copy of the inspection report within three days of its receipt.
- Monitors the conditions at the site for conformance with the contractor's Site Safety Plan and DDC construction documents.
- Notifies the contractor and DDC in the event that any condition or activity exists that is not in compliance with the contractor's Site Safety Plan, applicable federal, state or local codes or any condition that presents a potential risk of injury to the public or workers or possible damage to property.
- Notifies DDC of any unsafe or unhealthy condition and directs the contractor to provide such labor, materials, equipment and supervision to abate such conditions.
- Escort and assist QA&CS Construction Safety Auditors during the field and record inspections.
- Reports emergency conditions to the Construction Safety Unit immediately.

**B. Contractors**

- Submit a completed Safety Questionnaire and other safety performance related documentation with its bid or as part of a pre-qualification package.
- Complete a written Job Hazard Analysis (JHA) that identifies safety hazards for project specific work tasks and hazard control methods. A written JHA shall be available at the site for reference and included in the Site Safety Plan submitted by the contractor.
- Submit a Site Safety Plan and Safety Program within 30 days from the Award Date or as otherwise directed. The Site Safety Plan and Safety Program are subject to review and acceptance by the Construction Safety Unit prior to the commencement of work at the site. The Site Safety Plan shall be revised and updated as necessary.
- Develop project specific safety procedures to protect general public during all construction activities for the duration of the project.
- Ensure that all employees are aware of the hazards associated with the project through documented formal and informal training and/or other communications. Conduct and document weekly safety meetings and daily job briefing sessions for the duration of the project. Documentation to be provided to the RE/CPM on a monthly basis.
- Name the Project Safety Representative and Project Safety Manager, if required. The Contractor will be required to identify the Project Safety Representative and Project Safety Manager in the Site Safety Plan. Resumes, outlining the qualification and experience for the Project Safety Representative and Project Safety Manager, shall be available upon request. DDC reserves the right to request that the Contractor replace any Project Safety Representative or Project Safety Manager for any reason at any time during the project.
- Name a Competent Person(s), The Contractor will be required to identify a Competent Person(s) in the Site Safety Plan.
- Comply with all mandated federal, state and local safety and health rules and regulations.
- Comply with all provisions of the Site Safety Plan.
- Conduct applicable safety training prior to the commencement of work at the site. All training records (OSHA 10-hour, flagger, scaffold, fall protection, confined space entry, etc.) shall be provided to the RE/CPM prior to mobilization, included in the Site Safety Plan, kept current during the course of the project, and available for review. Prior to performing any work on DDC project all employees shall have successfully completed, within the previous five calendar years, a 10 Hour OSHA construction safety course.
- As part of the Site Safety Plan, prepare a site specific programs and plans, such as MPT plan, steel erection plan, confined space program, fall protection plan, demolition plan, etc. (if not otherwise provided in the contract documents) and comply with all of its provisions.
- Conduct and document site-specific safety orientation for Contractor personnel to review the hazards associated with the project as identified in the Site Safety Plan and the specific safety procedures and

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controls that will be used to protect workers, the general public and property. The Project Safety Representative and/or Project Safety Manager will conduct this training prior to mobilization and provide documentation to the RE/CPM.

- Provide, replace and adequately maintain at or around the project site, suitable and sufficient signage, lights, barricades and enclosures (fences, sidewalk sheds, netting, bracing, etc.).
- Report unsafe or unhealthy conditions to the RE/CPM as soon as practical, but no more than 24 hours after discovery, and take prompt actions to remove or abate such conditions.
- Report any accidents involving injuries to workers or the general public, as well as property damage, to the RE/CPM within one (1) hour.
- Following an accident, the Contractor shall not remove or alter any equipment, structure, material, or evidence related to the accident. Exception: Immediate emergency procedures taken to secure structures, temporary construction, operations, or equipment that pose a continued imminent danger or facilitate assistance for persons who are trapped or who have sustained bodily injury.
- Notify the RE/CPM within one (1) hour of the start of an inspection by any outside regulatory agency personnel, including OSHA, NYC DOB or others.
- Maintain all records pertaining to all required compliance documents and accident and injury reports.
- Address DDC recommendations on safety, which shall in no way relieve the Contractor of its responsibilities for safety on the project. The Contractor has sole responsibility for safety.

#### V. SAFETY QUESTIONNAIRE

DDC requires that all Contractors provide information regarding their current and past safety performance and programs. This will be accomplished by the use of the DDC Safety Questionnaire. As a part of the bid submittal package, the contractor must submit a completed DDC Safety Questionnaire listing company workers' compensation experience modification rating and OSHA Incident Rates for the three (3) years prior to the date of the bid opening. DDC may request a Contractor to update its Questionnaire at any time or to provide more detailed information. The Contractor must provide the requested information within 15 days.

The following criteria will be used by DDC in reviewing the Contractor's responsibility, which will be based on the information provided on the questionnaire:

- Criteria 1: OSHA Injury and Illness Rates (I&IR) are no greater than the average for the industry (based on the most current Bureau of Labor Statistics data for the Contractors SIC code); and
- Criteria 2: Insurance workers compensation Experience Modification Rate (EMR) equal to or less than 1.0; and
- Criteria 3: Any willful violations issued by OSHA or NYC DOB within the last three (3) years; and
- Criteria 4: A fatality (worker or member of public) and injuries, requiring OSHA notification, experienced on or near Contractor's worksite within the last three (3) years; and
- Criteria 5: Past safety performance on DDC projects (accidents; status of safety program and site safety plan submittals; etc.)
- Criteria 6: OSHA violation history for the last three (3) years;
- Criteria 7: Contractor shall provide OSHA Injury and Illness Records (currently OSHA 300 and 300A Logs) for the last three (3) years.

If the Contractor fails to meet the basic criteria listed above, the Construction Safety Unit may request, through the ACCO, more details concerning the Contractor's safety experience. DDC may request the Contractor to provide copies of, among other things, accident investigation reports, OSHA records, OSHA and NYC DOB citations, EPA citations and written corrective action plan.

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**VI. SAFETY PROGRAM AND SITE SAFETY PLAN**

Within thirty (30) days from the Award Date, or as otherwise directed, the Contractor shall submit the following: (1) Safety Program, and (2) Site Safety Plan. The Safety Program shall set forth the Contractor's overall safety policy, regulatory compliance plan and minimum safety standards. The Site Safety Plan shall identify project work scope, safety hazards associated with the project tasks, and include specific safety procedures and training appropriate and necessary to complete the work. The Safety Program and the Site Safety Plan are subject to review and acceptance by the Construction Safety Unit prior to the commencement of work at the site. Failure by the Contractor to submit an acceptable Site Safety Plan and Safety Program shall be grounds for default.

**Safety Program:** Corporate Safety Program established by the Contractor that includes the Contractor's overall safety policy, regulatory compliance plan and basic safety procedures covering all aspects of construction operations, performed by the Contractor. The Safety Program shall be a written document with a separate section describing each element of the Safety Program. The Safety Program shall have at minimum the following elements applicable to the Contractor's operations:

- Responsibility and Organization – Contractor's company organization chart, including titles, names, contact information, roles and responsibilities for key personnel, etc.
- Safety Training Program – Contractor's corporate training program.
- Hazard Corrective Actions – Criteria for safety inspections, identification of safety non-compliances, implementation and verification of corrective actions, forms to document safety inspections results, etc.
- Accident/Exposure Investigation
- Recordkeeping and Reporting Injuries – Responsible staff; reporting and recording criteria; OSHA 300 and 300A form completion, etc.
- Fire Protection and Prevention Program
- Housekeeping
- Illumination
- Sanitation
- Personal Protective Equipment (PPE) – Company policy for the use of head protection, foot protection, hearing protection, eye and face protection, protective clothing, and any additional protective equipment based on work tasks; PPE inspection and replacement policy.
- Hazard Communication Program
- Employee Emergency Action Plan
- Protection of Underground Facilities and Utilities
- Ionizing/Nonionizing Radiation
- Material Handling, Storage, Use and Disposal
- Tools – Hand and Power
- Signs, Signals, and Barricades
- Scaffold – Local Law 52 requirements, installation, use, inspection, dismantling, training and general safety requirements.
- Welding and Cutting
- Electrical Safety
- Fall Protection
- Cranes, Derrick, Hoists, Elevators, Conveyors
- Excavation Safety
- Concrete and Masonry Construction
- Maintenance and Protection of Traffic
- Steel Erection
- Demolition
- Blasting and the Use of Explosives
- Stairways and Ladders

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- Toxic and Hazardous Substances
- Alcohol and Drug Abuse Policy
- Rodents and Vermin
- Occupational Noise Exposure
- Confined Space Program – General confined Space Program: training requirements, confined space hazard evaluation procedure, atmospheric testing procedure, confined space classification, permit-required procedure, communication procedure, rescue procedure, forms, etc.
- Construction Vehicles/Heavy Equipment
- Dust Control Procedures

**Site Safety Plan:** The Site Safety Plan shall be a written document and shall apply to all project specific Contractor and subcontractor operations, and shall have at a minimum, the following elements with each element described in a separate section (It may be necessary to modify the basic format for certain unique or high-risk projects, such as tunnels or high-rise construction):

- Project Work Scope – Detailed information regarding work tasks that will be performed by contractor and subcontractors under the project.
- Responsibility and Organization – Contractor's organization chart with responsible staff for the project, including titles, names, contact information, roles and responsibilities.
- Safety Training and Education – OSHA 10 Hours training, requirements for daily safety briefings and weekly safety meetings, any work task specific training, responsible staff for implementation of training program for the project.
- Job Hazard Analysis (JHA) – Project specific Job Hazard Analysis including work tasks, identified hazards, hazard control methods (administrative, engineering, PPE), contractor's name, project id, location, name and signature of a certifying person, hazard assessment date.
- Protection of Public
- Hazard Corrective Actions – Responsible staff, forms, frequency of safety inspections and implementation of corrective actions.
- Accident/Exposure Investigation – Accident/incident notification procedure of DDC project staff. Project specific procedures for accident investigation and implementation of corrective actions.
- First Aid and Medical Attention – Responsible staff, location and inspection of First Aid kit, directions to local hospitals; emergency telephone numbers.
- Project Specific Fire Protection and Prevention Program.
- Project Specific Illumination Procedure.
- Project Specific Sanitation Procedure.
- Personal Protective Equipment (PPE)
- Hazard Communication Program – Responsible staff; training; SDS records, project specific list of chemical; location of the program and SDS records.
- Means of Egress – Information regarding free and unobstructed egress from all parts of the building or structure; exit marking; maintenance of means of egress, etc.
- Employee Emergency Action Plan – Project specific: responsible staff, emergency alarm system, evacuation procedure, procedure to account for employees after evacuation, etc.
- Evacuation Plan – Project specific evacuation plan (drawing/scheme) with exists and evacuation routes.
- Protection of Underground Facilities and Utilities, including responsible staff.
- Ionizing/Nonionizing Radiation – Competent person, license and qualification requirements, type of radiation, employees exposure and protection, etc.
- Material Handling, Storage, Use and Disposal – Project specific information regarding material storage and disposal.
- Signs, Signals, and Barricades – Use of danger/warning signs, sidewalk closure, safety instruction signs, pedestrian fencing and barricades, etc.
- Scaffold – Project specific scaffold types, training, scaffold drawings, competent person, criteria for project specific scaffold, falling object protection.

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- Welding and Cutting – project specific procedure for welding and cutting, including all necessary safety requirements such as fire prevention, personal protective equipment, hot work permits, FDNY certificate requirements.
- Fall Protection – Project specific information regarding selected fall protection systems, fall protection plan.
- Cranes, Derrick, Hoists, Elevators, Conveyors – project specific equipment information including type, rated load capacity, manufacture specification requirements, competent person, exposure to falling load, inspection, recordkeeping, clearance requirements, communication procedure, ground lines, permits.
- Excavation Safety – Competent person, project specific protective system.
- Maintenance and Protection of Traffic Plan – Project specific MPT plan, flagmen training.
- Steel Erection – Site specific erection plan, requirements for applicable written notifications, competent person.
- Demolition – Engineering survey, including written evidence, disconnection of all effected utilities, identification of all hazardous chemicals, materials, gases, etc., floor openings, chutes, inspection and maintenance of all stairs/passageways, removal of materials/debris/structural elements, lock out/tag out, competent person.
- Blasting and the Use of Explosives – Project specific safety procedures, warning signs, training/qualification, transportation, storage and use of explosives, inspection.
- Toxic and Hazardous Substances – Safety procedures for substances to be used on project.
- Noise Mitigation Plan – Completed project specific Noise Mitigation Plan.
- Confined Space Program – Project specific Confined Space Program, responsible staff, training records, equipment information, rescue procedure, list of project specific confined spaces, forms.
- Construction Vehicles/Heavy Equipment – Type of construction vehicles/heavy equipment to be used on site.
- Dust Mitigation Plan – Completed project specific Dust Mitigation Plan.

The most critical component of the Site Safety Plan is the Job Hazard Analysis (JHA) section. The JHA form is a written document prepared by the contractor. The contractor must conduct a site and task assessment JHA to identify the major job steps and any potential safety or environmental hazards related to performance of the work, eliminate or implement controls for the potential hazards, and identify proper personal protective equipment for the task. The JHA shall be communicated to all contractor/subcontractor personnel on site.

The initial Job Hazard Assessment form shall be included in the contractor's Site Safety Plan and the current form shall be available at the construction site for reference.

Certain DDC programs, such as Job Order Contracting System (JOCs), may not necessarily require Site Safety Plans. The JOCs contractor shall submit a Safety Program. The Site Safety Plan requirement for the JOCs contractor will be determined by QA&CS based on a project work scope, construction activities and project location. In addition, certain DDC Operating Units may establish client-specific program or safety requirements. The contractor's Site Safety Plan must address such client-specific program or safety requirements.

## **VII. KICK-OFF MEETINGS/PRE-CONSTRUCTION AND SAFETY REVIEW**

RE/CPM shall invite QA&CS Construction Safety Unit to the construction kick-off meeting. A QA&CS representative will participate in this meeting with the Contractor and RE/CPM prior to the start of the project for the purpose of:

- A. Reviewing the safety issues detailed in the contract.
- B. Reviewing the Site Safety Plan.
- C. Reviewing any new issues or information that was not previously addressed.
- D. Discussing planned inspections and audits of the site by QA&CS personnel.

City of New York Department of Design and Construction: Safety Requirements  
Safety and Site Support- Quality Assurance and Construction Safety

**VIII. EVALUATION DURING WORK IN PROGRESS**

The Contractor's adherence to these Safety Requirements will be monitored throughout the project. This will be accomplished by the following:

- A. Use of a safety checklist by a representative of the Construction Safety Unit or other designated DDC representative or Consultant during regular, unannounced inspections of the job site. Field Exit Conferences will be held with the RE/CPM, Contractor Project Safety Representatives.
- B. The RE/CPM will continually monitor the safety and environmental performance of the contractor's employees and work methods. Deficiencies shall be brought to the attention of the contractor's representative on site for immediate correction. The DDC representative will maintain a written record of these deficiencies and have these records available upon request. Any critical deficiencies shall be immediately reported to QA&CS phone# (718) 391-1624 or (718) 391-1911.
- C. If the Contractor's safety performance during the project is not up to DDC standards (safety performance measure, accident/incident rate, etc.) the Director - QA&CS, or his/her designee will meet with the Contractor's Project Safety Representative and or Project Safety Manager, the DDC Project Manager, the RE/CPM, and the DDC Environmental Specialist (if environmental issues are involved). The purpose of this meeting is to 1) determine the level of non-compliance; 2) explain and clarify the safety/environmental provisions; 3) agree on a future course of action to correct the deficiencies.
- D. If the deficiencies continue to occur with inadequate attention by the contractor, this shall, among other remedies available, be grounds for default.
- E. The contractor shall within 1 hour inform the RE/CPM/CM of all accidents/incidents including all fatalities, any injuries to employees or members of the general public, and property damage (e.g., structural damage, equipment rollovers, utility damage, loads dropped from crane). The RE/CPM shall notify the Construction Safety Unit as per DDC's Construction Safety Emergency and Accident Notification and Response Protocol and shall maintain a record of all contractor accidents/incidents for the project.
- F. The Construction Safety Unit shall be notified within two (2) hours of the start of any NYS-DOL/ NYC-COSH/ OSHA/ EPA inspections.

**IX. SAFETY PERFORMANCE EVALUATION**

The contractor's safety record, including accident/incident history and DDC safety inspection results, will be considered as part of the Contractor's performance evaluation at the conclusion of the project. Poor safety performance during the course of the project shall be a reason to rate a Contractor unsatisfactory which may be reflected in the City's Vendex system and will be considered for future procurement actions as set forth in the City's Procurement Policy Board Rules.



**NEW YORK CITY STANDARD CONSTRUCTION CONTRACT (DEC. 2013)**  
**INSURANCE RIDER**

The following provisions supersede the corresponding provisions in the December 2013 version of the New York City Standard Construction Contract:

1. Section 22.1.1(c) provides as follows:

22.1.1(c) If the **Work** requires a permit from the Department of Buildings pursuant to 1 RCNY Section 101-08, the **Contractor** shall provide Commercial General Liability Insurance with limits of at least those required by 1 RCNY section 101-08 or greater limits provided by the Agency in Schedule A. If the Work does not require such a permit, the minimum limits shall be those provided for in Schedule A.

2. Section 22.3.3 provides as follows:

22.3.3 For policies provided pursuant to all of Article 22.1 other than Article 22.1.2, the **Contractor** shall submit one or more Certificates of Insurance on forms acceptable to the **Commissioner**. All such Certificates of Insurance shall certify (a) the issuance and effectiveness of such policies of insurance, each with the specified minimum limits (b) for insurance secured pursuant to Article 22.1.1 that the City and any other entity specified in Schedule A is an Additional Insured thereunder; (c) in the event insurance is required pursuant to Article 22.1.6 and/or Article 22.1.7, that the City is an Additional Insured thereunder; and (d) the company code issued to the insurance company by the National Association of Insurance Commissioners (the NAIC number). All such Certificates of Insurance shall be accompanied by the required additional insured endorsements and either a duly executed "Certification by Insurance Broker or Agent" in the form contained in Part III of Schedule A or copies of all policies referenced in such Certificate of Insurance as certified by an authorized representative of the issuing insurance carrier. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

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**CITY OF NEW YORK**  
**STANDARD CONSTRUCTION CONTRACT**

**March 2017**

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**CITY OF NEW YORK  
STANDARD CONSTRUCTION CONTRACT**

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**WITNESSETH:**

The parties, in consideration of the mutual agreements contained herein, agree as follows:

**CHAPTER I: THE CONTRACT AND DEFINITIONS**

**ARTICLE 1. THE CONTRACT**

1.1 Except for titles, subtitles, headings, running headlines, tables of contents and indices (all of which are printed herein merely for convenience), the following, except for such portions thereof as may be specifically excluded, shall be deemed to be part of this **Contract**:

1.1.1 All provisions required by law to be inserted in this **Contract**, whether actually inserted or not;

1.1.2 The Contract Drawings and Specifications;

1.1.3 The General Conditions and Special Conditions, if any;

1.1.4 The **Contract**;

1.1.5 The Information for Bidders; Request for Proposals; Notice of Solicitation and Proposal For Bids; Bid or Proposal, and, if used, the Bid Booklet;

1.1.6 All Addenda issued prior to the receipt of the bids; the Notice of Award; Performance and Payment Bonds, if required; and the Notice to Proceed or the Order to Work.

1.2 Should any conflict occur in or between the Drawings and Specifications, the **Contractor** shall be deemed to have estimated the most expensive way of doing the **Work**, unless the **Contractor** shall have asked for and obtained a decision in writing from the **Commissioner** of the **Agency** that is entering into this **Contract**, before the submission of its bid, as to what shall govern.

**ARTICLE 2. DEFINITIONS**

2.1 The following words and expressions, or pronouns used in their stead, shall, wherever they appear in this Contract, be construed as follows, unless a different meaning is clear from the context:

2.1.1 "**Addendum**" or "**Addenda**" shall mean the additional Contract provisions and/or technical clarifications issued in writing by the Commissioner prior to the receipt of bids.

2.1.2 "**Agency**" shall mean a city, county, borough or other office, position, department, division, bureau, board or commission, or a corporation, institution or agency of government, the expenses of which are paid in whole or in part from the City treasury.

2.1.3 "**Agency Chief Contracting Officer**" (**ACCO**) shall mean a person delegated authority by the Commissioner to organize and supervise the procurement activity of subordinate Agency staff in conjunction with the CCPO, or his/her duly authorized representative.

2.1.4 **"Allowance"** shall mean a sum of money which the Agency may include in the total amount of the Contract for such specific contingencies as the Agency believes may be necessary to complete the Work, e.g., lead or asbestos remediation, and for which the Contractor will be paid on the basis of stipulated unit prices or a formula set forth in the Contract or negotiated between the parties provided, however, that if the Contractor is not directed to use the Allowance, the Contractor shall have no right to such money and it shall be deducted from the total amount of the Contract.

2.1.5 **"City"** shall mean the City of New York.

2.1.6 **"City Chief Procurement Officer" (CCPO)** shall mean a person delegated authority by the Mayor to coordinate and oversee the procurement activity of Mayoral agency staff, including the ACCO and any offices which have oversight responsibility for the procurement of construction, or his/her duly authorized representative.

2.1.7 **"Commissioner"** shall mean the head of the Agency that has entered into this Contract, or his/her duly authorized representative.

2.1.8 **"Comptroller"** shall mean the Comptroller of the City of New York.

2.1.9 **"Contract"** or **"Contract Documents"** shall mean each of the various parts of the contract referred to in Article 1 hereof, both as a whole and severally.

2.1.10 **"Contract Drawings"** shall mean only those drawings specifically entitled as such and listed in the Specifications or in any Addendum, or any drawings furnished by the Commissioner, pertaining or supplemental thereto.

2.1.11 **"Contract Work"** shall mean everything required to be furnished and done by the Contractor by any one or more of the parts of the Contract referred to in Article 1, except Extra Work as hereinafter defined.

2.1.12 **"Contractor"** shall mean the entity which executed this Contract, whether a corporation, firm, partnership, joint venture, individual, or any combination thereof, and its, their, his/her successors, personal representatives, executors, administrators, and assigns, and any person, firm, partnership, joint venture, individual, or corporation which shall at any time be substituted in the place of the Contractor under this Contract.

2.1.13 **"Days"** shall mean calendar days, except where otherwise specified.

2.1.14 **"Engineer"** or **"Architect"** or **"Project Manager"** shall mean the person so designated in writing by the Commissioner in the Notice to Proceed or the Order to Work to act as such in relation to this Contract, including a private Architect or Engineer or Project Manager, as the case may be. Subject to written approval by the Commissioner, the Engineer, Architect or Project Manager may designate an authorized representative.

2.1.15 **"Engineering Audit Officer" (EAO)** shall mean the person so designated by the Commissioner to perform responsible auditing functions hereunder.

2.1.16 **"Extra Work"** shall mean Work other than that required by the Contract at the time of award which is authorized by the Commissioner pursuant to Chapter VI of this Contract.

2.1.17 **"Federal-Aid Contract"** shall mean a contract in which the United States (federal) Government provides financial funding as so designated in the Information for Bidders.

2.1.18 **"Final Acceptance"** shall mean final written acceptance of all the Work by the Commissioner, a copy of which shall be sent to the Contractor.

2.1.19 **"Final Approved Punch List"** shall mean a list, approved pursuant to Article 14.2.2, specifying those items of Work to be completed by the Contractor after Substantial Completion and dates for the completion of each item of Work.

2.1.20 **"Law"** or **"Laws"** shall mean the Constitution of the State of New York, the New York City Charter, the New York City Administrative Code, a statute of the United States or of the State of New York, a local law of the City of New York, any ordinance, rule or regulation having the force of law, or common law.

2.1.21 **"Materialman"** shall mean any corporation, firm, partnership, joint venture, or individual, other than employees of the Contractor, who or which contracts with the Contractor or any Subcontractor, to fabricate or deliver, or who actually fabricates or delivers, plant, materials or equipment to be incorporated in the Work.

2.1.22 **"Means and Methods of Construction"** shall mean the labor, materials, temporary structures, tools, plant, and construction equipment, and the manner and time of their use, necessary to accomplish the result intended by this Contract.

2.1.23 **"Notice to Proceed"** or **"Order to Work"** shall mean the written notice issued by the Commissioner specifying the time for commencement of the Work and the Engineer, Architect or Project Manager.

2.1.24 **"Other Contractor(s)"** shall mean any contractor (other than the entity which executed this Contract or its Subcontractors) who or which has a contract with the City for work on or adjacent to the building or Site of the Work.

2.1.25 **"Payroll Taxes"** shall mean State Unemployment Insurance (SUI), Federal Unemployment Insurance (FUI), and payments pursuant to the Federal Insurance Contributions Act (FICA).

2.1.26 **"Project"** shall mean the public improvement to which this Contract relates.

2.1.27 **"Procurement Policy Board" (PPB)** shall mean the Agency of the City of New York whose function is to establish comprehensive and consistent procurement policies and rules which shall have broad application throughout the City.

2.1.28 **"Required Quantity"** in a unit price Contract shall mean the actual quantity of any item of Work or materials which is required to be performed or furnished in order to comply with the Contract.

2.1.29 **"Resident Engineer"** shall mean the representative of the Commissioner duly designated by the Commissioner to be his/her representative at the site of the Work.

2.1.30 **"Site"** shall mean the area upon or in which the Contractor's operations are carried on, and such other areas adjacent thereto as may be designated as such by the Engineer.

2.1.31 **"Small Tools"** shall mean items that are ordinarily required for a worker's job function, including but not limited to, equipment that ordinarily has no licensing, insurance or substantive storage costs associated with it; such as circular and chain saws, impact drills, threaders, benders, wrenches, socket tools, etc.

2.1.32 **"Specifications"** shall mean all of the directions, requirements, and standards of performance applying to the Work as hereinafter detailed and designated under the Specifications.

2.1.33 **"Subcontractor"** shall mean any person, firm or corporation, other than employees of the Contractor, who or which contracts with the Contractor or with its subcontractors to furnish, or actually furnishes labor, or labor and materials, or labor and equipment, or superintendence, supervision and/or management at the Site. Wherever the word Subcontractor appears, it shall also mean sub-Subcontractor.

2.1.34 **"Substantial Completion"** shall mean the written determination by the Engineer that the Work required under this Contract is substantially, but not entirely, complete and the approval of the **Final Approved Punch List**.

2.1.35 **"Work"** shall mean all services required to complete the Project in accordance with the Contract Documents, including without limitation, labor, material, superintendence, management, administration, equipment, and incidentals, and obtaining any and all permits, certifications and licenses as may be necessary and required to complete the Work, and shall include both Contract Work and Extra Work.

## **CHAPTER II: THE WORK AND ITS PERFORMANCE**

### **ARTICLE 3. CHARACTER OF THE WORK**

3.1 Unless otherwise expressly provided in the **Contract Drawings, Specifications, and Addenda**, the **Work** shall be performed in accordance with the best modern practice, utilizing, unless otherwise specified in writing, new and unused materials of standard first grade quality and workmanship and design of the highest quality, to the satisfaction of the **Commissioner**.

### **ARTICLE 4. MEANS AND METHODS OF CONSTRUCTION**

4.1 Unless otherwise expressly provided in the **Contract Drawings, Specifications, and Addenda**, the **Means and Methods of Construction** shall be such as the **Contractor** may choose; subject, however, to the **Engineer's** right to reject the **Means and Methods of Construction** proposed by the **Contractor** which in the opinion of the **Engineer**:

4.1.1 Will constitute or create a hazard to the **Work**, or to persons or property; or

4.1.2 Will not produce finished **Work** in accordance with the terms of the **Contract**; or

4.1.3 Will be detrimental to the overall progress of the **Project**.

4.2 The **Engineer's** approval of the **Contractor's Means and Methods of Construction**, or his/her failure to exercise his/her right to reject such means or methods, shall not relieve the **Contractor**

of its obligation to complete the **Work** as provided in this **Contract**; nor shall the exercise of such right to reject create a cause of action for damages.

## **ARTICLE 5. COMPLIANCE WITH LAWS**

5.1 The **Contractor** shall comply with all **Laws** applicable to this **Contract** and to the **Work** to be done hereunder.

5.2 Procurement Policy Board Rules: This **Contract** is subject to the Rules of the **PPB** ("**PPB Rules**") in effect at the time of the bid opening for this **Contract**. In the event of a conflict between the **PPB Rules** and a provision of this **Contract**, the **PPB Rules** shall take precedence.

5.3 Noise Control Code provisions.

5.3.1 In accordance with the provisions of Section 24-216(b) of the Administrative Code of the **City** ("**Administrative Code**"), Noise Abatement Contract Compliance, devices and activities which will be operated, conducted, constructed or manufactured pursuant to this **Contract** and which are subject to the provisions of the **City Noise Control Code** shall be operated, conducted, constructed, or manufactured without causing a violation of the **Administrative Code**. Such devices and activities shall incorporate advances in the art of noise control development for the kind and level of noise emitted or produced by such devices and activities, in accordance with regulations issued by the **Commissioner** of the **City Department of Environmental Protection**.

5.3.2 The **Contractor** agrees to comply with Section 24-219 of the Administrative Code and implementing rules codified at 15 Rules of the City of New York ("**RCNY**") Section 28-100 *et seq.* In accordance with such provisions, the **Contractor**, if the **Contractor** is the responsible party under such regulations, shall prepare and post a Construction Noise Mitigation Plan at each **Site**, in which the **Contractor** shall certify that all construction tools and equipment have been maintained so that they operate at normal manufacturers operating specifications. If the **Contractor** cannot make this certification, it must have in place an Alternative Noise Mitigation Plan approved by the **City Department of Environmental Protection**. In addition, the **Contractor's** certified Construction Noise Mitigation Plan is subject inspection by the **City Department of Environmental Protection** in accordance with Section 28-101 of Title 15 of **RCNY**. No **Contract Work** may take place at a **Site** unless there is a Construction Noise Mitigation Plan or approved Alternative Noise Mitigation Plan in place. In addition, the **Contractor** shall create and implement a noise mitigation training program. Failure to comply with these requirements may result in fines and other penalties pursuant to the applicable provisions of the **Administrative Code** and **RCNY**.

5.4 Ultra Low Sulfur Diesel Fuel: In accordance with the provisions of Section 24-163.3 of the **Administrative Code**, the **Contractor** specifically agrees as follows:

5.4.1 Definitions. For purposes of this Article 5.4, the following definitions apply:

5.4.1(a) "**Contractor**" means any person or entity that enters into a Public Works Contract with a **City Agency**, or any person or entity that enters into an agreement with such person or entity, to perform work or provide labor or services related to such Public Works Contract.

5.4.1(b) "Motor Vehicle" means any self-propelled vehicle designed for transporting persons or property on a street or highway.

5.4.1(c) "Nonroad Engine" means an internal combustion engine (including the fuel system) that is not used in a Motor Vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under Section 7411 or Section 7521 of Title 42 of the United States Code, except that this term shall apply to internal combustion engines used to power generators, compressors or similar equipment used in any construction program or project.

5.4.1(d) "Nonroad Vehicle" means a vehicle that is powered by a Nonroad Engine, fifty (50) horsepower and greater, and that is not a Motor Vehicle or a vehicle used solely for competition, which shall include, but not be limited to, excavators, backhoes, cranes, compressors, generators, bulldozers, and similar equipment, except that this term shall not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five (65) horsepower or less and that are not used in any construction program or project.

5.4.1(e) "Public Works Contract" means a contract with a **City Agency** for a construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge; a contract with a **City Agency** for the preparation for any construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge; or a contract with a **City Agency** for any final work involved in the completion of any construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge.

5.4.1(f) "Ultra Low Sulfur Diesel Fuel" means diesel fuel that has a sulfur content of no more than fifteen parts per million (15 ppm).

#### 5.4.2 Ultra Low Sulfur Diesel Fuel

5.4.2(a) All **Contractors** shall use Ultra Low Sulfur Diesel Fuel in diesel-powered Nonroad Vehicles in the performance of this **Contract**.

5.4.2(b) Notwithstanding the requirements of Article 5.4.2(a), **Contractors** may use diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) to fulfill the requirements of this Article 5.4.2, where the Commissioner of the **City Department of Environmental Protection** ("DEP Commissioner") has issued a determination that a sufficient quantity of Ultra Low Sulfur Diesel Fuel is not available to meet the needs of **Agencies** and **Contractors**. Any such determination shall expire after six (6) months unless renewed.

5.4.2(c) **Contractors** shall not be required to comply with this Article 5.4.2 where the **City Agency** letting this **Contract** makes a written finding, which is approved, in writing, by the DEP Commissioner, that a sufficient quantity of Ultra Low Sulfur Diesel Fuel, or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) is not available to meet the requirements of Section 24-163.3 of the Administrative Code, provided that such **Contractor** in its fulfillment of the

requirements of this **Contract**, to the extent practicable, shall use whatever quantity of Ultra Low Sulfur Diesel Fuel or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) is available. Any finding made pursuant to this Article 5.4.2(c) shall expire after sixty (60) **Days**, at which time the requirements of this Article 5.4.2 shall be in full force and effect unless the **City Agency** renews the finding in writing and such renewal is approved by the DEP Commissioner.

5.4.2(d) **Contractors** may check on determinations and approvals issued by the DEP Commissioner pursuant to Section 24-163.3 of the Administrative Code, if any, at [www.dep.nyc.gov](http://www.dep.nyc.gov) or by contacting the **City Agency** letting this **Contract**.

5.4.2(e) The requirements of this Article 5.4.2 do not apply where they are precluded by federal or State funding requirements or where the **Contract** is an emergency procurement.

#### 5.4.3 Best Available Technology

5.4.3(a) All **Contractors** shall utilize the best available technology for reducing the emission of pollutants for diesel-powered Nonroad Vehicles in the performance of this **Contract**. For determinations of best available technology for each type of diesel-powered Nonroad Vehicle, **Contractors** shall comply with the regulations of the City Department of Environmental Protection, as and when adopted, Chapter 14 of Title 15 of the Rules of the City of New York (RCNY). The **Contractor** shall fully document all steps in the best available technology selection process and shall furnish such documentation to the **City Agency** or the DEP Commissioner upon request. The **Contractor** shall retain all documentation generated in the best available technology selection process for as long as the selected best available technology is in use.

5.4.3(b) No **Contractor** shall be required to replace best available technology for reducing the emission of pollutants or other authorized technology utilized for a diesel-powered Nonroad Vehicle in accordance with the provisions of this Article 5.4.3 within three (3) years of having first utilized such technology for such vehicle.

5.4.3(c) This Article 5.4.3 shall not apply to any vehicle used to satisfy the requirements of a specific Public Works Contract for fewer than twenty (20) **Days**.

5.4.3(d) The **Contractor** shall not be required to comply with this Article 5.4.3 with respect to a diesel-powered Nonroad Vehicle under the following circumstances:

5.4.3(d)(i) Where the **City Agency** makes a written finding, which is approved, in writing, by the DEP Commissioner, that the best available technology for reducing the emission of pollutants as required by this Article 5.4.3 is unavailable for such vehicle, the **Contractor** shall use whatever technology for reducing the emission of pollutants, if any, is available and appropriate for such vehicle.

5.4.3(d)(ii) Where the DEP Commissioner has issued a written waiver based upon the **Contractor** having demonstrated to the DEP Commissioner that the use of the best available technology for reducing the emission of pollutants might endanger the operator of such vehicle or those working near such vehicle, due to engine malfunction, the **Contractor** shall use whatever technology for

reducing the emission of pollutants, if any, is available and appropriate for such vehicle, which would not endanger the operator of such vehicle or those working near such vehicle.

5.4.3(d)(iii) In determining which technology to use for the purposes of Articles 5.4.3(d)(i) and 5.4.3(d)(ii) above, the **Contractor** shall primarily consider the reduction in emissions of particulate matter and secondarily consider the reduction in emissions of nitrogen oxides associated with the use of such technology, which shall in no event result in an increase in the emissions of either such pollutant.

5.4.3(d)(iv) The **Contractor** shall submit requests for a finding or a waiver pursuant to this Article 5.4.3(d) in writing to the DEP Commissioner, with a copy to the **ACCO** of the **City Agency** letting this **Contract**. Any finding or waiver made or issued pursuant to Articles 5.4.3(d)(i) and 5.4.3(d)(ii) above shall expire after one hundred eighty (180) **Days**, at which time the requirements of Article 5.4.3(a) shall be in full force and effect unless the **City Agency** renews the finding, in writing, and the DEP Commissioner approves such finding, in writing, or the DEP Commissioner renews the waiver, in writing.

5.4.3(e) The requirements of this Article 5.4.3 do not apply where they are precluded by federal or State funding requirements or where the **Contract** is an emergency procurement.

5.4.4 Section 24-163 of the Administrative Code. The **Contractor** shall comply with Section 24-163 of the Administrative Code related to the idling of the engines of motor vehicles while parking.

#### 5.4.5 Compliance

5.4.5(a) The **Contractor's** compliance with Article 5.4 may be independently monitored. If it is determined that the **Contractor** has failed to comply with any provision of Article 5.4, any costs associated with any independent monitoring incurred by the **City** shall be reimbursed by the **Contractor**.

5.4.5(b) Any **Contractor** who violates any provision of Article 5.4, except as provided in Article 5.4.5(c) below, shall be liable for a civil penalty between the amounts of one thousand (\$1,000) and ten thousand (\$10,000) dollars, in addition to twice the amount of money saved by such **Contractor** for failure to comply with Article 5.4.

5.4.5(c) No **Contractor** shall make a false claim with respect to the provisions of Article 5.4 to a **City Agency**. Where a **Contractor** has been found to have done so, such **Contractor** shall be liable for a civil penalty of twenty thousand (\$20,000) dollars, in addition to twice the amount of money saved by such **Contractor** in association with having made such false claim.

#### 5.4.6 Reporting

5.4.6(a) For all Public Works Contracts covered by this Article 5.4, the **Contractor** shall report to the **City Agency** the following information:



5.4.6(a)(i) The total number of diesel-powered Nonroad Vehicles used to fulfill the requirements of this Public Works Contract;

5.4.6(a)(ii) The number of such Nonroad Vehicles that were powered by Ultra Low Sulfur Diesel Fuel;

5.4.6(a)(iii) The number of such Nonroad Vehicles that utilized the best available technology for reducing the emission of pollutants, including a breakdown by vehicle model and the type of technology;

5.4.6(a)(iv) The number of such Nonroad Vehicles that utilized such other authorized technology in accordance with Article 5.4.3, including a breakdown by vehicle model and the type of technology used for each such vehicle;

5.4.6(a)(v) The locations where such Nonroad Vehicles were used; and

5.4.6(a)(vi) Where a determination is in effect pursuant to Article 5.4.2(b) or 5.4.2(c), detailed information concerning the **Contractor's** efforts to obtain Ultra Low Sulfur Diesel Fuel or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm).

5.4.6(b) The **Contractor** shall submit the information required by Article 5.4.6(a) at the completion of **Work** under the Public Works Contract and on a yearly basis no later than August 1 throughout the term of the Public Works Contract. The yearly report shall cover **Work** performed during the preceding fiscal year (July 1 - June 30).

5.5 Ultra Low Sulfur Diesel Fuel. In accordance with the Coordinated Construction Act for Lower Manhattan, as amended:

5.5.1 Definitions. For purposes of this Article 5.5, the following definitions apply:

5.5.1(a) "Lower Manhattan" means the area to the south of and within the following lines: a line beginning at a point where the United States pierhead line in the Hudson River as it exists now or may be extended would intersect with the southerly line of West Houston Street in the Borough of Manhattan extended, thence easterly along the southerly side of West Houston Street to the southerly side of Houston Street, thence easterly along the southerly side of Houston Street to the southerly side of East Houston Street, thence northeasterly along the southerly side of East Houston Street to the point where it would intersect with the United States pierhead line in the East River as it exists now or may be extended, including tax lots within or immediately adjacent thereto.

5.5.1(b) "Lower Manhattan Redevelopment Project" means any project in Lower Manhattan that is funded in whole or in part with federal or State funding, or any project intended to improve transportation between Lower Manhattan and the two air terminals in the City known as LaGuardia Airport and John F. Kennedy International Airport, or between Lower Manhattan and the air terminal in Newark known as Newark Liberty International Airport, and that is funded in whole or in part with federal funding.

5.5.1(c) "Nonroad Engine" means an internal combustion engine (including the fuel system) that is not used in a Motor Vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under Section 7411 or Section 7521 of Title 42 of the United States Code, except that this term shall apply to internal combustion engines used to power generators, compressors or similar equipment used in any construction program or project.

5.5.1(d) "Nonroad Vehicle" means a vehicle that is powered by a Nonroad Engine, fifty (50) horsepower (HP) and greater, and that is not a Motor Vehicle or a vehicle used solely for competition, which shall include, but not be limited to, excavators, backhoes, cranes, compressors, generators, bulldozers, and similar equipment, except that this terms shall not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five (65) HP or less and that are not used in any construction program or project.

5.5.1(e) "Ultra Low Sulfur Diesel Fuel" means diesel fuel that has a sulfur content of no more than fifteen parts per million (15 ppm).

5.5.2 Requirements. **Contractors** and **Subcontractors** are required to use only Ultra Low Sulfur Diesel Fuel to power the diesel-powered Nonroad Vehicles with engine HP rating of fifty (50) HP and above used on a Lower Manhattan Redevelopment Project and, where practicable, to reduce the emission of pollutants by retrofitting such Nonroad Vehicles with oxidation catalysts, particulate filters, or technology that achieves lowest particulate matter emissions.

5.6 Pesticides. In accordance with Section 17-1209 of the Administrative Code, to the extent that the **Contractor** or any **Subcontractor** applies pesticides to any property owned or leased by the **City**, the **Contractor**, and any **Subcontractor** shall comply with Chapter 12 of the Administrative Code.

5.7 Waste Treatment, Storage, and Disposal Facilities and Transporters. In connection with the **Work**, the **Contractor** and any **Subcontractor** shall use only those waste treatment, storage, and disposal facilities and waste transporters that possess the requisite license, permit or other governmental approval necessary to treat, store, dispose, or transport the waste, materials or hazardous substances.

5.8 Environmentally Preferable Purchasing. The **Contractor** shall ensure that products purchased or leased by the **Contractor** or any **Subcontractor** for the **Work** that are not specified by the **City** or are submitted as equivalents to a product specified by the **City** comply with the requirements of the New York City Environmentally Preferable Purchasing Program contained in Chapter 11 of Title 43 of the RCNY, pursuant to Chapter 3 of Title 6 of the Administrative Code.

## **ARTICLE 6. INSPECTION**

6.1 During the progress of the **Work** and up to the date of **Final Acceptance**, the **Contractor** shall at all times afford the representatives of the **City** every reasonable, safe, and proper facility for inspecting all **Work** done or being done at the **Site** and also for inspecting the manufacture or preparation of materials and equipment at the place of such manufacture or preparation.

6.2 The **Contractor's** obligation hereunder shall include the uncovering or taking down of finished **Work** and its restoration thereafter; provided, however, that the order to uncover, take down and restore shall be in writing, and further provided that if **Work** thus exposed proves satisfactory, and if the **Contractor** has complied with Article 6.1, such uncovering or taking down and restoration shall be

considered an item of **Extra Work** to be paid for in accordance with the provisions of Article 26. If the **Work** thus exposed proves unsatisfactory, the **City** has no obligation to compensate the **Contractor** for the uncovering, taking down or restoration.

6.3 Inspection and approval by the **Commissioner**, the **Engineer**, **Project Manager**, or **Resident Engineer**, of finished **Work** or of **Work** being performed, or of materials and equipment at the place of manufacture or preparation, shall not relieve the **Contractor** of its obligation to perform the **Work** in strict accordance with the **Contract**. Finished or unfinished **Work** not found to be in strict accordance with the **Contract** shall be replaced as directed by the **Engineer**, even though such **Work** may have been previously approved and paid for. Such corrective **Work** is **Contract Work** and shall not be deemed **Extra Work**.

6.4 Rejected **Work** and materials shall be promptly taken down and removed from the **Site**, which must at all times be kept in a reasonably clean and neat condition.

#### **ARTICLE 7. PROTECTION OF WORK AND OF PERSONS AND PROPERTY; NOTICES AND INDEMNIFICATION**

7.1 During the performance of the **Work** and up to the date of **Final Acceptance**, the **Contractor** shall be under an absolute obligation to protect the finished and unfinished **Work** against any damage, loss, injury, theft and/or vandalism and in the event of such damage, loss, injury, theft and/or vandalism, it shall promptly replace and/or repair such **Work** at the **Contractor's** sole cost and expense, as directed by the **Resident Engineer**. The obligation to deliver finished **Work** in strict accordance with the **Contract** prior to **Final Acceptance** shall be absolute and shall not be affected by the **Resident Engineer's** approval of, or failure to prohibit, the **Means and Methods of Construction** used by the **Contractor**.

7.2 During the performance of the **Work** and up to the date of **Final Acceptance**, the **Contractor** shall take all reasonable precautions to protect all persons and the property of the **City** and of others from damage, loss or injury resulting from the **Contractor's**, and/or its **Subcontractors'** operations under this **Contract**. The **Contractor's** obligation to protect shall include the duty to provide, place or replace, and adequately maintain at or about the **Site** suitable and sufficient protection such as lights, barricades, and enclosures.

7.3 The **Contractor** shall comply with the notification requirements set forth below in the event of any loss, damage or injury to **Work**, persons or property, or any accidents arising out of the operations of the **Contractor** and/or its **Subcontractors** under this **Contract**.

7.3.1 The **Contractor** shall make a full and complete report in writing to the **Resident Engineer** within three (3) **Days** after the occurrence.

7.3.2 The **Contractor** shall also send written notice of any such event to all insurance carriers that issued potentially responsive policies (including commercial general liability insurance carriers for events relating to the **Contractor's** own employees) no later than twenty (20) days after such event and again no later than twenty (20) days after the initiation of any claim and/or action resulting therefrom. Such notice shall contain the following information: the number of the insurance policy, the name of the Named Insured, the date and location of the incident, and the identity of the persons injured or property damaged. For any policy on which the **City** and/or the **Engineer**, **Architect**, or **Project Manager** are Additional Insureds, such notice shall expressly specify that "this notice is

being given on behalf of the City of New York as Additional Insured, such other Additional Insureds, as well as the Named Insured.”

7.3.2(a) Whenever such notice is sent under a policy on which the **City** is an Additional Insured, the **Contractor** shall provide copies of the notice to the **Comptroller**, the **Commissioner** and the **City Corporation Counsel**. The copy to the **Comptroller** shall be sent to the Insurance Unit, NYC Comptroller’s Office, 1 Centre Street – Room 1222, New York, New York, 10007. The copy to the **Commissioner** shall be sent to the address set forth in Schedule A of the General Conditions. The copy to the **City Corporation Counsel** shall be sent to Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.

7.3.2(b) If the **Contractor** fails to provide any of the foregoing notices to any appropriate insurance carrier(s) in a timely and complete manner, the **Contractor** shall indemnify the **City** for all losses, judgments, settlements, and expenses, including reasonable attorneys’ fees, arising from an insurer’s disclaimer of coverage citing late notice by or on behalf of the **City**.

7.4 To the fullest extent permitted by law, the **Contractor** shall defend, indemnify, and hold the **City**, its employees, and officials (the “Indemnitees”) harmless against any and all claims (including but not limited to claims asserted by any employee of the **Contractor** and/or its **Subcontractors**) and costs and expenses of whatever kind (including but not limited to payment or reimbursement of attorneys’ fees and disbursements) allegedly arising out of or in any way related to the operations of the **Contractor** and/or its **Subcontractors** in the performance of this **Contract** or from the **Contractor’s** and/or its **Subcontractors’** failure to comply with any of the provisions of this **Contract** or of the **Law**. Such costs and expenses shall include all those incurred in defending the underlying claim and those incurred in connection with the enforcement of this Article 7.4 by way of cross-claim, third-party claim, declaratory action or otherwise. The parties expressly agree that the indemnification obligation hereunder contemplates (1) full indemnity in the event of liability imposed against the Indemnitees without negligence and solely by reason of statute, operation of **Law** or otherwise; and (2) partial indemnity in the event of any actual negligence on the part of the Indemnitees either causing or contributing to the underlying claim (in which case, indemnification will be limited to any liability imposed over and above that percentage attributable to actual fault whether by statute, by operation of **Law**, or otherwise). Where partial indemnity is provided hereunder, all costs and expenses shall be indemnified on a pro rata basis.

7.4.1 Indemnification under Article 7.4 or any other provision of the **Contract** shall operate whether or not **Contractor** or its **Subcontractors** have placed and maintained the insurance specified under Article 22.

7.5 The provisions of this Article 7 shall not be deemed to create any new right of action in favor of third parties against the **Contractor** or the **City**.

### CHAPTER III: TIME PROVISIONS

#### **ARTICLE 8. COMMENCEMENT AND PROSECUTION OF THE WORK**

8.1 The **Contractor** shall commence the **Work** on the date specified in the **Notice to Proceed** or the **Order to Work**. The time for performance of the **Work** under the **Contract** shall be computed from

the date specified in the **Notice to Proceed** or the **Order to Work**. **TIME BEING OF THE ESSENCE** to the **City**, the **Contractor** shall thereafter prosecute the **Work** diligently, using such **Means and Methods of Construction** as are in accord with Article 4 herein and as will assure its completion not later than the date specified in this Contract, or on the date to which the time for completion may be extended.

#### **ARTICLE 9. PROGRESS SCHEDULES**

9.1 To enable the **Work** to be performed in an orderly and expeditious manner, the **Contractor**, within fifteen (15) **Days** after the **Notice to Proceed** or **Order to Work**, unless otherwise directed by the **Engineer**, shall submit to the **Engineer** a proposed progress schedule based on the Critical Path Method in the form of a bar graph or in such other form as specified by the **Engineer**, and monthly cash flow requirements, showing:

9.1.1 The anticipated time of commencement and completion of each of the various operations to be performed under this **Contract**; and

9.1.2 The sequence and interrelation of each of these operations with the others and with those of other related contracts; and

9.1.3 The estimated time required for fabrication or delivery, or both, of all materials and equipment required for the **Work**, including the anticipated time for obtaining required approvals pursuant to Article 10; and

9.1.4 The estimated amount in dollars the **Contractor** will claim on a monthly basis.

9.2 The proposed schedule shall be revised as directed by the **Engineer**, until finally approved by the **Engineer**, and after such approval, subject to the provisions of Article 11, shall be strictly adhered to by the **Contractor**.

9.3 If the **Contractor** shall fail to adhere to the approved progress schedule, or to the schedule as revised pursuant to Article 11, it shall promptly adopt such other or additional **Means and Methods of Construction**, at its sole cost and expense, as will make up for the time lost and will assure completion in accordance with the approved progress schedule. The approval by the **City** of a progress schedule which is shorter than the time allotted under the **Contract** shall not create any liability for the **City** if the approved progress schedule is not met.

9.4 The **Contractor** will not receive any payments until the proposed progress schedule is submitted.

#### **ARTICLE 10. REQUESTS FOR INFORMATION OR APPROVAL**

10.1 From time to time as the **Work** progresses and in the sequence indicated by the approved progress schedule, the **Contractor** shall submit to the **Engineer** a specific request in writing for each item of information or approval required by the **Contractor**. These requests shall state the latest date upon which the information or approval is actually required by the **Contractor**, and shall be submitted in a reasonable time in advance thereof to provide the **Engineer** a sufficient time to act upon such submissions, or any necessary re-submissions thereof.

10.2 The **Contractor** shall not have any right to an extension of time on account of delays due to the **Contractor's** failure to submit requests for the required information or the required approval in accordance with the above requirements.

#### **ARTICLE 11. NOTICE OF CONDITIONS CAUSING DELAY AND DOCUMENTATION OF DAMAGES CAUSED BY DELAY**

11.1 After the commencement of any condition which is causing or may cause a delay in completion of the **Work**, including conditions for which the **Contractor** may be entitled to an extension of time, the following notifications and submittals are required:

11.1.1 Within fifteen (15) **Days** after the **Contractor** becomes aware or reasonably should be aware of each such condition, the **Contractor** must notify the **Resident Engineer** or **Engineer**, as directed by the **Commissioner**, in writing of the existence, nature and effect of such condition upon the approved progress schedule and the **Work**, and must state why and in what respects, if any, the condition is causing or may cause a delay. Such notice shall include a description of the construction activities that are or could be affected by the condition and may include any recommendations the **Contractor** may have to address the delay condition and any activities the **Contractor** may take to avoid or minimize the delay.

11.1.2 If the **Contractor** shall claim to be sustaining damages for delay as provided for in this Article 11, within forty-five (45) **Days** from the time such damages are first incurred for each such condition, the **Contractor** shall submit to the **Commissioner** a verified written statement of the details and estimates of the amounts of such damages, including categories of expected damages and projected monthly costs, together with documentary evidence of such damages as the **Contractor** may have at the time of submission ("statement of delay damages"), as further detailed in Article 11.6. The **Contractor** may submit the above statement within such additional time as may be granted by the **Commissioner** in writing upon written request therefor.

11.1.3 Articles 11.1.1 and 11.1.2 do not relieve the **Contractor** of its obligation to comply with the provisions of Article 44.

11.2 Failure of the **Contractor** to strictly comply with the requirements of Article 11.1.1 may, in the discretion of the **Commissioner**, be deemed sufficient cause to deny any extension of time on account of delay arising out of such condition. Failure of the **Contractor** to strictly comply with the requirements of both Articles 11.1.1 and 11.1.2 shall be deemed a conclusive waiver by the **Contractor** of any and all claims for damages for delay arising from such condition and no right to recover on such claims shall exist.

11.3 When appropriate and directed by the **Engineer**, the progress schedule shall be revised by the **Contractor** until finally approved by the **Engineer**. The revised progress schedule must be strictly adhered to by the **Contractor**.

#### **11.4 Compensable Delays**

11.4.1 The **Contractor** agrees to make claim only for additional costs attributable to delay in the performance of this **Contract** necessarily extending the time for completion of the **Work** or resulting from acceleration directed by the **Commissioner** and required to maintain the progress schedule, occasioned solely by any act or omission to act of the **City** listed below. The **Contractor** also agrees that delay from any other cause shall be

compensated, if at all, solely by an extension of time to complete the performance of the **Work**.

- 11.4.1.1 The failure of the **City** to take reasonable measures to coordinate and progress the **Work** to the extent required by the **Contract**, except that the **City** shall not be responsible for the **Contractor's** obligation to coordinate and progress the **Work** of its **Subcontractors**.
- 11.4.1.2 Unreasonable delays attributable to the review of shop drawings, the issuance of change orders, or the cumulative impact of change orders that were not brought about by any act or omission of the **Contractor**.
- 11.4.1.3 The unavailability of the **Site** caused by acts or omissions of the **City**.
- 11.4.1.4 The issuance by the **Engineer** of a stop work order that was not brought about through any act or omission of the **Contractor**.
- 11.4.1.5 Differing site conditions or environmental hazards that were neither known nor reasonably ascertainable on a pre-bid inspection of the **Site** or review of the bid documents or other publicly available sources, and that are not ordinarily encountered in the **Project's** geographical area or neighborhood or in the type of **Work** to be performed.
- 11.4.1.6 Delays caused by the **City's** bad faith or its willful, malicious, or grossly negligent conduct;
- 11.4.1.7 Delays not contemplated by the parties;
- 11.4.1.8 Delays so unreasonable that they constitute an intentional abandonment of the **Contract** by the **City**; and
- 11.4.1.9 Delays resulting from the **City's** breach of a fundamental obligation of the **Contract**.

11.4.2 No claim may be made for any alleged delay in **Substantial Completion** of the **Work** if the **Work** will be or is substantially completed by the date of **Substantial Completion** provided for in Schedule A unless acceleration has been directed by the **Commissioner** to meet the date of **Substantial Completion** set forth in Schedule A, or unless there is a provision in the **Contract** providing for additional compensation for early completion.

11.4.3 The provisions of this Article 11 apply only to claims for additional costs attributable to delay and do not preclude determinations by the **Commissioner** allowing reimbursements for additional costs for **Extra Work** pursuant to Articles 25 and 26 of this **Contract**. To the extent that any cost attributable to delay is reimbursed as part of a change order, no additional claim for compensation under this Article 11 shall be allowed.

11.5 Non-Compensable Delays. The **Contractor** agrees to make no claim for, and is deemed to have included in its bid prices for the various items of the **Contract**, the extra/additional costs attributable to any delays caused by or attributable to the items set forth below. For such items, the **Contractor** shall be compensated, if at all, solely by an extension of time to complete the performance of the **Work**, in accordance with the provisions of Article 13. Such extensions of time will be granted, if at all, pursuant to the grounds set forth in Article 13.3.

11.5.1 The acts or omissions of any third parties, including but not limited to **Other Contractors**, public/ governmental bodies (other than **City Agencies**), utilities or private enterprises, who are disclosed in the **Contract Documents** or are ordinarily encountered or generally recognized as related to the **Work**;

11.5.2 Any situation which was within the contemplation of the parties at the time of entering into the **Contract**, including any delay indicated or disclosed in the **Contract Documents** or that would be generally recognized by a reasonably prudent contractor as related to the nature of the **Work**, and/or the existence of any facility or appurtenance owned, operated or maintained by any third party, as indicated or disclosed in the **Contract Documents** or ordinarily encountered or generally recognized as related to the nature of the **Work**;

11.5.3 Restraining orders, injunctions or judgments issued by a court which were caused by a Contractor's submission, action or inaction or by a Contractor's **Means and Methods of Construction**, or by third parties, unless such order, injunction or judgment was the result of an act or omission by the **City**;

11.5.4 Any labor boycott, strike, picketing, lockout or similar situation;

11.5.5 Any shortages of supplies or materials, or unavailability of equipment, required by the **Contract Work**;

11.5.6 Climatic conditions, storms, floods, droughts, tidal waves, fires, hurricanes, earthquakes, landslides or other catastrophes or acts of God, or acts of war or of the public enemy or terrorist acts, including the **City's** reasonable responses thereto; and

11.5.7 **Extra Work** which does not significantly affect the overall completion of the **Contract**, reasonable delays in the review or issuance of change orders or field orders and/or in shop drawing reviews or approvals.

#### 11.6 Required Content of Submission of Statement of Delay Damages

11.6.1 In the verified written statement of delay damages required by Article 11.1.2, the following information shall be provided by the **Contractor**:

11.6.1.1 For each delay, the start and end dates of the claimed periods of delay and, in addition, a description of the operations that were delayed, an explanation of how they were delayed, and the reasons for the delay, including identifying the applicable act or omission of the **City** listed in Article 11.4.

11.6.1.2 A detailed factual statement of the claim providing all necessary dates, locations and items of **Work** affected by the claim.

11.6.1.3 The estimated amount of additional compensation sought and a breakdown of that amount into categories as described in Article 11.7.

11.6.1.4 Any additional information requested by the **Commissioner**.

#### 11.7 Recoverable Costs

11.7.1 Delay damages may be recoverable for the following costs actually and necessarily incurred in the performance of the **Work**:

11.7.1.1 Direct labor, including payroll taxes (subject to statutory wage caps) and supplemental benefits, based on time and materials records;

11.7.1.2 Necessary materials (including transportation to the **Site**), based on time and material records;



- 11.7.1.3 Reasonable rental value of necessary plant and equipment other than small tools, plus fuel/energy costs according to the applicable formula set forth in Articles 26.2.4 and/or 26.2.8, based on time and material records;
- 11.7.1.4 Additional insurance and bond costs;
- 11.7.1.5 Extended **Site** overhead, field office rental, salaries of field office staff, on-site project managers and superintendents, field office staff vehicles, **Project**-specific storage, field office utilities and telephone, and field office consumables;
- 11.7.1.6 Labor escalation costs based on actual costs;
- 11.7.1.7 Materials and equipment escalation costs based on applicable industry indices unless documentation of actual increased cost is provided;
- 11.7.1.8 Additional material and equipment storage costs based on actual documented costs and additional costs necessitated by extended manufacturer warranty periods; and
- 11.7.1.9 Extended home office overhead calculated based on the following formula:
  - (1) Subtract from the original **Contract** amount the amount earned by original contractual **Substantial Completion** date (not including change orders);
  - (2) Remove 15% overhead and profit from the calculation in item (1) by dividing the results of item (1) by 1.15;
  - (3) Multiply the result of item (2) by 7.25% for the total home office overhead;
  - (4) Multiply the result of item (3) by 7.25% for the total profit; and
  - (5) The total extended home office overhead will be the total of items (3) and (4).

11.7.2 Recoverable Subcontractor Costs. When the **Work** is performed by a **Subcontractor**, the **Contractor** may be paid the actual and necessary costs of such subcontracted **Work** as outlined above in Articles 11.7.1.1 through 11.7.1.8, and an additional overhead of 5% of the costs outlined in Articles 11.7.1.1 through 11.7.1.3.

11.7.3 Non-Recoverable Costs. The parties agree that the **City** will have no liability for the following items and the **Contractor** agrees it shall make no claim for the following items:

- 11.7.3.1 Profit, or loss of anticipated or unanticipated profit, except as provided in Article 11.7.1.9;
- 11.7.3.2 Consequential damages, including, but not limited to, construction or bridge loans or interest paid on such loans, loss of bonding capacity, bidding opportunities, or interest in investment, or any resulting insolvency;
- 11.7.3.3 Indirect costs or expenses of any nature except those included in Article 11.7.1;
- 11.7.3.4 Direct or indirect costs attributable to performance of **Work** where the **Contractor**, because of situations or conditions within its control, has not progressed the **Work** in a satisfactory manner; and
- 11.7.3.5 Attorneys' fees and dispute and claims preparation expenses.

11.8 Any claims for delay under this Article 11 are not subject to the jurisdiction of the Contract Dispute Resolution Board pursuant to the dispute resolution process set forth in Article 27.

11.9 Any compensation provided to the **Contractor** in accordance with this Article 11 will be made pursuant to a claim filed with the **Comptroller**. Nothing in this Article 11 extends the time for the **Contractor** to file an action with respect to a claim within six months after **Substantial Completion** pursuant to Article 56.

## **ARTICLE 12. COORDINATION WITH OTHER CONTRACTORS**

12.1 During the progress of the **Work**, **Other Contractors** may be engaged in performing other work or may be awarded other contracts for additional work on this **Project**. In that event, the **Contractor** shall coordinate the **Work** to be done hereunder with the work of such **Other Contractors** and the **Contractor** shall fully cooperate with such **Other Contractors** and carefully fit its own **Work** to that provided under other contracts as may be directed by the **Engineer**. The **Contractor** shall not commit or permit any act which will interfere with the performance of work by any **Other Contractors**.

12.2 If the **Engineer** determines that the **Contractor** is failing to coordinate its **Work** with the work of **Other Contractors** as the **Engineer** has directed, then the **Commissioner** shall have the right to withhold any payments otherwise due hereunder until the **Contractor** completely complies with the **Engineer's** directions.

12.3 The **Contractor** shall notify the **Engineer** in writing if any **Other Contractor** on this **Project** is failing to coordinate its work with the **Work** of this **Contract**. If the **Engineer** finds such charges to be true, the **Engineer** shall promptly issue such directions to the **Other Contractor** with respect thereto as the situation may require. The **City** shall not, however, be liable for any damages suffered by any **Other Contractor's** failure to coordinate its work with the **Work** of this **Contract** or by reason of the **Other Contractor's** failure to promptly comply with the directions so issued by the **Engineer**, or by reason of any **Other Contractor's** default in performance, it being understood that the **City** does not guarantee the responsibility or continued efficiency of any contractor. The **Contractor** agrees to make no claim against the **City** for any damages relating to or arising out of any directions issued by the **Engineer** pursuant to this Article 12 (including but not limited to the failure of any **Other Contractor** to comply or promptly comply with such directions), or the failure of any **Other Contractor** to coordinate its work, or the default in performance of any **Other Contractor**.

12.4 The **Contractor** shall indemnify and hold the **City** harmless from any and all claims or judgments for damages and from costs and expenses to which the **City** may be subjected or which it may suffer or incur by reason of the **Contractor's** failure to comply with the **Engineer's** directions promptly; and the **Comptroller** shall have the right to exercise the powers reserved in Article 23 with respect to any claims which may be made for damages due to the **Contractor's** failure to comply with the **Engineer's** directions promptly. Insofar as the facts and **Law** relating to any claim would preclude the **City** from being completely indemnified by the **Contractor**, the **City** shall be partially indemnified by the **Contractor** to the fullest extent provided by **Law**.

12.5 Should the **Contractor** sustain any damage through any act or omission of any **Other Contractor** having a contract with the **City** for the performance of work upon the **Site** or of work which may be necessary to be performed for the proper prosecution of the **Work** to be performed hereunder, or through any act or omission of a subcontractor of such **Other Contractor**, the **Contractor** shall have no claim against the **City** for such damage, but shall have a right to recover such damage from the **Other**

**Contractor** under the provision similar to the following provisions which apply to this **Contract** and have been or will be inserted in the contracts with such **Other Contractors**:

12.5.1 Should any **Other Contractor** having or who shall hereafter have a contract with the **City** for the performance of work upon the **Site** sustain any damage through any act or omission of the **Contractor** hereunder or through any act or omission of any **Subcontractor** of the **Contractor**, the **Contractor** agrees to reimburse such **Other Contractor** for all such damages and to defend at its own expense any action based upon such claim and if any judgment or claim (even if the allegations of the action are without merit) against the **City** shall be allowed the **Contractor** shall pay or satisfy such judgment or claim and pay all costs and expenses in connection therewith and agrees to indemnify and hold the **City** harmless from all such claims. Insofar as the facts and **Law** relating to any claim would preclude the **City** from being completely indemnified by the **Contractor**, the **City** shall be partially indemnified by the **Contractor** to the fullest extent provided by **Law**.

12.6 The **City's** right to indemnification hereunder shall in no way be diminished, waived or discharged by its recourse to assessment of liquidated damages as provided in Article 15, or by the exercise of any other remedy provided for by **Contract** or by **Law**.

### **ARTICLE 13. EXTENSION OF TIME FOR PERFORMANCE**

13.1 If performance by the **Contractor** is delayed for a reason set forth in Article 13.3, the **Contractor** may be allowed a reasonable extension of time in conformance with this Article 13 and the **PPB Rules**.

13.2 Any extension of time may be granted only by the **ACCO** or by the Board for the Extension of Time (hereafter "Board") (as set forth below) upon written application by the **Contractor**.

13.3 Grounds for Extension: If such application is made, the **Contractor** shall be entitled to an extension of time for delay in completion of the **Work** caused solely:

13.3.1 By the acts or omissions of the **City**, its officials, agents or employees; or

13.3.2 By the act or omissions of **Other Contractors** on this **Project**; or

13.3.3 By supervening conditions entirely beyond the control of either party hereto (such as, but not limited to, acts of God or the public enemy, excessive inclement weather, war or other national emergency making performance temporarily impossible or illegal, or strikes or labor disputes not brought about by any act or omission of the **Contractor**).

13.3.4 The **Contractor** shall, however, be entitled to an extension of time for such causes only for the number of **Days** of delay which the **ACCO** or the Board may determine to be due solely to such causes, and then only if the **Contractor** shall have strictly complied with all of the requirements of Articles 9 and 10.

13.4 The **Contractor** shall not be entitled to receive a separate extension of time for each of several causes of delay operating concurrently, but, if at all, only for the actual period of delay in completion of the **Work** as determined by the **ACCO** or the Board, irrespective of the number of causes contributing to produce such delay. If one of several causes of delay operating concurrently results from any act, fault or omission of the **Contractor** or of its **Subcontractors** or **Materialmen**, and would of itself (irrespective

of the concurrent causes) have delayed the **Work**, no extension of time will be allowed for the period of delay resulting from such act, fault or omission.

13.5 The determination made by the **ACCO** or the Board on an application for an extension of time shall be binding and conclusive on the **Contractor**.

13.6 The **ACCO** or the Board acting entirely within their discretion may grant an application for an extension of time for causes of delay other than those herein referred.

13.7 Permitting the **Contractor** to continue with the **Work** after the time fixed for its completion has expired, or after the time to which such completion may have been extended has expired, or the making of any payment to the **Contractor** after such time, shall in no way operate as a waiver on the part of the **City** of any of its rights under this **Contract**.

13.8 Application for Extension of Time:

13.8.1 Before the **Contractor's** time extension request will be considered, the **Contractor** shall notify the **ACCO** of the condition which allegedly has caused or is causing the delay, and shall submit a written application to the **ACCO** identifying:

13.8.1(a) The **Contractor**; the registration number; and **Project** description;

13.8.1(b) Liquidated damage assessment rate, as specified in the **Contract**;

13.8.1(c) Original total bid price;

13.8.1(d) The original **Contract** start date and completion date;

13.8.1(e) Any previous time extensions granted (number and duration); and

13.8.1(f) The extension of time requested.

13.8.2 In addition, the application for extension of time shall set forth in detail:

13.8.2(a) The nature of each alleged cause of delay in completing the **Work**;

13.8.2(b) The date upon which each such cause of delay began and ended and the number of **Days** attributable to each such cause;

13.8.2(c) A statement that the **Contractor** waives all claims except for those delineated in the application, and the particulars of any claims which the **Contractor** does not agree to waive. For time extensions for **Substantial Completion** and final completion payments, the application shall include a detailed statement of the dollar amounts of each element of claim item reserved; and

13.8.2(d) A statement indicating the **Contractor's** understanding that the time extension is granted only for purposes of permitting continuation of **Contract** performance and payment for **Work** performed and that the **City** retains its right to conduct an investigation and assess liquidated damages as appropriate in the future.

13.9 Analysis and Approval of Time Extensions:

13.9.1 For time extensions for partial payments, a written determination shall be made by the **ACCO** who may, for good and sufficient cause, extend the time for the performance of the **Contract** as follows:

13.9.1(a) If the **Work** is to be completed within six (6) months, the time for performance may be extended for sixty (60) **Days**;

13.9.1(b) If the **Work** is to be completed within less than one (1) year but more than six (6) months, an extension of ninety (90) **Days** may be granted;

13.9.1(c) If the **Contract** period exceeds one (1) year, besides the extension granted in Article 13.9.1(b), an additional thirty (30) **Days** may be granted for each multiple of six (6) months involved beyond the one (1) year period; or

13.9.1(d) If exceptional circumstances exist, the **ACCO** may extend the time for performance beyond the extensions in Articles 13.9.1(a), 13.9.1(b), and 13.9.1(c). In that event, the **ACCO** shall file with the Mayor's Office of Contract Services a written explanation of the exceptional circumstances.

13.9.2 For extensions of time for **Substantial Completion** and final completion payments, the **Engineer**, in consultation with the **ACCO**, shall prepare a written analysis of the delay (including a preliminary determination of the causes of delay, the beginning and end dates for each such cause of delay, and whether the delays are excusable under the terms of this **Contract**). The report shall be subject to review by and approval of the Board, which shall have authority to question its analysis and determinations and request additional facts or documentation. The report as reviewed and made final by the Board shall be made a part of the **Agency** contract file. Neither the report itself nor anything contained therein shall operate as a waiver or release of any claim the **City** may have against the **Contractor** for either actual or liquidated damages.

13.9.3 Approval Mechanism for Time Extensions for **Substantial Completion** or Final Completion Payments: An extension shall be granted only with the approval of the Board which is comprised of the **ACCO** of the **Agency**, the **City** Corporation Counsel, and the **Comptroller**, or their authorized representatives.

13.9.4 Neither the granting of any application for an extension of time to the **Contractor** or any **Other Contractor** on this **Project** nor the papers, records or reports related to any application for or grant of an extension of time or determination related thereto shall be referred to or offered in evidence by the **Contractor** or its attorneys in any action or proceeding.

13.10 No Damage for Delay: The **Contractor** agrees to make no claim for damages for delay in the performance of this **Contract** occasioned by any act or omission to act of the **City** or any of its representatives, except as provided for in Article 11.

#### **ARTICLE 14. COMPLETION AND FINAL ACCEPTANCE OF THE WORK**

14.1 Date for **Substantial Completion**: The **Contractor** shall substantially complete the **Work** within the time fixed in Schedule A of the General Conditions, or within the time to which such **Substantial Completion** may be extended.

14.2 Determining the Date of **Substantial Completion**: The **Work** will be deemed to be substantially complete when the two conditions set forth below have been met.

14.2.1 Inspection: The **Engineer** or **Resident Engineer**, as applicable, has inspected the **Work** and has made a written determination that it is substantially complete.

14.2.2 Approval of **Final Approved Punch List** and Date for **Final Acceptance**: Following inspection of the **Work**, the **Engineer/Resident Engineer** shall furnish the **Contractor** with a final punch list, specifying all items of **Work** to be completed and proposing dates for the completion of each specified item of **Work**. The **Contractor** shall then submit in writing to the **Engineer/Resident Engineer** within ten (10) **Days** of the **Engineer/Resident Engineer** furnishing the final punch list either acceptance of the dates or proposed alternative dates for the completion of each specified item of **Work**. If the **Contractor** neither accepts the dates nor proposes alternative dates within ten (10) **Days**, the schedule proposed by the **Engineer/Resident Engineer** shall be deemed accepted. If the **Contractor** proposes alternative dates, then, within a reasonable time after receipt, the **Engineer/Resident Engineer**, in a written notification to the **Contractor**, shall approve the **Contractor's** completion dates or, if they are unable to agree, the **Engineer/Resident Engineer** shall establish dates for the completion of each item of **Work**. The latest completion date specified shall be the date for **Final Acceptance** of the **Work**.

14.3 Date of **Substantial Completion**. The date of approval of the **Final Approved Punch List**, shall be the date of **Substantial Completion**. The date of approval of the **Final Approved Punch List** shall be either (a) if the **Contractor** approves the final punch list and proposed dates for completion furnished by the **Engineer/Resident Engineer**, the date of the **Contractor's** approval; or (b) if the **Contractor** neither accepts the dates nor proposes alternative dates, ten (10) **Days** after the **Engineer/Resident Engineer** furnishes the **Contractor** with a final punch list and proposed dates for completion; or (c) if the **Contractor** proposes alternative dates, the date that the **Engineer/Resident Engineer** sends written notification to the **Contractor** either approving the **Contractor's** proposed alternative dates or establishing dates for the completion for each item of **Work**.

14.4 Determining the Date of **Final Acceptance**: The **Work** will be accepted as final and complete as of the date of the **Engineer's/Resident Engineer's** inspection if, upon such inspection, the **Engineer/Resident Engineer** finds that all items on the **Final Approved Punch List** are complete and no further **Work** remains to be done. The **Commissioner** will then issue a written determination of **Final Acceptance**.

14.5 Request for Inspection: Inspection of the **Work** by the **Engineer/Resident Engineer** for the purpose of **Substantial Completion** or **Final Acceptance** shall be made within fourteen (14) **Days** after receipt of the **Contractor's** written request therefor.

14.6 Request for Re-inspection: If upon inspection for the purpose of **Substantial Completion** or **Final Acceptance**, the **Engineer/Resident Engineer** determines that there are items of **Work** still to be performed, the **Contractor** shall promptly perform them and then request a re-inspection. If upon re-inspection, the **Engineer/Resident Engineer** determines that the **Work** is substantially complete or finally accepted, the date of such re-inspection shall be the date of **Substantial Completion** or **Final Acceptance**. Re-inspection by the **Engineer/Resident Engineer** shall be made within ten (10) **Days** after receipt of the **Contractor's** written request therefor.

14.7 Initiation of Inspection by the **Engineer/Resident Engineer**: If the **Contractor** does not request inspection or re-inspection of the **Work** for the purpose of **Substantial Completion** or **Final Acceptance**, the **Engineer/Resident Engineer** may initiate such inspection or re-inspection.

#### **ARTICLE 15. LIQUIDATED DAMAGES**

15.1 In the event the **Contractor** fails to substantially complete the **Work** within the time fixed for such **Substantial Completion** in Schedule A of the General Conditions, plus authorized time extensions, or if the **Contractor**, in the sole determination of the **Commissioner**, has abandoned the **Work**, the **Contractor** shall pay to the **City** the sum fixed in Schedule A of the General Conditions, for each and every **Day** that the time consumed in substantially completing the **Work** exceeds the time allowed therefor; which said sum, in view of the difficulty of accurately ascertaining the loss which the **City** will suffer by reason of delay in the **Substantial Completion** of the **Work** hereunder, is hereby fixed and agreed as the liquidated damages that the **City** will suffer by reason of such delay, and not as a penalty. This Article 15 shall also apply to the **Contractor** whether or not the **Contractor** is defaulted pursuant to Chapter X of this **Contract**. Neither the failure to assess liquidated damages nor the granting of any time extension shall operate as a waiver or release of any claim the **City** may have against the **Contractor** for either actual or liquidated damages.

15.2 Liquidated damages received hereunder are not intended to be nor shall they be treated as either a partial or full waiver or discharge of the **City's** right to indemnification, or the **Contractor's** obligation to indemnify the **City**, or to any other remedy provided for in this **Contract** or by **Law**.

15.3 The **Commissioner** may deduct and retain out of the monies which may become due hereunder, the amount of any such liquidated damages; and in case the amount which may become due hereunder shall be less than the amount of liquidated damages suffered by the **City**, the **Contractor** shall be liable to pay the difference.

#### **ARTICLE 16. OCCUPATION OR USE PRIOR TO COMPLETION**

16.1 Unless otherwise provided for in the **Specifications**, the **Commissioner** may take over, use, occupy or operate any part of the **Work** at any time prior to **Final Acceptance**, upon written notification to the **Contractor**. The **Engineer** or **Resident Engineer**, as applicable, shall inspect the part of the **Work** to be taken over, used, occupied, or operated, and will furnish the **Contractor** with a written statement of the **Work**, if any, which remains to be performed on such part. The **Contractor** shall not object to, nor interfere with, the **Commissioner's** decision to exercise the rights granted by Article 16. In the event the **Commissioner** takes over, uses, occupies, or operates any part of the **Work**:

16.1.1 the **Engineer/Resident Engineer** shall issue a written determination of **Substantial Completion** with respect to such part of the **Work**;

16.1.2 the **Contractor** shall be relieved of its absolute obligation to protect such part of the unfinished **Work** in accordance with Article 7;

16.1.3 the **Contractor's** guarantee on such part of the **Work** shall begin on the date of such use by the **City**; and;

16.1.4 the **Contractor** shall be entitled to a return of so much of the amount retained in accordance with Article 21 as it relates to such part of the **Work**, except so much thereof as may be retained under Articles 24 and 44.

## CHAPTER IV: SUBCONTRACTS AND ASSIGNMENTS

### ARTICLE 17. SUBCONTRACTS

17.1 The **Contractor** shall not make subcontracts totaling an amount more than the percentage of the total **Contract** price fixed in Schedule A of the General Conditions, without prior written permission from the **Commissioner**. All subcontracts made by the **Contractor** shall be in writing. No **Work** may be performed by a **Subcontractor** prior to the **Contractor** entering into a written subcontract with the **Subcontractor** and complying with the provisions of this Article 17.

17.2 Before making any subcontracts, the **Contractor** shall submit a written statement to the **Commissioner** giving the name and address of the proposed **Subcontractor**; the portion of the **Work** and materials which it is to perform and furnish; the cost of the subcontract; the VENDEX questionnaire if required; the proposed subcontract if requested by the **Commissioner**; and any other information tending to prove that the proposed **Subcontractor** has the necessary facilities, skill, integrity, past experience, and financial resources to perform the **Work** in accordance with the terms and conditions of this **Contract**.

17.3 In addition to the requirements in Article 17.2, **Contractor** is required to list the **Subcontractor** in the web based Subcontractor Reporting System through the City's Payee Information Portal (PIP), available at [www.nyc.gov/pip](http://www.nyc.gov/pip).<sup>1</sup> For each **Subcontractor** listed, **Contractor** is required to provide the following information: maximum contract value, description of **Subcontractor's** Work, start and end date of the subcontract and identification of the **Subcontractor's** industry. Thereafter, **Contractor** will be required to report in the system the payments made to each **Subcontractor** within 30 days of making the payment. If any of the required information changes throughout the Term of the **Contract**, **Contractor** will be required to revise the information in the system.

Failure of the **Contractor** to list a **Subcontractor** and/or to report **Subcontractor** payments in a timely fashion may result in the **Commissioner** declaring the **Contractor** in default of the **Contract** and will subject **Contractor** to liquidated damages in the amount of \$100 per day for each day that the **Contractor** fails to identify a **Subcontractor** along with the required information about the **Subcontractor** and/or fails to report payments to a **Subcontractor**, beyond the time frames set forth herein or in the notice from the City. Article 15 shall govern the issue of liquidated damages.

17.4 If an approved **Subcontractor** elects to subcontract any portion of its subcontract, the proposed sub-subcontract shall be submitted in the same manner as directed above.

17.5 The **Commissioner** will notify the **Contractor** in writing whether the proposed **Subcontractor** is approved. If the proposed **Subcontractor** is not approved, the **Contractor** may submit another proposed **Subcontractor** unless the **Contractor** decides to do the **Work**. No **Subcontractor** shall be permitted to enter or perform any work on the **Site** unless approved.

17.6 Before entering into any subcontract hereunder, the **Contractor** shall provide the proposed **Subcontractor** with a complete copy of this document and inform the proposed **Subcontractor** fully and completely of all provisions and requirements of this **Contract** relating either directly or indirectly to the **Work** to be performed and the materials to be furnished under such subcontract, and every such

<sup>1</sup> In order to use the new system, a PIP account will be required. Detailed instructions on creating a PIP account and using the new system are also available at [www.nyc.gov/pip](http://www.nyc.gov/pip). Additional assistance with PIP may be obtained by emailing the Financial Information Services Agency Help Desk at [pip@fisa.nyc.gov](mailto:pip@fisa.nyc.gov).



**Subcontractor** shall expressly stipulate that all labor performed and materials furnished by the **Subcontractor** shall strictly comply with the requirements of this **Contract**.

17.7 Documents given to a prospective **Subcontractor** for the purpose of soliciting the **Subcontractor's** bid shall include either a copy of the bid cover or a separate information sheet setting forth the **Project** name, the **Contract** number (if available), the **Agency** (as noted in Article 2.1.6), and the **Project's** location.

17.8 The **Commissioner's** approval of a **Subcontractor** shall not relieve the **Contractor** of any of its responsibilities, duties, and liabilities hereunder. The **Contractor** shall be solely responsible to the **City** for the acts or defaults of its **Subcontractor** and of such **Subcontractor's** officers, agents, and employees, each of whom shall, for this purpose, be deemed to be the agent or employee of the **Contractor** to the extent of its subcontract.

17.9 If the **Subcontractor** fails to maintain the necessary facilities, skill, integrity, past experience, and financial resources (other than due to the **Contractor's** failure to make payments where required) to perform the **Work** in accordance with the terms and conditions of this **Contract**, the **Contractor** shall promptly notify the **Commissioner** and replace such **Subcontractor** with a newly approved **Subcontractor** in accordance with this Article 17.

17.10 The **Contractor** shall be responsible for ensuring that all **Subcontractors** performing **Work** at the **Site** maintain all insurance required by **Law**.

17.11 The **Contractor** shall promptly, upon request, file with the **Engineer** a conformed copy of the subcontract and its cost. The subcontract shall provide the following:

17.11.1 **Payment to Subcontractors:** The agreement between the **Contractor** and its **Subcontractor** shall contain the same terms and conditions as to method of payment for **Work**, labor, and materials, and as to retained percentages, as are contained in this **Contract**.

17.11.2 **Prevailing Rate of Wages:** The agreement between the **Contractor** and its **Subcontractor** shall include the prevailing wage rates and supplemental benefits to be paid in accordance with Labor Law Section 220.

17.11.3 **Section 6-123 of the Administrative Code:** Pursuant to the requirements of Section 6-123 of the Administrative Code, every agreement between the **Contractor** and a **Subcontractor** in excess of fifty thousand (\$50,000) dollars shall include a provision that the **Subcontractor** shall not engage in any unlawful discriminatory practice as defined in Title VIII of the Administrative Code (Section 8-101 *et seq.*).

17.11.4 All requirements required pursuant to federal and/or state grant agreement(s), if applicable to the **Work**.

17.12 The **Commissioner** may deduct from the amounts certified under this **Contract** to be due to the **Contractor**, the sum or sums due and owing from the **Contractor** to the **Subcontractors** according to the terms of the said subcontracts, and in case of dispute between the **Contractor** and its **Subcontractor**, or **Subcontractors**, as to the amount due and owing, the **Commissioner** may deduct and withhold from the amounts certified under this **Contract** to be due to the **Contractor** such sum or sums as may be claimed by such **Subcontractor**, or **Subcontractors**, in a sworn affidavit, to be due and owing until such time as such claim or claims shall have been finally resolved.

17.13 On contracts where performance bonds and payment bonds are executed, the **Contractor** shall include on each requisition for payment the following data: **Subcontractor's** name, value of the subcontract, total amount previously paid to **Subcontractor** for **Work** previously requisitioned, and the amount, including retainage, to be paid to the **Subcontractor** for **Work** included in the requisition.

17.14 On **Contracts** where performance bonds and payment bonds are not executed, the **Contractor** shall include with each requisition for payment submitted hereunder, a signed statement from each and every **Subcontractor** and/or **Materialman** for whom payment is requested in such requisition. Such signed statement shall be on the letterhead of the **Subcontractor** and/or **Materialman** for whom payment is requested and shall (i) verify that such **Subcontractor** and/or **Materialman** has been paid in full for all **Work** performed and/or material supplied to date, exclusive of any amount retained and any amount included on the current requisition, and (ii) state the total amount of retainage to date, exclusive of any amount retained on the current requisition.

## **ARTICLE 18. ASSIGNMENTS**

18.1 The **Contractor** shall not assign, transfer, convey or otherwise dispose of this **Contract**, or the right to execute it, or the right, title or interest in or to it or any part thereof, or assign, by power of attorney or otherwise any of the monies due or to become due under this **Contract**, unless the previous written consent of the **Commissioner** shall first be obtained thereto, and the giving of any such consent to a particular assignment shall not dispense with the necessity of such consent to any further or other assignments.

18.2 Such assignment, transfer, conveyance or other disposition of this **Contract** shall not be valid until filed in the office of the **Commissioner** and the **Comptroller**, with the written consent of the **Commissioner** endorsed thereon or attached thereto.

18.3 Failure to obtain the previous written consent of the **Commissioner** to such an assignment, transfer, conveyance or other disposition, may result in the revocation and annulment of this **Contract**. The **City** shall thereupon be relieved and discharged from any further liability to the **Contractor**, its assignees, transferees or sublessees, who shall forfeit and lose all monies therefor earned under the **Contract**, except so much as may be required to pay the **Contractor's** employees.

18.4 The provisions of this clause shall not hinder, prevent, or affect an assignment by the **Contractor** for the benefit of its creditors made pursuant to the **Laws** of the State of New York.

18.5 This **Contract** may be assigned by the **City** to any corporation, agency or instrumentality having authority to accept such assignment.

## **CHAPTER V: CONTRACTOR'S SECURITY AND GUARANTEE**

### **ARTICLE 19. SECURITY DEPOSIT**

19.1 If performance and payment bonds are required, the **City** shall retain the bid security to ensure that the successful bidder executes the **Contract** and furnishes the required payment and performance security within ten (10) **Days** after notice of the award of the **Contract**. If the successful bidder fails to execute the **Contract** and furnish the required payment and performance security, the **City** shall retain such bid security as set forth in the Information for Bidders. If the successful bidder executes the

**Contract** and furnishes the required payment and performance security, the **City** shall return the bid security within a reasonable time after the furnishing of such bonds and execution of the **Contract** by the **City**.

19.2 If performance and payment bonds are not required, the bid security shall be retained by the **City** as security for the **Contractor's** faithful performance of the **Contract**. If partial payments are provided, the bid security will be returned to the **Contractor** after the sum retained under Article 21 equals the amount of the bid security, subject to other provisions of this **Contract**. If partial payments are not provided, the bid security will be released when final payment is certified by the **City** for payment.

19.3 If the **Contractor** is declared in default under Article 48 prior to the return of the deposit, or if any claim is made such as referred to in Article 23, the amount of such deposit, or so much thereof as the **Comptroller** may deem necessary, may be retained and then applied by the **Comptroller**:

19.3.1 To compensate the **City** for any expense, loss or damage suffered or incurred by reason of or resulting from such default, including the cost of re-letting and liquidated damages; or

19.3.2 To indemnify the **City** against any and all claims.

## **ARTICLE 20. PAYMENT GUARANTEE**

20.1 On **Contracts** where one hundred (100%) percent performance bonds and payment bonds are executed, this Article 20 does not apply.

20.2 In the event the terms of this **Contract** do not require the **Contractor** to provide a payment bond or where the **Contract** does not require a payment bond for one hundred (100%) percent of the **Contract** price, the **City** shall, in accordance with the terms of this Article 20, guarantee payment of all lawful claims for:

20.2.1 Wages and compensation for labor performed and/or services rendered; and

20.2.2 Materials, equipment, and supplies provided, whether incorporated into the **Work** or not, when demands have been filed with the **City** as provided hereinafter by any person, firm, or corporation which furnished labor, material, equipment, supplies, or any combination thereof, in connection with the **Work** performed hereunder (hereinafter referred to as the "beneficiary") at the direction of the **City** or the **Contractor**.

20.3 The provisions of Article 20.2 are subject to the following limitations and conditions:

20.3.1 If the **Contractor** provides a payment bond for a value that is less than one hundred (100%) percent of the value of the **Contract Work**, the payment bond provided by the **Contractor** shall be primary (and non-contributing) to the payment guarantee provided under this Article 20.

20.3.2 The guarantee is made for the benefit of all beneficiaries as defined in Article 20.2 provided that those beneficiaries strictly adhere to the terms and conditions of Article 20.3.4 and 20.3.5.

20.3.3 Nothing in this Article 20 shall prevent a beneficiary providing labor, services or material for the **Work** from suing the **Contractor** for any amounts due and owing the beneficiary by the **Contractor**.

20.3.4 Every person who has furnished labor or material, to the **Contractor** or to a **Subcontractor** of the **Contractor**, in the prosecution of the **Work** and who has not been paid in full therefor before the expiration of a period of ninety (90) **Days** after the date on which the last of the labor was performed or material was furnished by him/her for which the claim is made, shall have the right to sue on this payment guarantee in his/her own name for the amount, or the balance thereof, unpaid at the time of commencement of the action; provided, however, that a person having a direct contractual relationship with a **Subcontractor** of the **Contractor** but no contractual relationship express or implied with the **Contractor** shall not have a right of action upon the guarantee unless he/she shall have given written notice to the **Contractor** within one hundred twenty (120) **Days** from the date on which the last of the labor was performed or the last of the material was furnished, for which his/her claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the material was furnished or for whom the labor was performed. The notice shall be served by delivering the same personally to the **Contractor** or by mailing the same by registered mail, postage prepaid, in an envelope addressed to the **Contractor** at any place where it maintains an office or conducts its business; provided, however, that where such notice is actually received by the **Contractor** by other means, such notice shall be deemed sufficient.

20.3.5 Except as provided in Labor Law Section 220-g, no action on this payment guarantee shall be commenced after the expiration of the one-year limitations period set forth in Section 137(4)(b) of the State Finance Law.

20.3.6 The **Contractor** shall promptly forward to the **City** any notice or demand received pursuant to Article 20.3.4. The **Contractor** shall inform the **City** of any defenses to the notice or demand and shall forward to the **City** any documents the **City** requests concerning the notice or demand.

20.3.7 All demands made against the **City** by a beneficiary of this payment guarantee shall be presented to the **Engineer** along with all written documentation concerning the demand which the **Engineer** deems reasonably appropriate or necessary, which may include, but shall not be limited to: the subcontract; any invoices presented to the **Contractor** for payment; the notarized statement of the beneficiary that the demand is due and payable, that a request for payment has been made of the **Contractor** and that the demand has not been paid by the **Contractor** within the time allowed for such payment by the subcontract; and copies of any correspondence between the beneficiary and the **Contractor** concerning such demand. The **City** shall notify the **Contractor** that a demand has been made. The **Contractor** shall inform the **City** of any defenses to the demand and shall forward to the **City** any documents the **City** requests concerning the demand.

20.3.8 The **City** shall make payment only if, after considering all defenses presented by the **Contractor**, it determines that the payment is due and owing to the beneficiary making the demand.

20.3.9 No beneficiary shall be entitled to interest from the **City**, or to any other costs, including, but not limited to, attorneys' fees, except to the extent required by State Finance Law Section 137.

20.4 Upon the receipt by the **City** of a demand pursuant to this Article 20, the **City** may withhold from any payment otherwise due and owing to the **Contractor** under this **Contract** an amount sufficient to satisfy the demand.

20.4.1 In the event the **City** determines that the demand is valid, the **City** shall notify the **Contractor** of such determination and the amount thereof and direct the **Contractor** to immediately pay such amount to the beneficiary. In the event the **Contractor**, within seven (7) **Days** of receipt of such notification from the **City**, fails to pay the beneficiary, such failure shall constitute an automatic and irrevocable assignment of payment by the **Contractor** to the beneficiary for the amount of the demand determined by the **City** to be valid. The **Contractor**, without further notification or other process, hereby gives its unconditional consent to such assignment of payment to the beneficiary and authorizes the **City**, on its behalf, to take all necessary actions to implement such assignment of payment, including without limitation the execution of any instrument or documentation necessary to effectuate such assignment.

20.4.2 In the event that the amount otherwise due and owing to the **Contractor** by the **City** is insufficient to satisfy such demand, the **City** may, at its option, require payment from the **Contractor** of an amount sufficient to cover such demand and exercise any other right to require or recover payment which the **City** may have under **Law** or **Contract**.

20.4.3 In the event the **City** determines that the demand is invalid, any amount withheld pending the **City's** review of such demand shall be paid to the **Contractor**; provided, however, no lien has been filed. In the event a claim or an action has been filed, the terms and conditions set forth in Article 23 shall apply. In the event a lien has been filed, the parties will be governed by the provisions of the Lien Law of the State of New York.

20.5 The provisions of this Article 20 shall not prevent the **City** and the **Contractor** from resolving disputes in accordance with the **PPB Rules**, where applicable.

20.6 In the event the **City** determines that the beneficiary is entitled to payment pursuant to this Article 20, such determination and any defenses and counterclaims raised by the **Contractor** shall be taken into account in evaluating the **Contractor's** performance.

20.7 Nothing in this Article 20 shall relieve the **Contractor** of the obligation to pay the claims of all persons with valid and lawful claims against the **Contractor** relating to the **Work**.

20.8 The **Contractor** shall not require any performance, payment or other bonds of any **Subcontractor** if this **Contract** does not require such bonds of the **Contractor**.

20.9 The payment guarantee made pursuant to this Article 20 shall be construed in a manner consistent with Section 137 of the State Finance Law and shall afford to persons furnishing labor or materials to the **Contractor** or its **Subcontractors** in the prosecution of the **Work** under this **Contract** all of the rights and remedies afforded to such persons by such section, including but not limited to, the right to commence an action against the **City** on the payment guarantee provided by this Article 20 within the one-year limitations period set forth in Section 137(4)(b).

## **ARTICLE 21. RETAINED PERCENTAGE**

21.1 If this **Contract** requires one hundred (100%) percent performance and payment security, then as further security for the faithful performance of this **Contract**, the **Commissioner** shall deduct, and

retain until the substantial completion of the **Work**, five (5%) percent of the value of **Work** certified for payment in each partial payment voucher.

21.2 If this **Contract** does not require one hundred (100%) percent performance and payment security and if the price for which this **Contract** was awarded does not exceed one million (\$1,000,000) dollars, then as further security for the faithful performance of this **Contract**, the **Commissioner** shall deduct, and retain until the substantial completion of the **Work**, five (5%) percent of the value of **Work** certified for payment in each partial payment voucher.

21.3 If this **Contract** does not require one hundred (100%) percent performance and payment security and if the price for which this **Contract** was awarded exceeds one million (\$1,000,000) dollars, then as further security for the faithful performance of this **Contract**, the **Commissioner** shall deduct, and retain until the substantial completion of the **Work**, up to ten (10%) percent of the value of **Work** certified for payment in each partial payment voucher. The percentage to be retained is set forth in Schedule A of the General Conditions.

## **ARTICLE 22. INSURANCE**

22.1 Types of Insurance: The **Contractor** shall procure and maintain the following types of insurance if, and as indicated, in Schedule A of the General Conditions (with the minimum limits and special conditions specified in Schedule A). Such insurance shall be maintained from the date the **Contractor** is required to provide Proof of Insurance pursuant to Article 22.3.1 through the date of completion of all required **Work** (including punch list work as certified in writing by the **Resident Engineer**), except for insurance required pursuant to Article 22.1.4, which may terminate upon **Substantial Completion** of the **Contract**. All insurance shall meet the requirements set forth in this Article 22. Wherever this Article requires that insurance coverage be "at least as broad" as a specified form (including all ISO forms), there is no obligation that the form itself be used, provided that the **Contractor** can demonstrate that the alternative form or endorsement contained in its policy provides coverage at least as broad as the specified form.

22.1.1 Commercial General Liability Insurance: The **Contractor** shall provide Commercial General Liability Insurance covering claims for property damage and/or bodily injury, including death, which may arise from any of the operations under this **Contract**. Coverage under this insurance shall be at least as broad as that provided by the latest edition of Insurance Services Office ("ISO") Form CG 0001. Such insurance shall be "occurrence" based rather than "claims-made" and include, without limitation, the following types of coverage: premises operations; products and completed operations; contractual liability (including the tort liability of another assumed in a contract); broad form property damage; independent contractors; explosion, collapse and underground (XCU); construction means and methods; and incidental malpractice. Such insurance shall contain a "per project" aggregate limit, as specified in Schedule A, that applies separately to operations under this **Contract**.

22.1.1(a) Such Commercial General Liability Insurance shall name the **City** as an Additional Insured. Coverage for the **City** shall specifically include the **City's** officials and employees, be at least as broad as the latest edition of ISO Form CG 20 10 and provide completed operations coverage at least as broad as the latest edition of ISO Form CG 20 37.

22.1.1(b) Such Commercial General Liability Insurance shall name all other entities designated as additional insureds in Schedule A but only for claims arising from the

**Contractor's** operations under this **Contract**, with coverage at least as broad as the latest edition of ISO Form CG 20 26.

22.1.1(c) If the **Work** requires a permit from the Department of Buildings pursuant to 1 RCNY Section 101-08, the **Contractor** shall provide Commercial General Liability Insurance with limits of at least those required by 1 RCNY section 101-08 or greater limits required by the Agency in accordance with Schedule A. If the **Work** does not require such a permit, the minimum limits shall be those provided for in Schedule A.

22.1.1(d) If any of the **Work** includes repair of a waterborne vessel owned by or to be delivered to the **City**, such Commercial General Liability shall include, or be endorsed to include, Ship Repairer's Legal Liability Coverage to protect against, without limitation, liability arising from navigation of such vessels prior to delivery to and acceptance by the **City**.

22.1.2 Workers' Compensation Insurance, Employers' Liability Insurance, and Disability Benefits Insurance: The **Contractor** shall provide, and shall cause its **Subcontractors** to provide, Workers Compensation Insurance, Employers' Liability Insurance, and Disability Benefits Insurance in accordance with the **Laws** of the State of New York on behalf of all employees providing services under this **Contract** (except for those employees, if any, for which the **Laws** require insurance only pursuant to Article 22.1.3).

22.1.3 United States Longshoremen's and Harbor Workers Act and/or Jones Act Insurance: If specified in Schedule A of the General Conditions or if required by **Law**, the **Contractor** shall provide insurance in accordance with the United States Longshoremen's and Harbor Workers Act and/or the Jones Act, on behalf of all qualifying employees providing services under this **Contract**.

22.1.4 Builders Risk Insurance: If specified in Schedule A of the General Conditions, the **Contractor** shall provide Builders Risk Insurance on a completed value form for the total value of the **Work** through **Substantial Completion** of the **Work** in its entirety. Such insurance shall be provided on an All Risk basis and include coverage, without limitation, for windstorm (including named windstorm), storm surge, flood and earth movement. Unless waived by the **Commissioner**, it shall include coverage for ordinance and law, demolition and increased costs of construction, debris removal, pollutant clean up and removal, and expediting costs. Such insurance shall cover, without limitation, (a) all buildings and/or structures involved in the **Work**, as well as temporary structures at the **Site**, and (b) any property that is intended to become a permanent part of such building or structure, whether such property is on the **Site**, in transit or in temporary storage. Policies shall name the **Contractor** as Named Insured and list the **City** as both an Additional Insured and a Loss Payee as its interest may appear.

22.1.4(a) Policies of such insurance shall specify that, in the event a loss occurs at an occupied facility, occupancy of such facility is permitted without the consent of the issuing insurance company.

22.1.4(b) Such insurance may be provided through an Installation Floater, at the **Contractor's** option, if it otherwise conforms with the requirements of this Article 22.1.4.

22.1.5 Commercial Automobile Liability Insurance: The **Contractor** shall provide Commercial Automobile Liability Insurance for liability arising out of ownership,

maintenance or use of any owned (if any), non-owned and hired vehicles to be used in connection with this **Contract**. Coverage shall be at least as broad as the latest edition of ISO Form CA0001. If vehicles are used for transporting hazardous materials, the Automobile Liability Insurance shall be endorsed to provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90.

22.1.6 Contractors Pollution Liability Insurance: If specified in Schedule A of the General Conditions, the **Contractor** shall maintain, or cause the **Subcontractor** doing such **Work** to maintain, Contractors Pollution Liability Insurance covering bodily injury and property damage. Such insurance shall provide coverage for actual, alleged or threatened emission, discharge, dispersal, seepage, release or escape of pollutants (including asbestos), including any loss, cost or expense incurred as a result of any cleanup of pollutants (including asbestos) or in the investigation, settlement or defense of any claim, action, or proceedings arising from the operations under this **Contract**. Such insurance shall be in the **Contractor's** name and list the **City** as an Additional Insured and any other entity specified in Schedule A. Coverage shall include, without limitation, (a) loss of use of damaged property or of property that has not been physically injured, (b) transportation, and (c) non-owned disposal sites.

22.1.6(a) Coverage for the **City** as Additional Insured shall specifically include the **City's** officials and employees and be at least as broad as provided to the **Contractor** for this **Project**.

22.1.6(b) If such insurance is written on a claims-made policy, such policy shall have a retroactive date on or before the effective date of this **Contract**, and continuous coverage shall be maintained, or an extended discovery period exercised, for a period of not less than three (3) years from the time the **Work** under this **Contract** is completed.

22.1.7 Marine Insurance:

22.1.7(a) Marine Protection and Indemnity Insurance: If specified in Schedule A of the General Conditions or if the **Contractor** engages in marine operations in the execution of any part of the **Work**, the **Contractor** shall maintain, or cause the **Subcontractor** doing such **Work** to maintain, Marine Protection and Indemnity Insurance with coverage at least as broad as Form SP-23. The insurance shall provide coverage for the **Contractor** or **Subcontractor** (whichever is doing this **Work**) and for the **City** (together with its officials and employees) and any other entity specified in Schedule A as an Additional Insured for bodily injury and property damage arising from marine operations under this **Contract**. Coverage shall include, without limitation, injury or death of crew members (if not fully provided through other insurance), removal of wreck, damage to piers, wharves and other fixed or floating objects and loss of or damage to any other vessel or craft, or to property on such other vessel or craft.

22.1.7(b) Hull and Machinery Insurance: If specified in Schedule A of the General Conditions or if the **Contractor** engages in marine operations in the execution of any part of the **Work**, the **Contractor** shall maintain, or cause the **Subcontractor** doing such **Work** to maintain, Hull and Machinery Insurance with coverage for the **Contractor** or **Subcontractor** (whichever is doing this **Work**) and for the **City** (together with its officials and employees) as Additional Insured at least as broad as the latest edition of American Institute Tug Form for all tugs used under this



**Contract** and Collision Liability at least as broad as the latest edition of American Institute Hull Clauses.

22.1.7(c) **Marine Pollution Liability Insurance:** If specified in Schedule A of the General Conditions or if the **Contractor** engages in marine operations in the execution of any part of the **Work**, the **Contractor** shall maintain, or cause the **Subcontractor** doing such Work to maintain, Marine Pollution Liability Insurance covering itself (or the Subcontractor doing such Work) as Named Insured and the **City** (together with its officials and employees) and any other entity specified in Schedule A as an Additional Insured. Coverage shall be at least as broad as that provided by the latest edition of Water Quality Insurance Syndicate Form and include, without limitation, liability arising from the discharge or substantial threat of a discharge of oil, or from the release or threatened release of a hazardous substance including injury to, or economic losses resulting from, the destruction of or damage to real property, personal property or natural resources.

22.1.8 The **Contractor** shall provide such other types of insurance, at such minimum limits and with such conditions, as are specified in Schedule A of the General Conditions.

22.2 General Requirements for Insurance Coverage and Policies:

22.2.1 All required insurance policies shall be maintained with companies that may lawfully issue the required policy and have an A.M. Best rating of at least A-/VII or a Standard and Poor's rating of at least A, unless prior written approval is obtained from the **City Corporation Counsel**.

22.2.2 The **Contractor** shall be solely responsible for the payment of all premiums for all required policies and all deductibles and self-insured retentions to which such policies are subject, whether or not the **City** is an insured under the policy.

22.2.3 In his/her sole discretion, the **Commissioner** may, subject to the approval of the **Comptroller** and the **City Corporation Counsel**, accept Letters of Credit and/or custodial accounts in lieu of required insurance.

22.2.4 The **City's** limits of coverage for all types of insurance required pursuant to Schedule A of the General Conditions shall be the greater of (i) the minimum limits set forth in Schedule A or (ii) the limits provided to the **Contractor** as Named Insured under all primary, excess, and umbrella policies of that type of coverage.

22.2.5 The **Contractor** may satisfy its insurance obligations under this Article 22 through primary policies or a combination of primary and excess/umbrella policies, so long as all policies provide the scope of coverage required herein.

22.2.6 Policies of insurance provided pursuant to this Article 22 shall be primary and non-contributing to any insurance or self-insurance maintained by the **City**.

22.3 Proof of Insurance:

22.3.1 For all types of insurance required by Article 22.1 and Schedule A, except for insurance required by Articles 22.1.4 and 22.1.7, the **Contractor** shall file proof of insurance in accordance with this Article 22.3 within ten (10) **Days** of award. For insurance

provided pursuant to Articles 22.1.4 and 22.1.7, proof shall be filed by a date specified by the **Commissioner** or ten (10) **Days** prior to the commencement of the portion of the **Work** covered by such policy, whichever is earlier.

22.3.2 For Workers' Compensation Insurance provided pursuant to Article 22.1.2, the **Contractor** shall submit one of the following forms: C-105.2 Certificate of Workers' Compensation Insurance; U-26.3 - State Insurance Fund Certificate of Workers' Compensation Insurance; Request for WC/DB Exemption (Form CE-200); equivalent or successor forms used by the New York State Workers' Compensation Board; or other proof of insurance in a form acceptable to the **Commissioner**. For Disability Benefits Insurance provided pursuant to Article 22.1.2, the Contractor shall submit DB-120.1 - Certificate Of Insurance Coverage Under The NYS Disability Benefits Law, Request for WC/DB Exemption (Form CE-200); equivalent or successor forms used by the New York State Workers' Compensation Board; or other proof of insurance in a form acceptable to the **Commissioner**. ACORD forms are not acceptable.

22.3.3 For policies provided pursuant to all of Article 22.1 other than Article 22.1.2, the **Contractor** shall submit one or more Certificates of Insurance on forms acceptable to the **Commissioner**. All such Certificates of Insurance shall certify (a) the issuance and effectiveness of such policies of insurance, each with the specified minimum limits (b) for insurance secured pursuant to Article 22.1.1 that the **City** and any other entity specified in Schedule A is an Additional Insured thereunder; (c) in the event insurance is required pursuant to Article 22.1.6 and/or Article 22.1.7, that the **City** is an Additional Insured thereunder; (d) the company code issued to the insurance company by the National Association of Insurance Commissioners (the NAIC number); and (e) the number assigned to the **Contract** by the **City**. All such Certificates of Insurance shall be accompanied by either a duly executed "Certification by Insurance Broker or Agent" in the form contained in Part III of Schedule A or copies of all policies referenced in such Certificate of Insurance as certified by an authorized representative of the issuing insurance carrier. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

22.3.4 Documentation confirming renewals of insurance shall be submitted to the **Commissioner** prior to the expiration date of coverage of policies required under this **Contract**. Such proofs of insurance shall comply with the requirements of Articles 22.3.2 and 22.3.3.

22.3.5 The **Contractor** shall be obligated to provide the **City** with a copy of any policy of insurance provided pursuant to this Article 22 upon the demand for such policy by the **Commissioner** or the **City** Corporation Counsel.

#### 22.4 Operations of the **Contractor**:

22.4.1 The **Contractor** shall not commence the **Work** unless and until all required certificates have been submitted to and accepted by the **Commissioner**. Acceptance by the **Commissioner** of a certificate does not excuse the **Contractor** from securing insurance consistent with all provisions of this Article 22 or of any liability arising from its failure to do so.

22.4.2 The **Contractor** shall be responsible for providing continuous insurance coverage in the manner, form, and limits required by this **Contract** and shall be authorized to perform **Work** only during the effective period of all required coverage.

22.4.3 In the event that any of the required insurance policies lapse, are revoked, suspended or otherwise terminated, for whatever cause, the **Contractor** shall immediately stop all **Work**, and shall not recommence **Work** until authorized in writing to do so by the **Commissioner**. Upon quitting the **Site**, except as otherwise directed by the **Commissioner**, the **Contractor** shall leave all plant, materials, equipment, tools, and supplies on the **Site**. **Contract** time shall continue to run during such periods and no extensions of time will be granted. The **Commissioner** may also declare the **Contractor** in default for failure to maintain required insurance.

22.4.4 In the event the **Contractor** receives notice, from an insurance company or other person, that any insurance policy required under this Article 22 shall be cancelled or terminated (or has been cancelled or terminated) for any reason, the **Contractor** shall immediately forward a copy of such notice to both the **Commissioner** and the New York City Comptroller, attn: Office of Contract Administration, Municipal Building, One Centre Street, room 1005, New York, New York 10007. Notwithstanding the foregoing, the **Contractor** shall ensure that there is no interruption in any of the insurance coverage required under this Article 22.

22.4.5 Where notice of loss, damage, occurrence, accident, claim or suit is required under an insurance policy maintained in accordance with this Article 22, the **Contractor** shall notify in writing all insurance carriers that issued potentially responsive policies of any such event relating to any operations under this **Contract** (including notice to Commercial General Liability insurance carriers for events relating to the **Contractor's** own employees) no later than 20 days after such event. For any policy where the **City** is an Additional Insured, such notice shall expressly specify that "this notice is being given on behalf of the City of New York as Insured as well as the Named Insured." Such notice shall also contain the following information: the number of the insurance policy, the name of the named insured, the date and location of the damage, occurrence, or accident, and the identity of the persons or things injured, damaged or lost. The **Contractor** shall simultaneously send a copy of such notice to the City of New York c/o Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.

22.4.6 In the event of any loss, accident, claim, action, or other event that does or can give rise to a claim under any insurance policy required under this Article 22, the **Contractor** shall at all times fully cooperate with the **City** with regard to such potential or actual claim.

22.5 **Subcontractor Insurance:** In the event the **Contractor** requires any **Subcontractor** to procure insurance with regard to any operations under this **Contract** and requires such **Subcontractor** to name the **Contractor** as an **Additional Insured** thereunder, the **Contractor** shall ensure that the **Subcontractor** name the **City**, including its officials and employees, as an Additional Insured with coverage at least as broad as the most recent edition of ISO Form CG 20 26.

22.6 Wherever reference is made in Article 7 or this Article 22 to documents to be sent to the **Commissioner** (e.g., notices, filings, or submissions), such documents shall be sent to the address set forth in Schedule A of the General Conditions. In the event no address is set forth in Schedule A, such documents are to be sent to the **Commissioner's** address as provided elsewhere in this **Contract**.

22.7 Apart from damages or losses covered by insurance provided pursuant to Articles 22.1.2, 22.1.3, or 22.1.5, the **Contractor** waives all rights against the **City**, including its officials and employees, for any damages or losses that are covered under any insurance required under this Article 22 (whether or

not such insurance is actually procured or claims are paid thereunder) or any other insurance applicable to the operations of the **Contractor** and/or its employees, agents, or **Subcontractors**.

22.8 In the event the **Contractor** utilizes a self-insurance program to satisfy any of the requirements of this Article 22, the **Contractor** shall ensure that any such self-insurance program provides the **City** with all rights that would be provided by traditional insurance under this Article 22, including but not limited to the defense and indemnification obligations that insurers are required to undertake in liability policies.

22.9 Materiality/Non-Waiver: The **Contractor's** failure to secure policies in complete conformity with this Article 22, or to give an insurance company timely notice of any sort required in this **Contract** or to do anything else required by this Article 22 shall constitute a material breach of this **Contract**. Such breach shall not be waived or otherwise excused by any action or inaction by the **City** at any time.

22.10 Pursuant to General Municipal Law Section 108, this **Contract** shall be void and of no effect unless **Contractor** maintains Workers' Compensation Insurance for the term of this **Contract** to the extent required and in compliance with the New York State Workers' Compensation Law.

22.11 Other Remedies: Insurance coverage provided pursuant to this Article 22 or otherwise shall not relieve the **Contractor** of any liability under this **Contract**, nor shall it preclude the **City** from exercising any rights or taking such other actions available to it under any other provisions of this **Contract** or Law.

### **ARTICLE 23. MONEY RETAINED AGAINST CLAIMS**

23.1 If any claim shall be made by any person or entity (including **Other Contractors** with the **City** on this **Project**) against the **City** or against the **Contractor** and the **City** for any of the following:

(a) An alleged loss, damage, injury, theft or vandalism of any of the kinds referred to in Articles 7 and 12, plus the reasonable costs of defending the **City**, which in the opinion of the **Comptroller** may not be paid by an insurance company (for any reason whatsoever); or

(b) An infringement of copyrights, patents or use of patented articles, tools, etc., as referred to in Article 57; or

(c) Damage claimed to have been caused directly or indirectly by the failure of the **Contractor** to perform the **Work** in strict accordance with this **Contract**,

the amount of such claim, or so much thereof as the **Comptroller** may deem necessary, may be withheld by the **Comptroller**, as security against such claim, from any money due hereunder. The **Comptroller**, in his/her discretion, may permit the **Contractor** to substitute other satisfactory security in lieu of the monies so withheld.

23.2 If an action on such claim is timely commenced and the liability of the **City**, or the **Contractor**, or both, shall have been established therein by a final judgment of a court of competent jurisdiction, or if such claim shall have been admitted by the **Contractor** to be valid, the **Comptroller** shall pay such judgment or admitted claim out of the monies retained by the **Comptroller** under the provisions of this Article 23, and return the balance, if any, without interest, to the **Contractor**.

## **ARTICLE 24. MAINTENANCE AND GUARANTY**

24.1 The **Contractor** shall promptly repair, replace, restore or rebuild, as the **Commissioner** may determine, any finished **Work** in which defects of materials or workmanship may appear or to which damage may occur because of such defects, during the one (1) year period subsequent to the date of **Substantial Completion** (or use and occupancy in accordance with Article 16), except where other periods of maintenance and guaranty are provided for in Schedule A.

24.2 As security for the faithful performance of its obligations hereunder, the **Contractor**, upon filing its requisition for payment on **Substantial Completion**, shall deposit with the **Commissioner** a sum equal to one (1%) percent of the price (or the amount fixed in Schedule A of the General Conditions) in cash or certified check upon a state or national bank and trust company or a check of such bank and trust company signed by a duly authorized officer thereof and drawn to the order of the **Comptroller**, or obligations of the **City**, which the **Comptroller** may approve as of equal value with the sum so required.

24.3 In lieu of the above, the **Contractor** may make such security payment to the **City** by authorizing the **Commissioner** in writing to deduct the amount from the **Substantial Completion** payment which shall be deemed the deposit required above.

24.4 If the **Contractor** has faithfully performed all of its obligations hereunder the **Commissioner** shall so certify to the **Comptroller** within five (5) **Days** after the expiration of one (1) year from the date of **Substantial Completion** and acceptance of the **Work** or within thirty (30) **Days** after the expiration of the guarantee period fixed in the **Specifications**. The security payment shall be repaid to the **Contractor** without interest within thirty (30) **Days** after certification by the **Commissioner** to the **Comptroller** that the **Contractor** has faithfully performed all of its obligations hereunder.

24.5 Notice by the **Commissioner** to the **Contractor** to repair, replace, rebuild or restore such defective or damaged **Work** shall be timely, pursuant to this article, if given not later than ten (10) **Days** subsequent to the expiration of the one (1) year period or other periods provided for herein.

24.6 If the **Contractor** shall fail to repair, replace, rebuild or restore such defective or damaged **Work** promptly after receiving such notice, the **Commissioner** shall have the right to have the **Work** done by others in the same manner as provided for in the completion of a defaulted **Contract**, under Article 51.

24.7 If the security payment so deposited is insufficient to cover the cost of such **Work**, the **Contractor** shall be liable to pay such deficiency on demand by the **Commissioner**.

24.8 The **Engineer's** certificate setting forth the fair and reasonable cost of repairing, replacing, rebuilding or restoring any damaged or defective **Work** when performed by one other than the **Contractor**, shall be binding and conclusive upon the **Contractor** as to the amount thereof.

24.9 The **Contractor** shall obtain all manufacturers' warranties and guaranties of all equipment and materials required by this **Contract** in the name of the **City** and shall deliver same to the **Commissioner**. All of the **City's** rights and title and interest in and to said manufacturers' warranties and guaranties may be assigned by the **City** to any subsequent purchasers of such equipment and materials or lessees of the premises into which the equipment and materials have been installed.

## CHAPTER VI: CHANGES, EXTRA WORK, AND DOCUMENTATION OF CLAIM

### ARTICLE 25. CHANGES

25.1 Changes may be made to this **Contract** only as duly authorized in writing by the **Commissioner** in accordance with the **Law** and this **Contract**. All such changes, modifications, and amendments will become a part of the **Contract**. **Work** so ordered shall be performed by the **Contractor**.

25.2 **Contract** changes will be made only for **Work** necessary to complete the **Work** included in the original scope of the **Contract** and/or for non-material changes to the scope of the **Contract**. Changes are not permitted for any material alteration in the scope of **Work** in the **Contract**.

25.3 The **Contractor** shall be entitled to a price adjustment for **Extra Work** performed pursuant to a written change order. Adjustments to price shall be computed in one or more of the following ways:

25.3.1 By applicable unit prices specified in the **Contract**; and/or

25.3.2 By agreement of a fixed price; and/or

25.3.3 By time and material records; and/or

25.3.4 In any other manner approved by the **CCPO**.

25.4 All payments for change orders are subject to pre-audit by the **Engineering Audit Officer** and may be post-audited by the **Comptroller** and/or the **Agency**.

### ARTICLE 26. METHODS OF PAYMENT FOR OVERRUNS AND EXTRA WORK

26.1 **Overrun of Unit Price Item**: An overrun is any quantity of a unit price item which the **Contractor** is directed to provide which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule.

26.1.1 For any unit price item, the **Contractor** will be paid at the unit price bid for any quantity up to one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule. If during the progress of the **Work**, the actual quantity of any unit price item required to complete the **Work** approaches the estimated quantity for that item, and for any reason it appears that the actual quantity of any unit price item necessary to complete the **Work** will exceed the estimated quantity for that item by twenty-five (25%) percent, the **Contractor** shall immediately notify the **Engineer** of such anticipated overrun. The **Contractor** shall not be compensated for any quantity of a unit price item provided which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule without written authorization from the **Engineer**.

26.1.2 If the actual quantity of any unit price item necessary to complete the **Work** will exceed one hundred twenty five (125%) percent of the estimated quantity for that item set forth in the bid schedule, the **City** reserves the right and the **Contractor** agrees to negotiate a new unit price for such item. In no event shall such negotiated new unit price exceed the unit bid price. If the **City** and **Contractor** cannot agree on a new unit price, then the **City** shall order the **Contractor** and the **Contractor** agrees to provide additional quantities of

the item on the basis of time and material records for the actual and reasonable cost as determined under Article 26.2, but in no event at a unit price exceeding the unit price bid.

**26.2 Extra Work:** For **Extra Work** where payment is by agreement on a fixed price in accordance with Article 25.3.2, the price to be paid for such **Extra Work** shall be based on the fair and reasonable estimated cost of the items set forth below. For **Extra Work** where payment is based on time and material records in accordance with Article 25.3.3, the price to be paid for such **Extra Work** shall be the actual and reasonable cost of the items set forth below, calculated in accordance with the formula specified therein, if any.

26.2.1 Necessary materials (including transportation to the **Site**); plus

26.2.2 Necessary direct labor, including payroll taxes (subject to statutory wage caps) and supplemental benefits; plus

26.2.3 Sales and personal property taxes, if any, required to be paid on materials not incorporated into such **Extra Work**; plus

26.2.4 Reasonable rental value of **Contractor**-owned (or **Subcontractor**-owned, as applicable), necessary plant and equipment other than **Small Tools**, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per operating hour:  $(.035) \times (\text{HP rating}) \times (\text{Fuel cost/gallon})$ . Reasonable rental value is defined as the lower of either seventy-five percent of the monthly prorated rental rates established in "The AED Green Book, Rental Rates and Specifications for Construction Equipment" published by Equipment Watch (the "Green Book"), or seventy-five percent of the monthly prorated rental rates established in the "Rental Rate Blue Book for Construction Equipment" published by Equipment Watch (the "Blue Book") (the applicable Blue Book rate being for rental only without the addition of any operational costs listed in the Blue Book). The reasonable rental value is deemed to be inclusive of all operating costs except for fuel/energy consumption and equipment operator's wages/costs. For multiple shift utilization, reimbursement shall be calculated as follows: first shift shall be seventy-five (75%) percent of such rental rates; second shift shall be sixty (60%) percent of the first shift rate; and third shift shall be forty (40%) percent of the first shift rate. Equipment on standby shall be reimbursed at one-third (1/3) the prorated monthly rental rate. **Contractor**-owned (or **Subcontractor**-owned, as applicable) equipment includes equipment from rental companies affiliated with or controlled by the **Contractor** (or **Subcontractor**, as applicable), as determined by the **Commissioner**. In establishing cost reimbursement for non-operating **Contractor**-owned (or **Subcontractor**-owned, as applicable) equipment (scaffolding, sheeting systems, road plates, etc.), the **City** may restrict reimbursement to a purchase-salvage/life cycle basis if less than the computed rental costs; plus

26.2.5 Necessary installation and dismantling of such plant and equipment, including transportation to and from the **Site**, if any, provided that, in the case of non-**Contractor**-owned (or non-**Subcontractor**-owned, as applicable) equipment rented from a third party, the cost of installation and dismantling are not allowable if such costs are included in the rental rate; plus

26.2.6 Necessary fees charged by governmental entities; plus

26.2.7 Necessary construction-related service fees charged by non-governmental entities, such as landfill tipping fees; plus

26.2.8 Reasonable rental costs of non-**Contractor**-owned (or non-**Subcontractor**-owned, as applicable) necessary plant and equipment other than **Small Tools**, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per hour of operation:  $(.035) \times (\text{HP rating}) \times (\text{Fuel cost/gallon})$ . In lieu of renting, the **City** reserves the right to direct the purchase of non-operating equipment (scaffolding, sheeting systems, road plates, etc.), with payment on a purchase-salvage/life cycle basis, if less than the projected rental costs; plus

26.2.9 Workers' Compensation Insurance, and any insurance coverage expressly required by the **City** for the performance of the **Extra Work** which is different than the types of insurance required by Article 22 and Schedule A of the General Conditions. The cost of Workers' Compensation Insurance is subject to applicable payroll limitation caps and shall be based upon the carrier's Manual Rate for such insurance derived from the applicable class Loss Cost ("LC") and carrier's Lost Cost Multiplier ("LCM") approved by the New York State Department of Financial Services, and with the exception of experience rating, rate modifiers as promulgated by the New York Compensation Insurance Rating Board ("NYCIRB"); plus

26.2.10 Additional costs incurred as a result of the **Extra Work** for performance and payment bonds; plus

26.2.11 Twelve percent (12%) percent of the total of items in Articles 26.2.1 through 26.2.5 as compensation for overhead, except that no percentage for overhead will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes. Overhead shall include without limitation, all costs and expenses in connection with administration, management superintendence, small tools, and insurance required by Schedule A of the General Conditions other than Workers' Compensation Insurance; plus

26.2.12 Ten (10%) percent of the total of items in Articles 26.2.1 through 26.2.5, plus the items in Article 26.2.11, as compensation for profit, except that no percentage for profit will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes; plus

26.2.13 Five (5%) percent of the total of items in Articles 26.2.6 through 26.2.10 as compensation for overhead and profit.

26.3 Where the **Extra Work** is performed in whole or in part by other than the **Contractor's** own forces pursuant to Article 26.2, the **Contractor** shall be paid, subject to pre-audit by the **Engineering Audit Officer**, the cost of such **Work** computed in accordance with Article 26.2 above, plus an additional allowance of five (5%) percent to cover the **Contractor's** overhead and profit.

26.4 Where a change is ordered, involving both **Extra Work** and omitted or reduced **Contract Work**, the **Contract** price shall be adjusted, subject to pre-audit by the **EAO**, in an amount based on the difference between the cost of such **Extra Work** and of the omitted or reduced **Work**.

26.5 Where the **Contractor** and the **Commissioner** can agree upon a fixed price for **Extra Work** in accordance with Article 25.3.2 or another method of payment for **Extra Work** in accordance with



Article 25.3.4, or for **Extra Work** ordered in connection with omitted **Work**, such method, subject to pre-audit by the **EAO**, may, at the option of the **Commissioner**, be substituted for the cost plus a percentage method provided in Article 26.2; provided, however, that if the **Extra Work** is performed by a **Subcontractor**, the **Contractor** shall not be entitled to receive more than an additional allowance of five (5%) percent for overhead and profit over the cost of such **Subcontractor's Work** as computed in accordance with Article 26.2.

## **ARTICLE 27. RESOLUTION OF DISPUTES**

27.1 All disputes between the **City** and the **Contractor** of the kind delineated in this Article 27.1 that arise under, or by virtue of, this **Contract** shall be finally resolved in accordance with the provisions of this Article 27 and the **PPB Rules**. This procedure for resolving all disputes of the kind delineated herein shall be the exclusive means of resolving any such disputes.

27.1.1 This Article 27 shall not apply to disputes concerning matters dealt with in other sections of the **PPB Rules**, or to disputes involving patents, copyrights, trademarks, or trade secrets (as interpreted by the courts of New York State) relating to proprietary rights in computer software.

27.1.2 This Article 27 shall apply only to disputes about the scope of **Work** delineated by the **Contract**, the interpretation of **Contract** documents, the amount to be paid for **Extra Work** or disputed work performed in connection with the **Contract**, the conformity of the **Contractor's Work** to the **Contract**, and the acceptability and quality of the **Contractor's Work**; such disputes arise when the **Engineer**, **Resident Engineer**, **Engineering Audit Officer**, or other designee of the **Commissioner** makes a determination with which the **Contractor** disagrees.

27.2 All determinations required by this Article 27 shall be made in writing clearly stated, with a reasoned explanation for the determination based on the information and evidence presented to the party making the determination. Failure to make such determination within the time required by this Article 27 shall be deemed a non-determination without prejudice that will allow application to the next level.

27.3 During such time as any dispute is being presented, heard, and considered pursuant to this Article 27, the **Contract** terms shall remain in force and the **Contractor** shall continue to perform **Work** as directed by the **ACCO** or the **Engineer**. Failure of the **Contractor** to continue **Work** as directed shall constitute a waiver by the **Contractor** of its claim.

### **27.4 Presentation of Disputes to Commissioner.**

Notice of Dispute and Agency Response. The **Contractor** shall present its dispute in writing ("Notice of Dispute") to the **Commissioner** within thirty (30) Days of receiving written notice of the determination or action that is the subject of the dispute. This notice requirement shall not be read to replace any other notice requirements contained in the **Contract**. The Notice of Dispute shall include all the facts, evidence, documents, or other basis upon which the **Contractor** relies in support of its position, as well as a detailed computation demonstrating how any amount of money claimed by the **Contractor** in the dispute was arrived at. Within thirty (30) Days after receipt of the detailed written submission comprising the complete Notice of Dispute, the **Engineer**, **Resident Engineer**, **Engineering Audit Officer**, or other designee of the **Commissioner** shall submit to the **Commissioner** all materials he or she deems pertinent to the dispute. Following initial submissions to the **Commissioner**, either party may demand of the other the production of any document or other material the demanding party believes may be relevant to the dispute. The requested party shall produce all relevant materials that are not otherwise

protected by a legal privilege recognized by the courts of New York State. Any question of relevancy shall be determined by the **Commissioner** whose decision shall be final. Willful failure of the **Contractor** to produce any requested material whose relevancy the **Contractor** has not disputed, or whose relevancy has been affirmatively determined, shall constitute a waiver by the **Contractor** of its claim.

27.4.1 **Commissioner Inquiry.** The **Commissioner** shall examine the material and may, in his or her discretion, convene an informal conference with the **Contractor**, the **ACCO**, and the **Engineer, Resident Engineer, Engineering Audit Officer**, or other designee of the **Commissioner** to resolve the issue by mutual consent prior to reaching a determination. The **Commissioner** may seek such technical or other expertise as he or she shall deem appropriate, including the use of neutral mediators, and require any such additional material from either or both parties as he or she deems fit. The **Commissioner's** ability to render, and the effect of, a decision hereunder shall not be impaired by any negotiations in connection with the dispute presented, whether or not the **Commissioner** participated therein. The **Commissioner** may or, at the request of any party to the dispute, shall compel the participation of any **Other Contractor** with a contract related to the **Work** of this **Contract**, and that **Contractor** shall be bound by the decision of the **Commissioner**. Any **Other Contractor** thus brought into the dispute resolution proceeding shall have the same rights and obligations under this Article 27 as the **Contractor** initiating the dispute.

27.4.2 **Commissioner Determination.** Within thirty (30) **Days** after the receipt of all materials and information, or such longer time as may be agreed to by the parties, the **Commissioner** shall make his or her determination and shall deliver or send a copy of such determination to the **Contractor**, the **ACCO**, and **Engineer, Resident Engineer, Engineering Audit Officer**, or other designee of the **Commissioner**, as applicable, together with a statement concerning how the decision may be appealed.

27.4.3 **Finality of Commissioner's Decision.** The **Commissioner's** decision shall be final and binding on all parties, unless presented to the Contract Dispute Resolution Board pursuant to this Article 27. The **City** may not take a petition to the Contract Dispute Resolution Board. However, should the **Contractor** take such a petition, the **City** may seek, and the Contract Dispute Resolution Board may render, a determination less favorable to the **Contractor** and more favorable to the **City** than the decision of the **Commissioner**.

27.5 **Presentation of Dispute to the Comptroller.** Before any dispute may be brought by the **Contractor** to the Contract Dispute Resolution Board, the **Contractor** must first present its claim to the **Comptroller** for his or her review, investigation, and possible adjustment.

27.5.1 **Time, Form, and Content of Notice.** Within thirty (30) **Days** of its receipt of a decision by the **Commissioner**, the **Contractor** shall submit to the **Comptroller** and to the **Commissioner** a Notice of Claim regarding its dispute with the **Agency**. The Notice of Claim shall consist of (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed and the reason(s) the **Contractor** contends the dispute was wrongly decided by the **Commissioner**; (ii) a copy of the written decision of the **Commissioner**; and (iii) a copy of all materials submitted by the **Contractor** to the **Agency**, including the Notice of Dispute. The **Contractor** may not present to the **Comptroller** any material not presented to the **Commissioner**, except at the request of the **Comptroller**.

27.5.2 Response. Within thirty (30) **Days** of receipt of the Notice of Claim, the **Agency** shall make available to the **Comptroller** a copy of all material submitted by the **Agency** to the **Commissioner** in connection with the dispute. The **Agency** may not present to the **Comptroller** any material not presented to the **Commissioner** except at the request of the **Comptroller**.

27.5.3 **Comptroller Investigation.** The **Comptroller** may investigate the claim in dispute and, in the course of such investigation, may exercise all powers provided in Sections 7-201 and 7-203 of the Administrative Code. In addition, the **Comptroller** may demand of either party, and such party shall provide, whatever additional material the **Comptroller** deems pertinent to the claim, including original business records of the **Contractor**. Willful failure of the **Contractor** to produce within fifteen (15) **Days** any material requested by the **Comptroller** shall constitute a waiver by the **Contractor** of its claim. The **Comptroller** may also schedule an informal conference to be attended by the **Contractor**, **Agency** representatives, and any other personnel desired by the **Comptroller**.

27.5.4 Opportunity of **Comptroller** to Compromise or Adjust Claim. The **Comptroller** shall have forty-five (45) **Days** from his or her receipt of all materials referred to in Article 27.5.3 to investigate the disputed claim. The period for investigation and compromise may be further extended by agreement between the **Contractor** and the **Comptroller**, to a maximum of ninety (90) **Days** from the **Comptroller's** receipt of all materials. The **Contractor** may not present its petition to the Contract Dispute Resolution Board until the period for investigation and compromise delineated in this Article 27.5.4 has expired. In compromising or adjusting any claim hereunder, the **Comptroller** may not revise or disregard the terms of the **Contract** between the parties.

27.6 Contract Dispute Resolution Board. There shall be a Contract Dispute Resolution Board composed of:

27.6.1 The chief administrative law judge of the Office of Administrative Trials and Hearings (OATH) or his/her designated OATH administrative law judge, who shall act as chairperson, and may adopt operational procedures and issue such orders consistent with this Article 27 as may be necessary in the execution of the Contract Dispute Resolution Board's functions, including, but not limited to, granting extensions of time to present or respond to submissions;

27.6.2 The **CCPO** or his/her designee; any designee shall have the requisite background to consider and resolve the merits of the dispute and shall not have participated personally and substantially in the particular matter that is the subject of the dispute or report to anyone who so participated; and

27.6.3 A person with appropriate expertise who is not an employee of the **City**. This person shall be selected by the presiding administrative law judge from a prequalified panel of individuals, established and administered by OATH with appropriate background to act as decision-makers in a dispute. Such individual may not have a contract or dispute with the **City** or be an officer or employee of any company or organization that does, or regularly represents persons, companies, or organizations having disputes with the **City**.

27.7 Petition to the Contract Dispute Resolution Board. In the event the claim has not been settled or adjusted by the **Comptroller** within the period provided in this Article 27, the **Contractor**,

within thirty (30) **Days** thereafter, may petition the Contract Dispute Resolution Board to review the **Commissioner's** determination.

27.7.1 **Form and Content of Petition by Contractor.** The **Contractor** shall present its dispute to the Contract Dispute Resolution Board in the form of a petition, which shall include (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed, and the reason(s) the **Contractor** contends the dispute was wrongly decided by the **Commissioner**; (ii) a copy of the written Decision of the **Commissioner**, (iii) copies of all materials submitted by the **Contractor** to the Agency; (iv) a copy of the written decision of the **Comptroller**, if any, and (v) copies of all correspondence with, or written material submitted by the **Contractor**, to the **Comptroller**. The **Contractor** shall concurrently submit four (4) complete sets of the Petition: one set to the City Corporation Counsel (Attn: Commercial and Real Estate Litigation Division) and three (3) sets to the Contract Dispute Resolution Board at OATH's offices with proof of service on the City Corporation Counsel. In addition, the **Contractor** shall submit a copy of the written statement of the substance of the dispute, cited in (i) above, to both the **Commissioner** and the **Comptroller**.

27.7.2 **Agency Response.** Within thirty (30) **Days** of its receipt of the Petition by the City Corporation Counsel, the **Agency** shall respond to the brief written statement of the **Contractor** and make available to the Contract Dispute Resolution Board all material it submitted to the **Commissioner** and **Comptroller**. Three (3) complete copies of the **Agency** response shall be provided to the Contract Dispute Resolution Board and one to the **Contractor**. Extensions of time for submittal of the **Agency** response shall be given as necessary upon a showing of good cause or, upon consent of the parties, for an initial period of up to thirty (30) **Days**.

27.7.3 **Further Proceedings.** The Contract Dispute Resolution Board shall permit the **Contractor** to present its case by submission of memoranda, briefs, and oral argument. The Contract Dispute Resolution Board shall also permit the **Agency** to present its case in response to the **Contractor** by submission of memoranda, briefs, and oral argument. If requested by the City Corporation Counsel, the **Comptroller** shall provide reasonable assistance in the preparation of the **Agency's** case. Neither the **Contractor** nor the **Agency** may support its case with any documentation or other material that was not considered by the **Comptroller**, unless requested by the Contract Dispute Resolution Board. The Contract Dispute Resolution Board, in its discretion, may seek such technical or other expert advice as it shall deem appropriate and may seek, on its own or upon application of a party, any such additional material from any party as it deems fit. The Contract Dispute Resolution Board, in its discretion, may combine more than one dispute between the parties for concurrent resolution.

27.7.4 **Contract Dispute Resolution Board Determination.** Within forty-five (45) **Days** of the conclusion of all written submissions and oral arguments, the Contract Dispute Resolution Board shall render a written decision resolving the dispute. In an unusually complex case, the Contract Dispute Resolution Board may render its decision in a longer period, not to exceed ninety (90) **Days**, and shall so advise the parties at the commencement of this period. The Contract Dispute Resolution Board's decision must be consistent with the terms of the **Contract**. Decisions of the Contract Dispute Resolution Board shall only resolve matters before the Contract Dispute Resolution Board and shall not have precedential effect with respect to matters not before the Contract Dispute Resolution Board.

27.7.5 Notification of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution Board shall send a copy of its decision to the **Contractor**, the **ACCO**, the Engineer, the **Comptroller**, the City Corporation Counsel, the CCPO, and the **PPB**. A decision in favor of the **Contractor** shall be subject to the prompt payment provisions of the **PPB Rules**. The Required Payment Date shall be thirty (30) Days after the date the parties are formally notified of the Contract Dispute Resolution Board's decision.

27.7.6 Finality of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution Board's decision shall be final and binding on all parties. Any party may seek review of the Contract Dispute Resolution Board's decision solely in the form of a challenge, filed within four (4) months of the date of the Contract Dispute Resolution Board's decision, in a court of competent jurisdiction of the State of New York, County of New York pursuant to Article 78 of the Civil Practice Law and Rules. Such review by the court shall be limited to the question of whether or not the Contract Dispute Resolution Board's decision was made in violation of lawful procedure, was affected by an error of **Law**, or was arbitrary and capricious or an abuse of discretion. No evidence or information shall be introduced or relied upon in such proceeding that was not presented to the Contract Dispute Resolution Board in accordance with this Article 27.

27.8 Any termination, cancellation, or alleged breach of the **Contract** prior to or during the pendency of any proceedings pursuant to this Article 27 shall not affect or impair the ability of the **Commissioner** or Contract Dispute Resolution Board to make a binding and final decision pursuant to this Article 27.

## **ARTICLE 28. RECORD KEEPING FOR EXTRA OR DISPUTED WORK OR WORK ON A TIME & MATERIALS BASIS**

28.1 While the **Contractor** or any of its **Subcontractors** is performing **Work** on a time and material basis or **Extra Work** on a time and material basis ordered by the **Commissioner** under Article 25, or where the **Contractor** believes that it or any of its **Subcontractors** is performing **Extra Work** but a final determination by **Agency** has not been made, or the **Contractor** or any of its **Subcontractors** is performing disputed **Work** (whether on or off the **Site**), or complying with a determination or order under protest in accordance with Articles 11, 27, and 30, in each such case the **Contractor** shall furnish the **Resident Engineer** daily with three (3) copies of written statements signed by the **Contractor's** representative at the **Site** showing:

28.1.1 The name, trade, and number of each worker employed on such **Work** or engaged in complying with such determination or order, the number of hours employed, and the character of the **Work** each is doing; and

28.1.2 The nature and quantity of any materials, plant and equipment furnished or used in connection with the performance of such **Work** or compliance with such determination or order, and from whom purchased or rented.

28.2 A copy of such statement will be countersigned by the **Resident Engineer**, noting thereon any items not agreed to or questioned, and will be returned to the **Contractor** within two (2) **Days** after submission.

28.3 The **Contractor** and its **Subcontractors**, when required by the **Commissioner**, or the **Comptroller**, shall also produce for inspection, at the office of the **Contractor** or **Subcontractor**, any and all of its books, bid documents, financial statements, vouchers, records, daily job diaries and reports,

and cancelled checks, and any other documents relating to showing the nature and quantity of the labor, materials, plant and equipment actually used in the performance of such **Work**, or in complying with such determination or order, and the amounts expended therefor, and shall permit the **Commissioner** and the **Comptroller** to make such extracts therefrom, or copies thereof, as they or either of them may desire.

28.4 In connection with the examination provided for herein, the **Commissioner**, upon demand therefor, will produce for inspection by the **Contractor** such records as the **Agency** may have with respect to such **Extra Work** or disputed **Work** performed under protest pursuant to order of the **Commissioner**, except those records and reports which may have been prepared for the purpose of determining the accuracy and validity of the **Contractor's** claim.

28.5 Failure to comply strictly with these requirements shall constitute a waiver of any claim for extra compensation or damages on account of the performance of such **Work** or compliance with such determination or order.

#### **ARTICLE 29. OMITTED WORK**

29.1 If any **Contract Work** in a lump sum **Contract**, or if any part of a lump sum item in a unit price, lump sum, or percentage-bid **Contract** is omitted by the **Commissioner** pursuant to Article 33, the **Contract** price, subject to audit by the EAO, shall be reduced by a pro rata portion of the lump sum bid amount based upon the percent of **Work** omitted subject to Article 29.4. For the purpose of determining the pro rata portion of the lump sum bid amount, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be the determining factor.

29.2 If the whole of a lump sum item or units of any other item is so omitted by the **Commissioner** in a unit price, lump sum, or percentage-bid **Contract**, then no payment will be made therefor except as provided in Article 29.4.

29.3 For units that have been ordered but are only partially completed, the unit price shall be reduced by a pro rata portion of the unit price bid based upon the percentage of **Work** omitted subject to Article 29.4.

29.4 In the event the **Contractor**, with respect to any omitted **Work**, has purchased any non-cancelable material and/or equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract**, but not yet incorporated into the **Work**, the **Contractor** shall be paid for such material and/or equipment in accordance with Article 64.2.1(b); provided, however, such payment is contingent upon the **Contractor's** delivery of such material and/or equipment in acceptable condition to a location designated by the **City**.

29.5 The **Contractor** agrees to make no claim for damages or for loss of overhead and profit with regard to any omitted **Work**.

#### **ARTICLE 30. NOTICE AND DOCUMENTATION OF COSTS AND DAMAGES; PRODUCTION OF FINANCIAL RECORDS**

30.1 If the **Contractor** shall claim to be sustaining damages by reason of any act or omission of the **City** or its agents, it shall submit to the **Commissioner** within forty-five (45) **Days** from the time such damages are first incurred, and every thirty (30) **Days** thereafter to the extent additional damages are being incurred for the same condition, verified statements of the details and the amounts of such

damages, together with documentary evidence of such damages. The **Contractor** may submit any of the above statements within such additional time as may be granted by the **Commissioner** in writing upon written request therefor. Failure of the **Commissioner** to respond in writing to a written request for additional time within thirty (30) **Days** shall be deemed a denial of the request. On failure of the **Contractor** to strictly comply with the foregoing provisions, such claims shall be deemed waived and no right to recover on such claims shall exist. Damages that the **Contractor** may claim in any action or dispute resolution procedure arising under or by reason of this **Contract** shall not be different from or in excess of the statements and documentation made pursuant to this Article 30. This Article 30.1 does not apply to claims submitted to the **Commissioner** pursuant to Article 11 or to claims disputing a determination under Article 27.

30.2 In addition to the foregoing statements, the **Contractor** shall, upon notice from the **Commissioner**, produce for examination at the **Contractor's** office, by the **Engineer, Architect or Project Manager**, all of its books of account, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this **Contract**, and submit itself and persons in its employment, for examination under oath by any person designated by the **Commissioner** or **Comptroller** to investigate claims made or disputes against the **City** under this **Contract**. At such examination, a duly authorized representative of the **Contractor** may be present.

30.3 In addition to the statements required under Article 28 and this Article 30, the **Contractor** and/or its **Subcontractor** shall, within thirty (30) **Days** upon notice from the **Commissioner** or **Comptroller**, produce for examination at the **Contractor's** and/or **Subcontractor's** office, by a representative of either the **Commissioner** or **Comptroller**, all of its books of account, bid documents, financial statements, accountant workpapers, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this **Contract**. Further, the **Contractor** and/or its **Subcontractor** shall submit any person in its employment, for examination under oath by any person designated by the **Commissioner** or **Comptroller** to investigate claims made or disputes against the **City** under this **Contract**. At such examination, a duly authorized representative of the **Contractor** may be present.

30.4 Unless the information and examination required under Article 30.3 is provided by the **Contractor** and/or its **Subcontractor** upon thirty (30) **Days'** notice from the **Commissioner** or **Comptroller**, or upon the **Commissioner's** or **Comptroller's** written authorization to extend the time to comply, the **City** shall be released from all claims arising under, relating to or by reason of this **Contract**, except for sums certified by the **Commissioner** to be due under the provisions of this **Contract**. It is further stipulated and agreed that no person has the power to waive any of the foregoing provisions and that in any action or dispute resolution procedure against the **City** to recover any sum in excess of the sums certified by the **Commissioner** to be due under or by reason of this **Contract**, the **Contractor** must allege in its complaint and prove, at trial or during such dispute resolution procedure, compliance with the provisions of this Article 30.

30.5 In addition, after the commencement of any action or dispute resolution procedure by the **Contractor** arising under or by reason of this **Contract**, the **City** shall have the right to require the **Contractor** to produce for examination under oath, up until the trial of the action or hearing before the Contract Dispute Resolution Board, the books and documents described in Article 30.3 and submit itself and all persons in its employ for examination under oath. If this Article 30 is not complied with as required, then the **Contractor** hereby consents to the dismissal of the action or dispute resolution procedure.

## **CHAPTER VII: POWERS OF THE RESIDENT ENGINEER, THE ENGINEER OR ARCHITECT AND THE COMMISSIONER**

### **ARTICLE 31. THE RESIDENT ENGINEER**

31.1 The **Resident Engineer** shall have the power to inspect, supervise, and control the performance of the **Work**, subject to review by the **Commissioner**. The **Resident Engineer** shall not, however, have the power to issue an **Extra Work** order, except as specifically designated in writing by the **Commissioner**.

### **ARTICLE 32. THE ENGINEER OR ARCHITECT OR PROJECT MANAGER**

32.1 The **Engineer** or **Architect** or **Project Manager**, in addition to those matters elsewhere herein delegated to the **Engineer** and expressly made subject to his/her determination, direction or approval, shall have the power, subject to review by the **Commissioner**:

32.1.1 To determine the amount, quality, and location of the **Work** to be paid for hereunder; and

32.1.2 To determine all questions in relation to the **Work**, to interpret the **Contract Drawings, Specifications, and Addenda**, and to resolve all patent inconsistencies or ambiguities therein; and

32.1.3 To determine how the **Work** of this **Contract** shall be coordinated with **Work of Other Contractors** engaged simultaneously on this **Project**, including the power to suspend any part of the **Work**, but not the whole thereof; and

32.1.4 To make minor changes in the **Work** as he/she deems necessary, provided such changes do not result in a net change in the cost to the **City** or to the **Contractor** of the **Work** to be done under the **Contract**; and

32.1.5 To amplify the **Contract Drawings**, add explanatory information and furnish additional **Specifications** and drawings, consistent with this **Contract**.

32.2 The foregoing enumeration shall not imply any limitation upon the power of the **Engineer** or **Architect** or **Project Manager**, for it is the intent of this **Contract** that all of the **Work** shall generally be subject to his/her determination, direction, and approval, except where the determination, direction or approval of someone other than the **Engineer** or **Architect** or **Project Manager** is expressly called for herein.

32.3 The **Engineer** or **Architect** or **Project Manager** shall not, however, have the power to issue an **Extra Work** order, except as specifically designated in writing by the **Commissioner**.

### **ARTICLE 33. THE COMMISSIONER**

33.1 The **Commissioner**, in addition to those matters elsewhere herein expressly made subject to his/her determination, direction or approval, shall have the power:



33.1.1 To review and make determinations on any and all questions in relation to this **Contract** and its performance; and

33.1.2 To modify or change this **Contract** so as to require the performance of **Extra Work** (subject, however, to the limitations specified in Article 25) or the omission of **Contract Work**; and

33.1.3 To suspend the whole or any part of the **Work** whenever in his/her judgment such suspension is required:

33.1.3(a) In the interest of the **City** generally; or

33.1.3(b) To coordinate the **Work** of the various contractors engaged on this **Project** pursuant to the provisions of Article 12; or

33.1.3(c) To expedite the completion of the entire **Project** even though the completion of this particular **Contract** may thereby be delayed.

#### **ARTICLE 34. NO ESTOPPEL**

34.1 Neither the **City** nor any **Agency**, official, agent or employee thereof, shall be bound, precluded or estopped by any determination, decision, approval, order, letter, payment or certificate made or given under or in connection with this **Contract** by the **City**, the **Commissioner**, the **Engineer**, the **Resident Engineer**, or any other official, agent or employee of the **City**, either before or after the final completion and acceptance of the **Work** and payment therefor:

34.1.1 From showing the true and correct classification, amount, quality or character of the **Work** actually done; or that any such determination, decision, order, letter, payment or certificate was untrue, incorrect or improperly made in any particular, or that the **Work**, or any part thereof, does not in fact conform to the requirements of this **Contract**; and

34.1.2 From demanding and recovering from the **Contractor** any overpayment made to it, or such damages as the **City** may sustain by reason of the **Contractor's** failure to perform each and every part of its **Contract**.

### **CHAPTER VIII: LABOR PROVISIONS**

#### **ARTICLE 35. EMPLOYEES**

35.1 The **Contractor** and its **Subcontractors** shall not employ on the **Work**:

35.1.1 Anyone who is not competent, faithful and skilled in the **Work** for which he/she shall be employed; and whenever the **Commissioner** shall inform the **Contractor**, in writing, that any employee is, in his/her opinion, incompetent, unfaithful or disobedient, that employee shall be discharged from the **Work** forthwith, and shall not again be employed upon it; or

35.1.2 Any labor, materials or means whose employment, or utilization during the course of this **Contract**, may tend to or in any way cause or result in strikes, work stoppages, delays, suspension of **Work** or similar troubles by workers employed by the **Contractor** or its **Subcontractors**, or by any of the trades working in or about the buildings and premises where **Work** is being performed under this **Contract**, or by **Other Contractors** or their **Subcontractors** pursuant to other contracts, or on any other building or premises owned or operated by the **City**, its **Agencies**, departments, boards or authorities. Any violation by the **Contractor** of this requirement may, upon certification of the **Commissioner**, be considered as proper and sufficient cause for declaring the **Contractor** to be in default, and for the **City** to take action against it as set forth in Chapter X of this **Contract**, or such other article of this **Contract** as the Commissioner may deem proper; or

35.1.3 In accordance with Section 220.3-e of the Labor Law of the State of New York (hereinafter "Labor Law"), the **Contractor** and its **Subcontractors** shall not employ on the **Work** any apprentice, unless he/she is a registered individual, under a bona fide program registered with the New York State Department of Labor. The allowable ratio of apprentices to journey-level workers in any craft classification shall not be greater than the ratio permitted to the **Contractor** as to its work force on any job under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the wage rate determined by the **Comptroller** of the **City** for the classification of **Work** actually performed. The **Contractor** or **Subcontractor** will be required to furnish written evidence of the registration of its program and apprentices as well as all the appropriate ratios and wage rates, for the area of the construction prior to using any apprentices on the **Contract Work**.

35.2 If the total cost of the **Work** under this **Contract** is at least two hundred fifty thousand (\$250,000) dollars, all laborers, workers, and mechanics employed in the performance of the **Contract** on the public work site, either by the **Contractor**, **Subcontractor** or other person doing or contracting to do the whole or a part of the **Work** contemplated by the **Contract**, shall be certified prior to performing any **Work** as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration.

35.3 In accordance with Local Law Nos. 30-2012 and 33-2012, codified at sections 6-132 and 12-113 of the Administrative Code, respectively,

35.3.1 The **Contractor** shall not take an adverse personnel action with respect to an officer or employee in retaliation for such officer or employee making a report of information concerning conduct which such officer or employee knows or reasonably believes to involve corruption, criminal activity, conflict of interest, gross mismanagement or abuse of authority by any officer or employee relating to this **Contract** to (a) the Commissioner of the Department of Investigation, (b) a member of the New York City Council, the Public Advocate, or the **Comptroller**, or (c) the **CCPO**, **ACCO**, **Agency** head, or **Commissioner**.

35.3.2 If any of the **Contractor's** officers or employees believes that he or she has been the subject of an adverse personnel action in violation of Article 35.3.1, he or she shall be entitled to bring a cause of action against the **Contractor** to recover all relief necessary to make him or her whole. Such relief may include but is not limited to: (a) an injunction to restrain continued retaliation, (b) reinstatement to the position such employee would have had but for the retaliation or to an equivalent position, (c) reinstatement of full fringe benefits and seniority rights, (d) payment of two times back

pay, plus interest, and (e) compensation for any special damages sustained as a result of the retaliation, including litigation costs and reasonable attorney's fees.

35.3.3 The **Contractor** shall post a notice provided by the **City** in a prominent and accessible place on any site where work pursuant to the **Contract** is performed that contains information about:

35.3.3(a) how its employees can report to the New York City Department of Investigation allegations of fraud, false claims, criminality or corruption arising out of or in connection with the **Contract**; and

35.3.3(b) the rights and remedies afforded to its employees under Administrative Code sections 7-805 (the New York City False Claims Act) and 12-113 (the Whistleblower Protection Expansion Act) for lawful acts taken in connection with the reporting of allegations of fraud, false claims, criminality or corruption in connection with the **Contract**.

35.3.4 For the purposes of this Article 35.3, "adverse personnel action" includes dismissal, demotion, suspension, disciplinary action, negative performance evaluation, any action resulting in loss of staff, office space, equipment or other benefit, failure to appoint, failure to promote, or any transfer or assignment or failure to transfer or assign against the wishes of the affected officer or employee.

35.3.5 This Article 35.3 is applicable to all of the **Contractor's Subcontractors** having subcontracts with a value in excess of \$100,000; accordingly, the **Contractor** shall include this rider in all subcontracts with a value in excess of \$100,000.

35.4 Article 35.3 is not applicable to this **Contract** if it is valued at \$100,000 or less. Articles 35.3.1, 35.3.2, 35.3.4, and 35.3.5 are not applicable to this **Contract** if it was solicited pursuant to a finding of an emergency.

#### 35.5 Paid Sick Leave Law.

##### 35.5.1 Introduction and General Provisions.

35.5.1(a) The Earned Sick Time Act, also known as the Paid Sick Leave Law ("PSLL"), requires covered employees who annually perform more than 80 hours of work in New York City to be provided with paid sick time.<sup>2</sup> Contractors of the **City** or of other governmental entities may be required to provide sick time pursuant to the PSLL.

35.5.1(b) The PSLL became effective on April 1, 2014, and is codified at Title 20, Chapter 8, of the New York City Administrative Code. It is administered by the City's Department of Consumer Affairs ("DCA"); DCA's rules promulgated under the PSLL are codified at Chapter 7 of Title 6 of the Rules of the City of New York ("Rules").

<sup>2</sup> Pursuant to the PSLL, if fewer than five employees work for the same employer, as determined pursuant to New York City Administrative Code § 20-912(g), such employer has the option of providing such employees uncompensated sick time.

35.5.1(c) The **Contractor** agrees to comply in all respects with the PSLL and the Rules, and as amended, if applicable, in the performance of this **Contract**. The **Contractor** further acknowledges that such compliance is a material term of this **Contract** and that failure to comply with the PSLL in performance of this **Contract** may result in its termination.

35.5.1(d) The **Contractor** must notify the **Agency Chief Contracting Officer** of the **Agency** with whom it is contracting in writing within ten (10) days of receipt of a complaint (whether oral or written) regarding the PSLL involving the performance of this **Contract**. Additionally, the **Contractor** must cooperate with DCA's education efforts and must comply with DCA's subpoenas and other document demands as set forth in the PSLL and Rules.

35.5.1(e) The PSLL is summarized below for the convenience of the **Contractor**. The **Contractor** is advised to review the PSLL and Rules in their entirety. On the website [www.nyc.gov/PaidSickLeave](http://www.nyc.gov/PaidSickLeave) there are links to the PSLL and the associated Rules as well as additional resources for employers, such as Frequently Asked Questions, timekeeping tools and model forms, and an event calendar of upcoming presentations and webinars at which the **Contractor** can get more information about how to comply with the PSLL. The **Contractor** acknowledges that it is responsible for compliance with the PSLL notwithstanding any inconsistent language contained herein.

#### 35.5.2 Pursuant to the PSLL and the Rules: Applicability, Accrual, and Use.

35.5.2(a) An employee who works within the City of New York for more than eighty hours in any consecutive 12-month period designated by the employer as its "calendar year" pursuant to the PSLL ("Year") must be provided sick time. Employers must provide a minimum of one hour of sick time for every 30 hours worked by an employee and compensation for such sick time must be provided at the greater of the employee's regular hourly rate or the minimum wage. Employers are not required to provide more than 40 hours of sick time to an employee in any Year.

35.5.2(b) An employee has the right to determine how much sick time he or she will use, provided that employers may set a reasonable minimum increment for the use of sick time not to exceed four hours per **Day**. In addition, an employee may carry over up to 40 hours of unused sick time to the following Year, provided that no employer is required to allow the use of more than forty hours of sick time in a Year or carry over unused paid sick time if the employee is paid for such unused sick time and the employer provides the employee with at least the legally required amount of paid sick time for such employee for the immediately subsequent Year on the first **Day** of such Year.

35.5.2(c) An employee entitled to sick time pursuant to the PSLL may use sick time for any of the following:

- i. such employee's mental illness, physical illness, injury, or health condition or the care of such illness, injury, or condition or such employee's need for medical diagnosis or preventive medical care;
- ii. such employee's care of a family member (an employee's child, spouse, domestic partner, parent, sibling, grandchild or grandparent, or the child or parent of an employee's spouse or domestic partner) who has a mental

illness, physical illness, injury or health condition or who has a need for medical diagnosis or preventive medical care;

- iii. closure of such employee's place of business by order of a public official due to a public health emergency; or
- iv. such employee's need to care for a child whose school or childcare provider has been closed due to a public health emergency.

35.5.2(d) An employer must not require an employee, as a condition of taking sick time, to search for a replacement. However, an employer may require an employee to provide: reasonable notice of the need to use sick time; reasonable documentation that the use of sick time was needed for a reason above if for an absence of more than three consecutive work days; and/or written confirmation that an employee used sick time pursuant to the PSL. However, an employer may not require documentation specifying the nature of a medical condition or otherwise require disclosure of the details of a medical condition as a condition of providing sick time and health information obtained solely due to an employee's use of sick time pursuant to the PSL must be treated by the employer as confidential.

35.5.2(e) If an employer chooses to impose any permissible discretionary requirement as a condition of using sick time, it must provide to all employees a written policy containing those requirements, using a delivery method that reasonably ensures that employees receive the policy. If such employer has not provided its written policy, it may not deny sick time to an employee because of non-compliance with such a policy.

35.5.2(f) Sick time to which an employee is entitled must be paid no later than the payday for the next regular payroll period beginning after the sick time was used.

35.5.3 Exemptions and Exceptions. Notwithstanding the above, the PSL does not apply to any of the following:

35.5.3(a) an independent contractor who does not meet the definition of employee under section 190(2) of the New York State Labor Law;

35.5.3(b) an employee covered by a valid collective bargaining agreement in effect on April 1, 2014, until the termination of such agreement;

35.5.3(c) an employee in the construction or grocery industry covered by a valid collective bargaining agreement if the provisions of the PSL are expressly waived in such collective bargaining agreement;

35.5.3(d) an employee covered by another valid collective bargaining agreement if such provisions are expressly waived in such agreement and such agreement provides a benefit comparable to that provided by the PSL for such employee;

35.5.3(e) an audiologist, occupational therapist, physical therapist, or speech language pathologist who is licensed by the New York State Department of Education and who calls in for work assignments at will, determines his or her own schedule, has the ability to reject or accept any assignment referred to him or her, and is paid an average hourly wage that is at least four times the federal minimum wage;

35.5.3(f) an employee in a work study program under Section 2753 of Chapter 42 of the United States Code;

35.5.3(g) an employee whose work is compensated by a qualified scholarship program as that term is defined in the Internal Revenue Code, Section 117 of Chapter 20 of the United States Code; or

35.5.3(h) a participant in a Work Experience Program (WEP) under section 336-c of the New York State Social Services Law.

**35.5.4 Retaliation Prohibited.** An employer may not threaten or engage in retaliation against an employee for exercising or attempting in good faith to exercise any right provided by the PSL. In addition, an employer may not interfere with any investigation, proceeding, or hearing pursuant to the PSL.

**35.5.5 Notice of Rights.**

35.5.5(a) An employer must provide its employees with written notice of their rights pursuant to the PSL. Such notice must be in English and the primary language spoken by an employee, provided that DCA has made available a translation into such language. Downloadable notices are available on DCA's website at <http://www.nyc.gov/html/dca/html/law/PaidSickLeave.shtml>.

35.5.5(b) Any person or entity that willfully violates these notice requirements is subject to a civil penalty in an amount not to exceed fifty dollars for each employee who was not given appropriate notice.

**35.5.6 Records.** An employer must retain records documenting its compliance with the PSL for a period of at least three years, and must allow DCA to access such records in furtherance of an investigation related to an alleged violation of the PSL.

**35.5.7 Enforcement and Penalties.**

35.5.7(a) Upon receiving a complaint alleging a violation of the PSL, DCA has the right to investigate such complaint and attempt to resolve it through mediation. Within **30 Days** of written notification of a complaint by DCA, or sooner in certain circumstances, the employer must provide DCA with a written response and such other information as DCA may request. If DCA believes that a violation of the PSL has occurred, it has the right to issue a notice of violation to the employer.

35.5.7(b) DCA has the power to grant an employee or former employee all appropriate relief as set forth in New York City Administrative Code § 20-924(d). Such relief may include, among other remedies, treble damages for the wages that should have been paid, damages for unlawful retaliation, and damages and reinstatement for unlawful discharge. In addition, DCA may impose on an employer found to have violated the PSL civil penalties not to exceed \$500 for a first violation, \$750 for a second violation within two years of the first violation, and \$1,000 for each succeeding violation within two years of the previous violation.

**35.5.8 More Generous Policies and Other Legal Requirements.** Nothing in the PSL is intended to discourage, prohibit, diminish, or impair the adoption or retention of a more generous sick time policy, or the obligation of an employer to comply with any contract,

collective bargaining agreement, employment benefit plan or other agreement providing more generous sick time. The PSLI provides minimum requirements pertaining to sick time and does not preempt, limit or otherwise affect the applicability of any other law, regulation, rule, requirement, policy or standard that provides for greater accrual or use by employees of sick leave or time, whether paid or unpaid, or that extends other protections to employees. The PSLI may not be construed as creating or imposing any requirement in conflict with any federal or state law, rule or regulation.

35.6 HireNYC: Hiring and Reporting Requirements. This Article 35.6 applies to construction contracts of \$1,000,000 or more. The **Contractor** shall comply with the requirements of Articles 35.6.1-35.6.5 for all non-trades jobs (e.g., for an administrative position arising out of **Work** ant located in New York City). The **Contractor** shall reasonably cooperate with SBS and the **City** on specific outreach events, including "Hire-on-the-Spot" events, for the hiring of trades workers in connection with the **Work**. If provided elsewhere in this **Contract**, this **Contract** is subject to a project labor agreement.

35.6.1 Enrollment. The **Contractor** shall enroll with the HireNYC system, found at [www.nyc.gov/sbs](http://www.nyc.gov/sbs), within thirty (30) days after the registration of this **Contract** pursuant to Section 328 of the New York City Charter. The **Contractor** shall provide information about the business, designate a primary contact and say whether it intends to hire for any entry to mid-level job opportunities arising from this **Contract** and located in New York City, and, if so, the approximate start date of the first hire.

#### 35.6.2 Job Posting Requirements.

35.6.2(a) Once enrolled in HireNYC, the **Contractor** agrees to update the HireNYC portal with all entry to mid-level job opportunities arising from this **Contract** and located in New York City, if any, which shall be defined as jobs requiring no more than an associate degree, as provided by the New York State Department of Labor (see Column F of <https://labor.ny.gov/stats/2012-2022-NYS-Employment-Prospects.xls>). The information to be updated includes the types of entry and mid-level positions made available from the work arising from the **Contract** and located in New York City, the number of positions, the anticipated schedule of initiating the hiring process for these positions, and the contact information for the **Contractor's** representative charged with overseeing hiring. The **Contractor** must update the HireNYC portal with any hiring needs arising from the contract and located in New York City, and the requirements of the jobs to be filled, no less than three weeks prior to the intended first day of employment for each new position, except with the permission of SBS, not to be unreasonably withheld, and must also update the HireNYC portal as set forth below.

35.6.2(b) After enrollment through HireNYC and submission of relevant information, SBS will work with the **Contractor** to develop a recruitment plan which will outline the candidate screening process, and will provide clear instructions as to when, where, and how interviews will take place. HireNYC will screen applicants based on employer requirements and refer applicants whom it believes are qualified to the **Contractor** for interviews. The **Contractor** must interview referred applicants whom it believes are qualified.

35.6.2(c) After completing an interview of a candidate referred by HireNYC, the **Contractor** must provide feedback via the portal within twenty (20) business days to indicate which candidates were interviewed and hired, if any. In addition, the **Contractor** shall provide the start date of new hires, and additional information

reasonably related to such hires, within twenty (20) business days after the start date. In the event the **Contractor** does not have any job openings covered by this Rider in any given year, the **Contractor** shall be required to provide an annual update to HireNYC to that effect. For this purpose, the reporting year shall run from the date of the registration of the **Contract** pursuant to Charter section 328 and each anniversary date.

35.6.2(d) These requirements do not limit the **Contractor's** ability to assess the qualifications of prospective workers, and to make final hiring and retention decisions. No provision of this Article 35.6 shall be interpreted so as to require the **Contractor** to employ any particular worker.

35.6.2(e) In addition, the provisions of this Article 35.6 shall not apply to positions that the **Contractor** intends to fill with employees employed pursuant to the job retention provision of Section 22-505 of the Administrative Code of the City of New York. The **Contractor** shall not be required to report such openings with HireNYC. However, the **Contractor** shall enroll with the HireNYC system pursuant to Article 35.6.1, above, and, if such positions subsequently become open, then the remaining provisions of this Article 35.6 will apply.

35.6.3 Breach and Liquidated Damages. If the **Contractor** fails to comply with the terms of the **ContrSact** and this Article 35.6 (1) by not enrolling its business with HireNYC; (2) by not informing HireNYC, as required, of open positions; or (3) by failing to interview a qualified candidate, the **Agency** may assess liquidated damages in the amount of two-thousand five hundred dollars (\$2,500) per breach. For all other events of noncompliance with the terms of this Article 35.6, the **Agency** may assess liquidated damages in the amount of five hundred dollars (\$500) per breach. Furthermore, in the event the **Contractor** breaches the requirements of this Article 35.6 during the term of the **Contract**, the **City** may hold the **Contractor** in default of this **Contract**.

35.6.4 Audit Compliance. In addition to the auditing requirements set forth in other parts of the **Contract**, the **Contractor** shall permit SBS and the **City** to inspect any and all records concerning or relating to job openings or the hiring of individuals for work arising from the **Contract** and located in New York City. The **Contractor** shall permit an inspection within seven (7) business days of the request.

35.6.5 Other Reporting Requirements. The **Contractor** shall report to the **City**, on a monthly basis, all information reasonably requested by the **City** that is necessary for the **City** to comply with any reporting requirements imposed by **Law**, including any requirement that the **City** maintain a publicly accessible database. In addition, the **Contractor** agrees to comply with all reporting requirements imposed by **Law**, or as otherwise requested by the **City**.

35.6.6 Federal Hiring Requirements. If this **Contract** is federally funded (as indicated elsewhere in this **Contract**), the **Contractor** shall comply with all federal hiring requirements as may be set forth in this **Contract**, including, as applicable: (a) Section 3 of the HUD Act of 1968, which requires, to the greatest extent feasible, economic opportunities for 30 percent of new hires be given to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing and Executive Order 11246, which prohibits discrimination in employment due to race, color, religion, sex or national origin, and requires the implementation of goals for minority and female participation for work involving any construction trade.



## **ARTICLE 36. NO DISCRIMINATION**

36.1 The **Contractor** specifically agrees, as required by Labor Law Section 220-e, as amended, that:

36.1.1 In the hiring of employees for the performance of **Work** under this **Contract** or any subcontract hereunder, neither the **Contractor**, **Subcontractor**, nor any person acting on behalf of such **Contractor** or **Subcontractor**, shall by reason of race, creed, color or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the **Work** to which the employment relates;

36.1.2 Neither the **Contractor**, **Subcontractor**, nor any person on its behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of **Work** under this **Contract** on account of race, creed, color or national origin;

36.1.3 There may be deducted from the amount payable to the **Contractor** by the **City** under this **Contract** a penalty of fifty (\$50.00) dollars for each person for each **Day** during which such person was discriminated against or intimidated in violation of the provisions of this **Contract**; and

36.1.4 This **Contract** may be cancelled or terminated by the **City** and all moneys due or to become due hereunder may be forfeited, for a second or any subsequent violation of the terms or conditions of this Article 36.

36.1.5 This Article 36 covers all construction, alteration and repair of any public building or public work occurring in the State of New York and the manufacture, sale, and distribution of materials, equipment, and supplies to the extent that such operations are performed within the State of New York pursuant to this **Contract**.

36.2 The **Contractor** specifically agrees, as required by Section 6-108 of the Administrative Code, as amended, that:

36.2.1 It shall be unlawful for any person engaged in the construction, alteration or repair of buildings or engaged in the construction or repair of streets or highways pursuant to a **Contract** with the **City** or engaged in the manufacture, sale or distribution of materials, equipment or supplies pursuant to a **Contract** with the **City** to refuse to employ or to refuse to continue in any employment any person on account of the race, color or creed of such person.

36.2.2 It shall be unlawful for any person or any servant, agent or employee of any person, described in Article 36.1.2, to ask, indicate or transmit, orally or in writing, directly or indirectly, the race, color or creed or religious affiliation of any person employed or seeking employment from such person, firm or corporation.

36.2.3 Breach of the foregoing provisions shall be deemed a violation of a material provision of this **Contract**.

36.2.4 Any person, or the employee, manager or owner of or officer of such firm or corporation who shall violate any of the provisions of this Article 36.2 shall, upon

conviction thereof, be punished by a fine of not more than one hundred (\$100.00) dollars or by imprisonment for not more than thirty (30) **Days**, or both.

36.3 This **Contract** is subject to the requirements of Executive Order No. 50 (1980) ("E.O. 50"), as revised, and the rules and regulations promulgated thereunder. No contract will be awarded unless and until these requirements have been complied with in their entirety. By signing this **Contract**, the **Contractor** agrees that it:

36.3.1 Will not engage in any unlawful discrimination against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability, marital status or sexual orientation with respect to all employment decisions including, but not limited to, recruitment, hiring, upgrading, demotion, downgrading, transfer, training, rates of pay or other forms of compensation, layoff, termination, and all other terms and conditions of employment; and

36.3.2 Will not engage in any unlawful discrimination in the selection of **Subcontractors** on the basis of the owner's race, color, creed, national origin, sex, age, disability, marital status or sexual orientation; and

36.3.3 Will state in all solicitations or advertisements for employees placed by or on behalf of the **Contractor** that all qualified applicants will receive consideration for employment without unlawful discrimination based on race, creed, color, national origin, sex, age, citizens status, disability, marital status, sexual orientation, or that it is an equal employment opportunity employer; and

36.3.4 Will send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or memorandum of understanding, written notification of its equal employment opportunity commitments under E.O. 50 and the rules and regulations promulgated thereunder; and

36.3.5 Will furnish, before the award of the **Contract**, all information and reports, including an employment report, that are required by E.O. 50, the rules and regulations promulgated thereunder, and orders of the **City Department of Business Services, Division of Labor Services (DLS)** and will permit access to its books, records, and accounts by the **DLS** for the purposes of investigation to ascertain compliance with such rules, regulations, and orders.

36.4 The **Contractor** understands that in the event of its noncompliance with the nondiscrimination clauses of this **Contract** or with any of such rules, regulations, or orders, such noncompliance shall constitute a material breach of this **Contract** and noncompliance with E.O. 50 and the rules and regulations promulgated thereunder. After a hearing held pursuant to the rules of the **DLS**, the Director of the **DLS** may direct the **Commissioner** to impose any or all of the following sanctions:

36.4.1 Disapproval of the **Contractor**; and/or

36.4.2 Suspension or termination of the **Contract**; and/or

36.4.3 Declaring the **Contractor** in default; and/or

36.4.4 In lieu of any of the foregoing sanctions, the Director of the **DLS** may impose an employment program.

In addition to any actions taken under this **Contract**, failure to comply with E.O. 50 and the rules and regulations promulgated thereunder, in one or more instances, may result in a **City Agency** declaring the **Contractor** to be non-responsible in future procurements. The **Contractor** further agrees that it will refrain from entering into any **Contract** or **Contract** modification subject to E.O. 50 and the rules and regulations promulgated thereunder with a **Subcontractor** who is not in compliance with the requirements of E.O. 50 and the rules and regulations promulgated thereunder.

36.5 The **Contractor** specifically agrees, as required by Section 6-123 of the Administrative Code, that:

36.5.1 The **Contractor** will not engage in any unlawful discriminatory practice in violation of Title 8 of the Administrative Code; and

36.5.2 Any failure to comply with this Article 36.5 may subject the **Contractor** to the remedies set forth in Section 6-123 of the Administrative Code, including, where appropriate, sanctions such as withholding of payment, imposition of an employment program, finding the **Contractor** to be in default, cancellation of the **Contract**, or any other sanction or remedy provided by **Law** or **Contract**.

#### **ARTICLE 37. LABOR LAW REQUIREMENTS**

37.1 The **Contractor** shall strictly comply with all applicable provisions of the Labor Law, as amended. Such compliance is a material term of this **Contract**.

37.2 The **Contractor** specifically agrees, as required by Labor Law Sections 220 and 220-d, as amended, that:

37.2.1 **Hours of Work:** No laborer, worker, or mechanic in the employ of the **Contractor**, **Subcontractor** or other person doing or contracting to do the whole or a part of the **Work** contemplated by this **Contract** shall be permitted or required to work more than eight (8) hours in any one (1) **Day**, or more than five (5) **Days** in any one (1) week, except as provided in the Labor Law and in cases of extraordinary emergency including fire, flood, or danger to life or property, or in the case of national emergency when so proclaimed by the President of the United States of America.

37.2.2 In situations in which there are not sufficient laborers, workers, and mechanics who may be employed to carry on expeditiously the **Work** contemplated by this **Contract** as a result of such restrictions upon the number of hours and **Days** of labor, and the immediate commencement or prosecution or completion without undue delay of the **Work** is necessary for the preservation of the **Site** and/or for the protection of the life and limb of the persons using the same, such laborers, workers, and mechanics shall be permitted or required to work more than eight (8) hours in any one (1) **Day**; or five (5) **Days** in any one (1) week; provided, however, that upon application of any **Contractor**, the **Commissioner** shall have first certified to the Commissioner of Labor of the State of New York (hereinafter "Commissioner of Labor") that such public **Work** is of an important nature and that a delay in carrying it to completion would result in serious disadvantage to the public; and provided, further, that such Commissioner of Labor shall have determined that such an emergency does in fact exist as provided in Labor Law Section 220.2.

37.2.3 Failure of the **Commissioner** to make such a certification to the Commissioner of Labor shall not entitle the **Contractor** to damages for delay or for any cause whatsoever.

37.2.4 Prevailing Rate of Wages: The wages to be paid for a legal day's **Work** to laborers, workers, or mechanics employed upon the **Work** contemplated by this **Contract** or upon any materials to be used thereon shall not be less than the "prevailing rate of wage" as defined in Labor Law Section 220, and as fixed by the **Comptroller** in the attached Schedule of Wage Rates and in updated schedules thereof. The prevailing wage rates and supplemental benefits to be paid are those in effect at the time the **Work** is being performed.

37.2.5 Requests for interpretation or correction in the Information for Bidders includes all requests for clarification of the classification of trades to be employed in the performance of the **Work** under this **Contract**. In the event that a trade not listed in the **Contract** is in fact employed during the performance of this **Contract**, the **Contractor** shall be required to obtain from the **Agency** the prevailing wage rates and supplementary benefits for the trades used and to complete the performance of this **Contract** at the price at which the **Contract** was awarded.

37.2.6 Minimum Wages: Except for employees whose wage is required to be fixed pursuant to Labor Law Section 220, all persons employed by the **Contractor** and any **Subcontractor** in the manufacture or furnishing of the supplies, materials, or equipment, or the furnishing of work, labor, or services, used in the performance of this **Contract**, shall be paid, without subsequent deduction or rebate unless expressly authorized by **Law**, not less than the sum mandated by **Law**.

37.3 Working Conditions: No part of the **Work**, labor or services shall be performed or rendered by the **Contractor** in any plants, factories, buildings or surroundings or under working conditions which are unsanitary or hazardous or dangerous to the health and safety of employees engaged in the performance of this **Contract**. Compliance with the safety, sanitary, and factory inspection **Laws** of the state in which the **Work** is to be performed shall be prima facie evidence of compliance with this Article 37.3.

37.4 Prevailing Wage Enforcement: The **Contractor** agrees to pay for all costs incurred by the **City** in enforcing prevailing wage requirements, including the cost of any investigation conducted by or on behalf of the **Agency** or the **Comptroller**, where the **City** discovers a failure to comply with any of the requirements of this Article 37 by the **Contractor** or its **Subcontractor(s)**. The **Contractor** also agrees that, should it fail or refuse to pay for any such investigation, the **Agency** is hereby authorized to deduct from a **Contractor's** account an amount equal to the cost of such investigation.

37.4.1 The Labor Law Section 220 and Section 220-d, as amended, provide that this **Contract** shall be forfeited and no sum paid for any **Work** done hereunder on a second conviction for willfully paying less than:

37.4.1(a) The stipulated prevailing wage scale as provided in Labor Law section 220, as amended, or

37.4.1(b) The stipulated minimum hourly wage scale as provided in Labor Law section 220-d, as amended.

37.4.2 For any breach or violation of either working conditions (Article 37.3) or minimum wages (Article 37.2.6) provisions, the party responsible therefor shall be liable to the **City** for liquidated damages, which may be withheld from any amounts due on any contracts with the **City** of such party responsible, or may be recovered in actions brought by the **City**

Corporation Counsel in the name of the **City**, in addition to damages for any other breach of this **Contract**, for a sum equal to the amount of any underpayment of wages due to any employee engaged in the performance of this **Contract**. In addition, the **Commissioner** shall have the right to cancel contracts and enter into other contracts for the completion of the original contract, with or without public letting, and the original **Contractor** shall be liable for any additional cost. All sums withheld or recovered as deductions, rebates, refunds, or underpayment of wages hereunder, shall be held in a special deposit account and shall be paid without interest, on order of the **Comptroller**, directly to the employees who have been paid less than minimum rates of pay as set forth herein and on whose account such sums were withheld or recovered, provided that no claims by employees for such payments shall be entertained unless made within two (2) years from the date of actual notice to the **Contractor** of the withholding or recovery of such sums by the **City**.

37.4.3 A determination by the **Comptroller** that a **Contractor** and/or its **Subcontractor** willfully violated Labor Law Section 220 will be forwarded to the **City's** five District Attorneys for review.

37.4.4 The **Contractor's** or **Subcontractor's** noncompliance with this Article 37.4 and Labor Law Section 220 may result in an unsatisfactory performance evaluation and the **Comptroller** may also find and determine that the **Contractor** or **Subcontractor** willfully violated the New York Labor Law.

37.4.4(a) An unsatisfactory performance evaluation for noncompliance with this Article 37.4 may result in a determination that the **Contractor** is a non-responsible bidder on subsequent procurements with the **City** and thus a rejection of a future award of a contract with the **City**, as well as any other sanctions provided for by Law.

37.4.4(b) Labor Law Section 220-b, as amended, provides that when two (2) final determinations have been rendered against a **Contractor** or **Subcontractor** within any consecutive six (6) year period determining that such **Contractor** or **Subcontractor** has willfully failed to pay the prevailing rate of wages or to provide supplements in accordance with the Labor Law and this Article 37.4, whether such failures were concurrent or consecutive and whether or not such final determinations concerning separate public works projects are rendered simultaneously, such **Contractor** or **Subcontractor** shall be ineligible to submit a bid on or be awarded any public works contract with the **City** for a period of five (5) years from the second final determination. If the final determination involves the falsification of payroll records or the kickback of wages or supplements, the **Contractor** or **Subcontractor** shall be ineligible to submit a bid on or be awarded any public works contract with the **City** for a period of five (5) years from the first final determination.

37.4.4(c) Labor Law Section 220, as amended, provides that the **Contractor** or **Subcontractor** found to have violated this Article 37.4 may be directed to make payment of wages or supplements including interest found to be due, and the **Contractor** or **Subcontractor** may be directed to make payment of a further sum as a civil penalty in an amount not exceeding twenty-five (25%) percent of the total amount found to be due.

37.5 The **Contractor** and its **Subcontractors** shall within ten (10) **Days** after mailing of a Notice of Award or written order, post in prominent and conspicuous places in each and every plant, factory, building, and structure where employees of the **Contractor** and its **Subcontractors** engaged in the

performance of this **Contract** are employed, notices furnished by the **City**, in relation to prevailing wages and supplements, minimum wages, and other stipulations contained in Sections 220 and 220-h of the Labor Law, and the **Contractor** and its **Subcontractors** shall continue to keep such notices posted in such prominent and conspicuous places until **Final Acceptance** of the supplies, materials, equipment, or **Work**, labor, or services required to be furnished or rendered under this **Contract**.

37.6 The **Contractor** shall strictly comply with all of the provisions of Articles 37.6.1 through 37.6.5, and provide for all workers, laborers or mechanics in its employ, the following:

37.6.1 **Notices Posted At Site:** Post, in a location designated by the **City**, schedules of prevailing wages and supplements for this **Project**, a copy of all re-determinations of such schedules for the **Project**, the Workers' Compensation Law Section 51 notice, all other notices required by Law to be posted at the **Site**, the **City** notice that this **Project** is a public works project on which each worker is entitled to receive the prevailing wages and supplements for the occupation at which he or she is working, and all other notices which the **City** directs the **Contractor** to post. The **Contractor** shall provide a surface for such notices which is satisfactory to the **City**. The **Contractor** shall maintain and keep current such notices in a legible manner and shall replace any notice or schedule which is damaged, defaced, illegible or removed for any reason. The **Contractor** shall post such notices before commencing any **Work** on the **Site** and shall maintain such notices until all **Work** on the **Site** is complete; and

37.6.2 **Daily Site Sign-in Sheets:** Maintain daily **Site** sign-in sheets, and require that **Subcontractors** maintain daily **Site** sign-in sheets for its employees, which include blank spaces for an employee's name to be both printed and signed, job title, date started and Social Security number, the time the employee began work and the time the employee left work, until **Final Acceptance** of the supplies, materials, equipment, or **Work**, labor, or services to be furnished or rendered under this **Contract** unless exception is granted by the **Comptroller** upon application by the **Agency**. In the alternative, subject to the approval of the **CCPO**, the **Contractor** and **Subcontractor** may maintain an electronic or biometric sign-in system, which provides the information required by this Article 37.6.2; and

37.6.3 **Individual Employee Information Notices:** Distribute a notice to each worker, laborer or mechanic employed under this **Contract**, in a form provided by the **Agency**, that this **Project** is a public works project on which each worker, laborer or mechanic is entitled to receive the prevailing rate of wages and supplements for the occupation at which he or she is working. If the total cost of the **Work** under this **Contract** is at least two hundred fifty thousand (\$250,000) dollars, such notice shall also include a statement that each worker, laborer or mechanic must be certified prior to performing any **Work** as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration. Such notice shall be distributed to each worker before he or she starts performing any **Work** of this **Contract** and with the first paycheck after July first of each year. "Worker, laborer or mechanic" includes employees of the **Contractor** and all **Subcontractors** and all employees of suppliers entering the **Site**. At the time of distribution, the **Contractor** shall have each worker, laborer or mechanic sign a statement, in a form provided by the **Agency**, certifying that the worker has received the notice required by this Article 37.6.3, which signed statement shall be maintained with the payroll records required by this **Contract**; and

37.6.3(a) The **Contractor** and each **Subcontractor** shall notify each worker, laborer or mechanic employed under this **Contract** in writing of the prevailing rate of

wages for their particular job classification. Such notification shall be given to every worker, laborer, and mechanic on their first pay stub and with every pay stub thereafter; and

37.6.4 **Site Laminated Identification Badges:** The **Contractor** shall provide laminated identification badges which include a photograph of the worker's, laborer's or mechanic's face and indicate the worker's, laborer's or mechanic's name, trade, employer's name, and employment starting date (month/day/year). Further, the **Contractor** shall require as a condition of employment on the **Site**, that each and every worker, laborer or mechanic wear the laminated identification badge at all times and that it may be seen by any representative of the **City**. The **Commissioner** may grant a written waiver from the requirement that the laminated identification badge include a photograph if the **Contractor** demonstrates that the identity of an individual wearing a laminated identification badge can be easily verified by another method; and

37.6.5 **Language Other Than English Used On Site:** Provide the **ACCO** notice when three (3) or more employees (worker and/or laborer and/or mechanic) on the **Site**, at any time, speak a language other than English. The **ACCO** will then provide the **Contractor** the notices described in Article 37.6.1 in that language or languages as may be required. The **Contractor** is responsible for all distributions under this Article 37; and

37.6.6 **Provision of Records:** The **Contractor** and **Subcontractor(s)** shall produce within five (5) **Days** on the **Site** of the **Work** and upon a written order of the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, or the **Comptroller**, such records as are required to be kept by this Article 37.6; and

37.6.7 The **Contractor** and **Subcontractor(s)** shall pay employees by check or direct deposit. If this **Contract** is for an amount greater than one million (\$1,000,000) dollars, checks issued by the **Contractor** to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the **Agency**). For any subcontract for an amount greater than seven hundred fifty thousand (\$750,000) dollars, checks issued by a **Subcontractor** to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the **Agency**); and

37.6.8 The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of Articles 37.6.1 through 37.6.7 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

37.7 The **Contractor** and its **Subcontractors** shall keep such employment and payroll records as are required by Section 220 of the Labor Law. The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of this Article 37.7 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

37.8 At the time the **Contractor** makes application for each partial payment and for final payment, the **Contractor** shall submit to the **Commissioner** a written payroll certification, in the form provided by this **Contract**, of compliance with the prevailing wage, minimum wage, and other provisions and stipulations required by Labor Law Section 220 and of compliance with the training requirements of Labor Law Section 220-h set forth in Article 35.2. This certification of compliance shall be a condition precedent to payment and no payment shall be made to the **Contractor** unless and until each such certification shall have been submitted to and received by the **Commissioner**.

37.9 This **Contract** is executed by the **Contractor** with the express warranty and representation that the **Contractor** is not disqualified under the provisions of Section 220 of the Labor Law from the award of the **Contract**.

37.10 Any breach or violation of any of the foregoing shall be deemed a breach or violation of a material provision of this **Contract**, and grounds for cancellation thereof by the **City**.

#### **ARTICLE 38. PAYROLL REPORTS**

38.1 The **Contractor** and its **Subcontractor(s)** shall maintain on the **Site** during the performance of the **Work** the original payrolls or transcripts thereof which the **Contractor** and its **Subcontractor(s)** are required to maintain and shall submit such original payrolls or transcripts, subscribed and affirmed by it as true, within thirty (30) **Days** after issuance of its first payroll, and every thirty (30) **Days** thereafter, pursuant to Labor Law Section 220(3-a)(a)(iii). The **Contractor** and **Subcontractor(s)** shall submit such original payrolls or transcripts along with each and every payment requisition. If payment requisitions are not submitted at least once a month, the **Contractor** and its **Subcontractor(s)** shall submit original payrolls and transcripts both along with its payment requisitions and independently of its payment requisitions.

38.2 The **Contractor** shall maintain payrolls or transcripts thereof for six (6) years from the date of completion of the **Work** on this **Contract**. If such payrolls and transcripts are maintained outside of New York City after the completion of the **Work** and their production is required pursuant to this Article 38, the **Contractor** shall produce such records in New York City upon request by the **City**.

38.3 The **Contractor** and **Subcontractor(s)** shall comply with any written order, direction, or request made by the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, the **Agency Labor Law Investigator(s)**, or the **Comptroller**, to provide to the requesting party any of the following information and/or records within five (5) **Days** of such written order, direction, or request:

38.3.1 Such original payrolls or transcripts thereof subscribed and affirmed by it as true and the statements signed by each worker pursuant to this Chapter VIII; and/or

38.3.2 Attendance sheets for each **Day** on which any employee of the **Contractor** and/or any of the **Subcontractor(s)** performed **Work** on the **Site**, which attendance sheet shall be in a form acceptable to the **Agency** and shall provide information acceptable to the **Agency** to identify each such employee; and/or

38.3.3 Any other information to satisfy the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, the **Agency Labor Law Investigator(s)** or the **Comptroller**, that this Chapter VIII and the Labor Law, as to the hours of employment and prevailing rates of wages and/or supplemental benefits, are being observed.

38.4 The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of Articles 38.1 and/or 38.2 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

#### **ARTICLE 39. DUST HAZARDS**

39.1 Should a harmful dust hazard be created in performing the **Work** of this **Contract**, for the elimination of which appliances or methods have been approved by the Board of Standards and Appeals



of the City of New York, such appliances and methods shall be installed, maintained, and effectively operated during the continuance of such harmful dust hazard. Failure to comply with this provision after notice shall make this **Contract** voidable at the sole discretion of the **City**.

## **CHAPTER IX: PARTIAL AND FINAL PAYMENTS**

### **ARTICLE 40. CONTRACT PRICE**

40.1 The **City** shall pay, and the **Contractor** agrees to accept, in full consideration for the **Contractor's** performance of the **Work** subject to the terms and conditions hereof, the lump sum price or unit prices for which this **Contract** was awarded, plus the amount required to be paid for any **Extra Work** ordered by the **Commissioner** under Article 25, less credit for any **Work** omitted pursuant to Article 29.

### **ARTICLE 41. BID BREAKDOWN ON LUMP SUM**

41.1 Within fifteen (15) **Days** after the commencement date specified in the **Notice to Proceed** or **Order to Work**, unless otherwise directed by the **Resident Engineer**, the **Contractor** shall submit to the **Resident Engineer** a breakdown of its bid price, or of lump sums bid for items of the **Contract**, showing the various operations to be performed under the **Contract**, as directed in the progress schedule required under Article 9, and the value of each of such operations, the total of such items to equal the lump sum price bid. Said breakdown must be approved in writing by the **Resident Engineer**.

41.2 No partial payment will be approved until the **Contractor** submits a bid breakdown that is acceptable to the **Resident Engineer**.

41.3 The **Contractor** shall also submit such other information relating to the bid breakdown as directed by the **Resident Engineer**. Thereafter, the breakdown may be used only for checking the **Contractor's** applications for partial payments hereunder, but shall not be binding upon the **City**, the **Commissioner**, or the **Engineer** for any purpose whatsoever.

### **ARTICLE 42. PARTIAL PAYMENTS**

42.1 From time to time as the **Work** progresses satisfactorily, but not more often than once each calendar month (except where the **Commissioner** approves in writing the submission of invoices on a more frequent basis and for invoices relating to **Work** performed pursuant to a change order), the **Contractor** may submit to the **Engineer** a requisition for a partial payment in the prescribed form, which shall contain an estimate of the quantity and the fair value of the **Work** done during the payment period.

42.2 Partial payments may be made for materials, fixtures, and equipment in advance of their actual incorporation in the **Work**, as the **Commissioner** may approve, and upon the terms and conditions set forth in the General Conditions.

42.3 The **Contractor** shall also submit to the **Commissioner** in connection with every application for partial payment a verified statement in the form prescribed by the **Comptroller** setting forth the information required under Labor Law Section 220-a.

42.4 Within thirty (30) **Days** after receipt of a satisfactory payment application, and within sixty (60) **Days** after receipt of a satisfactory payment application in relation to **Work** performed pursuant to a change order, the **Engineer** will prepare and certify, and the **Commissioner** will approve, a voucher for a partial payment in the amount of such approved estimate, less any and all deductions authorized to be made by the **Commissioner** under the terms of this **Contract** or by **Law**.

#### **ARTICLE 43. PROMPT PAYMENT**

43.1 The Prompt Payment provisions of the **PPB** Rules in effect at the time of the bid will be applicable to payments made under this **Contract**. The provisions require the payment to the **Contractor** of interest on payments made after the required payment date, except as set forth in the **PPB** Rules.

43.2 The **Contractor** shall submit a proper invoice to receive payment, except where the **Contract** provides that the **Contractor** will be paid at predetermined intervals without having to submit an invoice for each scheduled payment.

43.3 Determination of interest due will be made in accordance with the **PPB** Rules.

43.4 If the **Contractor** is paid interest, the proportionate share(s) of that interest shall be forwarded by the **Contractor** to its **Subcontractor(s)**.

43.5 The **Contractor** shall pay each **Subcontractor** or **Materialman** not later than seven (7) **Days** after receipt of payment out of amounts paid to the **Contractor** by the **City** for **Work** performed by the **Subcontractor** or **Materialman** under this **Contract**.

43.5.1 If **Contractor** fails to make any payment to any **Subcontractor** or **Materialman** within seven (7) **Days** after receipt of payment by the **City** pursuant to this Article 43.5, then the **Contractor** shall pay interest on amounts due to such **Subcontractor** or **Materialman** at the rate of interest in effect on the date such payment is made by the **Contractor** computed in accordance with Section 756-b (1)(b) of the New York General Business Law. Accrual of interest shall commence on the **Day** immediately following the expiration of the seventh **Day** following receipt of payment by the **Contractor** from the **City** and shall end on the date on which payment is made.

43.6 The **Contractor** shall include in each of its subcontracts a provision requiring each **Subcontractor** to make payment to each of its **Subcontractors** or **Materialmen** for **Work** performed under this **Contract** in the same manner and within the same time period set forth above.

#### **ARTICLE 44. SUBSTANTIAL COMPLETION PAYMENT**

44.1 The **Contractor** shall submit with the **Substantial Completion** requisition:

44.1.1 A final verified statement of any pending Article 27 disputes in accordance with the **PPB** Rules and this **Contract** and any and all alleged claims against the **City**, in any way connected with or arising out of this **Contract** (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) setting forth with respect to each such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the

**Contractor** claims the performance of the **Work** or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay.

44.1.1(a) With respect to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the **City Corporation Counsel** shall have the same right to inspect, and to make extracts or copies of, the **Contractor's** books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 44.1.1(a) is intended to or shall relieve the **Contractor** from the obligation of complying strictly with Articles 11, 27, 28, and 30. The **Contractor** is warned that unless such claims are completely set forth as herein required, the **Contractor** upon acceptance of the **Substantial Completion** payment pursuant to this Article 44, will have waived any such claims.

44.1.2 A Final Approved Punch List.

44.1.3 Where required, a request for an extension of time to achieve **Substantial Completion** or final extension of time.

44.2 The **Commissioner** shall issue a voucher calling for payment of any part or all of the balance due for **Work** performed under the **Contract**, including monies retained under Article 21, less any and all deductions authorized to be made by the **Commissioner**, under this **Contract** or by **Law**, and less twice the amount the **Commissioner** considers necessary to ensure the completion of the balance of the **Work** by the **Contractor**. Such a payment shall be considered a partial and not a final payment. No **Substantial Completion** payment shall be made under this Article 44 where the **Contractor** failed to complete the **Work** within the time fixed for such completion in the Schedule A of the General Conditions, or within the time to which completion may have been extended, until an extension or extensions of time for the completion of **Work** have been acted upon pursuant to Article 13.

44.3 No further partial payments shall be made to the **Contractor** after **Substantial Completion**, except the **Substantial Completion** payment and payment pursuant to any **Contractor's** requisition that were properly filed with the **Commissioner** prior to the date of **Substantial Completion**; however, the **Commissioner** may grant a waiver for further partial payments after the date of **Substantial Completion** to permit payments for change order **Work** and/or release of retainage and deposits pursuant to Articles 21 and 24. Such waiver shall be in writing.

44.4 The **Contractor** acknowledges that nothing contained in this Article 44 is intended to or shall in any way diminish the force and effect of Article 13.

#### **ARTICLE 45. FINAL PAYMENT**

45.1 After completion and **Final Acceptance** of the **Work**, the **Contractor** shall submit all required certificates and documents, together with a requisition for the balance claimed to be due under the **Contract**, less the amount authorized to be retained for maintenance under Article 24. Such submission shall be within 90 days of the date of the **Commissioner's** written determination of **Final Acceptance**, or within such additional time as may be granted by the **Commissioner** in writing. If the **Contractor** fails to submit all required certificates and documents within the time allowed, no payment of the balance claimed shall be made to the **Contractor** and the **Contractor** shall be deemed to have forfeited its right to payment of any balance claimed. A verified statement similar to that required in connection with applications for partial payments shall also be submitted to the **Commissioner**.

45.2 Amended Verified Statement of Claims: The **Contractor** shall also submit with the final requisition any amendments to the final verified statement of any pending dispute resolution procedures in accordance with the **PPB Rules** and this **Contract** and any and all alleged claims against the **City**, in any way connected with or arising out of this **Contract** (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) that have occurred subsequent to **Substantial Completion**, setting forth with respect to each such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each such item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the **Contractor** claims the performance of the **Work** or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay. With reference to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the **City Corporation Counsel** shall have the same right to inspect, and to make extracts or copies of, the **Contractor's** books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 45.2, is intended to or shall relieve the **Contractor** from the obligation of complying strictly with Articles 11, 27, 28, and 30. The **Contractor** is warned that unless such claims are completely set forth as herein required, the **Contractor**, upon acceptance of the Final Payment pursuant to Article 46, will have waived any such claims.

45.3 Preparation of Final Voucher: Upon determining the balance due hereunder other than on account of claims, the **Engineer** will prepare and certify, for the **Commissioner's** approval, a voucher for final payment in that amount less any and all deductions authorized to be made by the **Commissioner** under this **Contract** or by **Law**. In the case of a lump sum **Contract**, the **Commissioner** shall certify the voucher for final payment within thirty (30) **Days** from the date of completion and acceptance of the **Work**, provided all requests for extensions of time have been acted upon.

45.3.1 All prior certificates and vouchers upon which partial payments were made, being merely estimates made to enable the **Contractor** to prosecute the **Work** more advantageously, shall be subject to correction in the final voucher, and the certification of the **Engineer** thereon and the approval of the **Commissioner** thereof, shall be conditions precedent to the right of the **Contractor** to receive any money hereunder. Such final voucher shall be binding and conclusive upon the **Contractor**.

45.3.2 Payment pursuant to such final voucher, less any deductions authorized to be made by the **Commissioner** under this **Contract** or by **Law**, shall constitute the final payment, and shall be made by the **Comptroller** within thirty (30) **Days** after the filing of such voucher in his/her office.

45.4 The **Contractor** acknowledges that nothing contained in this Article 45 is intended to or shall in any way diminish the force and effect of Article 13.

#### **ARTICLE 46. ACCEPTANCE OF FINAL PAYMENT**

46.1 The acceptance by the **Contractor**, or by anyone claiming by or through it, of the final payment, whether such payment be made pursuant to any judgment of any court, or otherwise, shall constitute and operate as a release of the **City** from any and all claims of and liability to the **Contractor** for anything heretofore done or furnished for the **Contractor** relating to or arising out of this **Contract** and the **Work** done hereunder, and for any prior act, neglect or default on the part of the **City** or any of its officials, agents or employees, excepting only a claim against the **City** for the amounts deducted or retained in accordance with the terms and provisions of this **Contract** or by **Law**, and excepting any claims, not otherwise waived, or any pending dispute resolution procedures which are contained in the

verified statement filed with the **Contractor's** substantial and final requisitions pursuant to Articles 44 and 45.

46.2 The **Contractor** is warned that the execution by it of a release, in connection with the acceptance of the final payment, containing language purporting to reserve claims other than those herein specifically excepted from the operation of this Article 46, or those for amounts deducted by the **Commissioner** from the final requisition or from the final payment as certified by the **Engineer** and approved by the **Commissioner**, shall not be effective to reserve such claims, anything stated to the **Contractor** orally or in writing by any official, agent or employee of the **City** to the contrary notwithstanding.

46.3 Should the **Contractor** refuse to accept the final payment as tendered by the **Comptroller**, it shall constitute a waiver of any right to interest thereon.

46.4 The **Contractor**, however, shall not be barred by this Article 46 from commencing an action for breach of **Contract** to the extent permitted by **Law** and by the terms of the **Contract** for any claims that are contained in the verified statement filed with the **Contractor's** substantial and final requisitions pursuant to Articles 44 and 45 or that arose after submission of the final payment requisition, provided that a detailed and verified statement of claim is served upon the contracting **Agency** and **Comptroller** not later than forty (40) **Days** after the making of such final payment by electronic funds transfer (EFT) or the mailing of such final payment. The statement shall specify the items upon which the claim will be based and any such claim shall be limited to such items.

#### **ARTICLE 47. APPROVAL BY PUBLIC DESIGN COMMISSION**

47.1 All works of art, including paintings, mural decorations, stained glass, statues, bas-reliefs, and other sculptures, monuments, fountains, arches, and other structures of a permanent character intended for ornament or commemoration, and every design of the same to be used in the performance of this **Contract**, and the design of all bridges, approaches, buildings, gates, fences, lamps, or structures to be erected, pursuant to the terms of this **Contract**, shall be submitted to the Art Commission, d/b/a the Public Design Commission of the City of New York, and shall be approved by the Public Design Commission prior to the erection or placing in position of the same. The final payment shall not become due or payable under this **Contract** unless and until the Public Design Commission shall certify that the design for the **Work** herein contracted for has been approved by the said Public Design Commission, and that the same has been executed in substantial accordance with the design so approved, pursuant to the provisions of Chapter 37, Section 854 of the **City Charter**, as amended.

### **CHAPTER X: CONTRACTOR'S DEFAULT**

#### **ARTICLE 48. COMMISSIONER'S RIGHT TO DECLARE CONTRACTOR IN DEFAULT**

48.1 In addition to those instances specifically referred to in other Articles herein, the **Commissioner** shall have the right to declare the **Contractor** in default of this **Contract** if:

48.1.1 The **Contractor** fails to commence **Work** when notified to do so by the **Commissioner**; or if

48.1.2 The **Contractor** shall abandon the **Work**; or if

48.1.3 The **Contractor** shall refuse to proceed with the **Work** when and as directed by the **Commissioner**; or if

48.1.4 The **Contractor** shall, without just cause, reduce its working force to a number which, if maintained, would be insufficient, in the opinion of the **Commissioner**, to complete the **Work** in accordance with the progress schedule; or if

48.1.5 The **Contractor** shall fail or refuse to increase sufficiently such working force when ordered to do so by the **Commissioner**; or if

48.1.6 The **Contractor** shall sublet, assign, transfer, convert or otherwise dispose of this **Contract** other than as herein specified; or sell or assign a majority interest in the **Contractor**; or if

48.1.7 The **Contractor** fails to secure and maintain all required insurance; or if

48.1.8 A receiver or receivers are appointed to take charge of the **Contractor's** property or affairs; or if

48.1.9 The **Commissioner** shall be of the opinion that the **Contractor** is or has been unnecessarily or unreasonably or willfully delaying the performance and completion of the **Work**, or the award of necessary subcontracts, or the placing of necessary material and equipment orders; or if

48.1.10 The **Commissioner** shall be of the opinion that the **Contractor** is or has been willfully or in bad faith violating any of the provisions of this **Contract**; or if

48.1.11 The **Commissioner** shall be of the opinion that the **Work** cannot be completed within the time herein provided therefor or within the time to which such completion may have been extended; provided, however, that the impossibility of timely completion is, in the **Commissioner's** opinion, attributable to conditions within the **Contractor's** control; or if

48.1.12 The **Work** is not completed within the time herein provided therefor or within the time to which the **Contractor** may be entitled to have such completion extended; or if

48.1.13 Any statement or representation of the **Contractor** in the **Contract** or in any document submitted by the **Contractor** with respect to the **Work**, the **Project**, or the **Contract** (or for purposes of securing the **Contract**) was untrue or incorrect when made; or if

48.1.14 The **Contractor** or any of its officers, directors, partners, five (5%) percent shareholders, principals, or other persons substantially involved in its activities, commits any of the acts or omissions specified as the grounds for debarment in the **PPB Rules**.

48.2 Before the **Commissioner** shall exercise his/her right to declare the **Contractor** in default, the **Commissioner** shall give the **Contractor** an opportunity to be heard, upon not less than two (2) **Days'** notice.

#### **ARTICLE 49. EXERCISE OF THE RIGHT TO DECLARE DEFAULT**

49.1 The right to declare the **Contractor** in default for any of the grounds specified or referred to in Article 48 shall be exercised by sending the **Contractor** a notice, signed by the **Commissioner**, setting forth the ground or grounds upon which such default is declared (hereinafter referred to as a "Notice of Default").

49.2 The **Commissioner's** determination that the **Contractor** is in default shall be conclusive, final, and binding on the parties and such a finding shall preclude the **Contractor** from commencing a plenary action for any damages relating to the **Contract**. If the **Contractor** protests the determination of the **Commissioner**, the **Contractor** may commence an action in a court of competent jurisdiction of the State of New York under Article 78 of the New York Civil Practice Law and Rules.

#### **ARTICLE 50. QUITTING THE SITE**

50.1 Upon receipt of such notice the **Contractor** shall immediately discontinue all further operations under this **Contract** and shall immediately quit the **Site**, leaving untouched all plant, materials, equipment, tools, and supplies then on the **Site**.

#### **ARTICLE 51. COMPLETION OF THE WORK**

51.1 The **Commissioner**, after declaring the **Contractor** in default, may then have the **Work** completed by such means and in such manner, by contract with or without public letting, or otherwise, as he/she may deem advisable, utilizing for such purpose such of the **Contractor's** plant, materials, equipment, tools, and supplies remaining on the **Site**, and also such **Subcontractors**, as he/she may deem advisable.

51.2 After such completion, the **Commissioner** shall make a certificate stating the expense incurred in such completion, which shall include the cost of re-letting and also the total amount of liquidated damages (at the rate provided for in the **Contract**) from the date when the **Work** should have been completed by the **Contractor** in accordance with the terms hereof to the date of actual completion of the **Work**. Such certificate shall be binding and conclusive upon the **Contractor**, its sureties, and any person claiming under the **Contractor**, as to the amount thereof.

51.3 The expense of such completion, including any and all related and incidental costs, as so certified by the **Commissioner**, and any liquidated damages assessed against the **Contractor**, shall be charged against and deducted out of monies which are earned by the **Contractor** prior to the date of default. Should the expense of such completion, as certified by the **Commissioner**, exceed the total sum which would have been payable under the **Contract** if it had been completed by the **Contractor**, any excess shall be paid by the **Contractor**.

#### **ARTICLE 52. PARTIAL DEFAULT**

52.1 In case the **Commissioner** shall declare the **Contractor** in default as to a part of the **Work** only, the **Contractor** shall discontinue such part, shall continue performing the remainder of the **Work** in strict conformity with the terms of this **Contract**, and shall in no way hinder or interfere with any **Other Contractor(s)** or persons whom the **Commissioner** may engage to complete the **Work** as to which the **Contractor** was declared in default.

52.2 The provisions of this Chapter relating to declaring the **Contractor** in default as to the entire **Work** shall be equally applicable to a declaration of partial default, except that the **Commissioner** shall be entitled to utilize for completion of the part of the **Work** as to which the **Contractor** was declared in default only such plant, materials, equipment, tools, and supplies as had been previously used by the **Contractor** on such part.

#### **ARTICLE 53. PERFORMANCE OF UNCOMPLETED WORK**

53.1 In completing the whole or any part of the **Work** under the provisions of this Chapter X, the **Commissioner** shall have the power to depart from or change or vary the terms and provisions of this **Contract**, provided, however, that such departure, change or variation is made for the purpose of reducing the time or expense of such completion. Such departure, change or variation, even to the extent of accepting a lesser or different performance, shall not affect the conclusiveness of the **Commissioner's** certificate of the cost of completion referred to in Article 51, nor shall it constitute a defense to an action to recover the amount by which such certificate exceeds the amount which would have been payable to the **Contractor** hereunder but for its default.

#### **ARTICLE 54. OTHER REMEDIES**

54.1 In addition to the right to declare the **Contractor** in default pursuant to this Chapter X, the **Commissioner** shall have the absolute right, in his/her sole discretion and without a hearing, to complete or cause to be completed in the same manner as described in Articles 51 and 53, any or all unsatisfactory or uncompleted punch list **Work** that remains after the completion date specified in the **Final Approved Punch List**. A written notice of the exercise of this right shall be sent to the **Contractor** who shall immediately quit the **Site** in accordance with the provisions of Article 50.

54.2 The expense of completion permitted under Article 54.1, including any and all related and incidental costs, as so certified by the **Commissioner**, shall be charged against and deducted out of monies which have been earned by the **Contractor** prior to the date of the exercise of the right set forth in Article 54.1; the balance of such monies, if any, subject to the other provisions of this **Contract**, to be paid to the **Contractor** without interest after such completion. Should the expense of such completion, as certified by the **Commissioner**, exceed the total sum which would have been payable under the **Contract** if it had been completed by the **Contractor**, any excess shall be paid by the **Contractor**.

54.3 The previous provisions of this Chapter X shall be in addition to any and all other remedies available under **Law** or in equity.

54.4 The exercise by the **City** of any remedy set forth herein shall not be deemed a waiver by the **City** of any other legal or equitable remedy contained in this **Contract** or provided under **Law**.

### **CHAPTER XI: MISCELLANEOUS PROVISIONS**

#### **ARTICLE 55. CONTRACTOR'S WARRANTIES**

55.1 In consideration of, and to induce, the award of this **Contract** to the **Contractor**, the **Contractor** represents and warrants:



55.1.1 That it is financially solvent, sufficiently experienced and competent to perform the **Work**; and

55.1.2 That the facts stated in its bid and the information given by it pursuant to the Information for Bidders is true and correct in all respects; and

55.1.3 That it has read and complied with all requirements set forth in the **Contract**.

#### **ARTICLE 56. CLAIMS AND ACTIONS THEREON**

56.1 Any claim, that is not subject to dispute resolution under the **PPB Rules** or this **Contract**, against the **City** for damages for breach of **Contract** shall not be made or asserted in any action, unless the **Contractor** shall have strictly complied with all requirements relating to the giving of notice and of information with respect to such claims, as herein before provided.

56.2 Nor shall any action be instituted or maintained on any such claims unless such action is commenced within six (6) months after **Substantial Completion**; except that:

56.2.1 Any claims arising out of events occurring after **Substantial Completion** and before **Final Acceptance** of the **Work** shall be asserted within six (6) months of **Final Acceptance** of the **Work**;

56.2.2 If the **Commissioner** exercises his/her right to complete or cause to complete any or all unsatisfactory or uncompleted punch list **Work** that remains after the completion date specified in the **Final Approved Punch List** pursuant to Article 54, any such action shall be commenced within six (6) months from the date the **Commissioner** notifies the **Contractor** in writing that he/she has exercised such right. Any claims for monies deducted, retained or withheld under the provisions of this **Contract** shall be asserted within six (6) months after the date when such monies otherwise become due and payable hereunder; and

56.2.3 If the **Commissioner** exercises his/her right to terminate the **Contract** pursuant to Article 64, any such action shall be commenced within six (6) months of the date the **Commissioner** exercises said right.

#### **ARTICLE 57. INFRINGEMENT**

57.1 The **Contractor** shall be solely responsible for and shall defend, indemnify, and hold the **City** harmless from any and all claims (even if the allegations of the lawsuit are without merit) and judgments for damages and from costs and expenses to which the **City** may be subject to or which it may suffer or incur allegedly arising out of or in connection with any infringement by the **Contractor** of any copyright, trade secrets, trademark or patent rights or any other property or personal right of any third party by the **Contractor** and/or its **Subcontractors** in the performance or completion of the **Work**. Insofar as the facts or **Law** relating to any claim would preclude the **City** from being completely indemnified by the **Contractor**, the **City** shall be partially indemnified by the **Contractor** to the fullest extent permitted by **Law**.

## **ARTICLE 58. NO CLAIM AGAINST OFFICIALS, AGENTS OR EMPLOYEES**

58.1 No claim whatsoever shall be made by the **Contractor** against any official, agent or employee of the **City** for, or on account of, anything done or omitted to be done in connection with this **Contract**.

## **ARTICLE 59. SERVICE OF NOTICES**

59.1 The **Contractor** hereby designates the business address, fax number, and email address specified in its bid, as the place where all notices, directions or other communications to the **Contractor** may be delivered, or to which they may be mailed. Any notice, direction, or communication from either party to the other shall be in writing and shall be deemed to have been given when (i) delivered personally; (ii) sent by certified mail, return receipt requested; (iii) delivered by overnight or same day courier service in a properly addressed envelope with confirmation; or (iv) sent by fax or email and, unless receipt of the fax or e-mail is acknowledged by the recipient by fax or e-mail, deposited in a post office box regularly maintained by the United States Postal Service in a properly addressed, postage pre-paid envelope.

59.2 **Contractor's** notice address, email address, or fax number may be changed at any time by an instrument in writing, executed and acknowledged by the **Contractor**, and delivered to the **Commissioner**.

59.3 Nothing herein contained shall, however, be deemed to preclude or render inoperative the service of any notice, direction or other communication upon the **Contractor** personally, or, if the **Contractor** is a corporation, upon any officer thereof.

## **ARTICLE 60. UNLAWFUL PROVISIONS DEEMED STRICKEN FROM CONTRACT**

60.1 If this **Contract** contains any unlawful provision not an essential part of the **Contract** and which shall not appear to have been a controlling or material inducement to the making thereof, the same shall be deemed of no effect and shall, upon notice by either party, be deemed stricken from the **Contract** without affecting the binding force of the remainder.

## **ARTICLE 61. ALL LEGAL PROVISIONS DEEMED INCLUDED**

61.1 It is the intent and understanding of the parties to this **Contract** that each and every provision of **Law** required to be inserted in this **Contract** shall be and is inserted herein. Furthermore, it is hereby stipulated that every such provision is to be deemed to be inserted herein, and if, through mistake or otherwise, any such provision is not inserted, or is not inserted in correct form, then this **Contract** shall forthwith upon the application of either party be amended by such insertion so as to comply strictly with the **Law** and without prejudice to the rights of either party hereunder.

## **ARTICLE 62. TAX EXEMPTION**

62.1 The **City** is exempt from payment of Federal, State, and local taxes, including sales and compensating use taxes of the State of New York and its cities and counties on all tangible personal property sold to the **City** pursuant to the provisions of this **Contract**. These taxes are not to be included in bids. However, this exemption does not apply to tools, machinery, equipment or other property leased by or to the **Contractor**, **Subcontractor** or **Materialman** or to tangible personal property which, even

though it is consumed, is not incorporated into the completed **Work** (consumable supplies) and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**. The **Contractor** and its **Subcontractors** and **Materialmen** shall be responsible for and pay any and all applicable taxes, including sales and compensating use taxes, on such leased tools, machinery, equipment or other property and upon all such consumable supplies and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**.

62.2 The **Contractor** agrees to sell and the **City** agrees to purchase all tangible personal property, other than consumable supplies and other tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**, that is required, necessary or proper for or incidental to the construction of the **Project** covered by this **Contract**. The sum paid under this **Contract** for such tangible personal property shall be in full payment and consideration for the sale of such tangible personal property.

62.2.1 The **Contractor** agrees to construct the **Project** and to perform all **Work**, labor and services rendered, necessary, proper or incidental thereto for the sum shown in the bid for the performance of such **Work**, labor, and services, and the sum so paid pursuant to this **Contract** for such **Work**, labor, and services, shall be in full consideration for the performance by the **Contractor** of all its duties and obligations under this **Contract** in connection with said **Work**, labor, and services.

62.3 20 NYCRR Section 541.3(d) provides that a **Contractor's** purchases of tangible personal property that is either incorporated into real property owned by a governmental entity or purchased for and sold to a governmental entity are exempt from sales and use tax. The **City** shall not pay sales tax for any such tangible personal property that it purchases from the **Contractor** pursuant to the **Contract**. With respect to such tangible personal property, the **Contractor**, at the request of the **City**, shall furnish to the **City** such bills of sale and other instruments as may be required by the **City**, properly executed, acknowledged and delivered assuring to the **City** title to such tangible personal property, free of liens and/or encumbrances, and the **Contractor** shall mark or otherwise identify all such tangible personal property as the property of the **City**.

62.4 Title to all tangible personal property to be sold by the **Contractor** to the **City** pursuant to the provisions of the **Contract** shall immediately vest in and become the sole property of the **City** upon delivery of such tangible personal property to the **Site**. Notwithstanding such transfer of title, the **Contractor** shall have the full and continuing responsibility to install such tangible personal property in accordance with the provisions of this **Contract**, protect it, maintain it in a proper condition and forthwith repair, replace and make good any damage thereto, theft or disappearance thereof, and furnish additional tangible personal property in place of any that may be lost, stolen or rendered unusable, without cost to the **City**, until such time as the **Work** covered by the **Contract** is fully accepted by the **City**. Such transfer of title shall in no way affect any of the **Contractor's** obligations hereunder. In the event that, after title has passed to the **City**, any of the tangible personal property is rejected as being defective or otherwise unsatisfactory, title to all such tangible personal property shall be deemed to have been transferred back to the **Contractor**.

62.5 The purchase by **Subcontractors** or **Materialmen** of tangible personal property to be sold hereunder shall be a purchase or procurement for resale to the **Contractor** (either directly or through other **Subcontractors**) and therefore not subject to the aforesaid sales and compensating use taxes, provided that the subcontracts and purchase agreements provide for the resale of such tangible personal property and that such subcontracts and purchase agreements are in a form similar to this **Contract** with respect to the separation of the sale of consumable supplies and tangible personal property that the

**Contractor** is required to remove from the **Site** during or upon completion of the **Work** from the **Work** and labor, services, and any other matters to be provided, and provided further that the subcontracts and purchase agreements provide separate prices for tangible personal property and all other services and matters. Such separation shall actually be followed in practice, including the separation of payments for tangible personal property from the payments for other **Work** and labor and other things to be provided.

62.6 The **Contractor** and its **Subcontractors** and **Materialmen** shall furnish a **Contractor Exempt Purchase Certificate** to all persons, firms or corporations from which they purchase tangible personal property for the performance of the **Work** covered by this **Contract**.

62.7 In the event any of the provisions of this Article 62 shall be deemed to be in conflict with any other provisions of this **Contract** or create any ambiguity, then the provisions of this Article 62 shall control.

### **ARTICLE 63. INVESTIGATION(S) CLAUSE**

63.1 The parties to this **Contract** agree to cooperate fully and faithfully with any investigation, audit or inquiry conducted by a United States, a State of New York (State) or a **City** governmental agency or authority that is empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath, or conducted by the Inspector General of a governmental agency that is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit or license that is the subject of the investigation, audit or inquiry.

63.2 If any person who has been advised that his/her statement, and any information from such statement, will not be used against him/her in any subsequent criminal proceeding refuses to testify before a grand jury or other governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath concerning the award of or performance under any transaction, agreement, lease, permit, contract, or license entered into with the **City**, the State, or any political subdivision or public authority thereof, or the Port Authority of New York and New Jersey, or any local development corporation within the **City**, or any public benefit corporation organized under the **Laws** of the State of New York, or;

63.3 If any person refuses to testify for a reason other than the assertion of his/her privilege against self incrimination in an investigation, audit or inquiry conducted by a **City** or State governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to take testimony under oath, or by the Inspector General of the governmental agency that is a party in interest in, and is seeking testimony concerning the award of, or performance under any transaction, agreement, lease, permit, contract, or license entered into with the **City**, the State, or any political subdivision thereof or any local development corporation within the **City**, then;

63.4 The **Commissioner** whose **Agency** is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit, or license shall convene a hearing, upon not less than five (5) **Days'** written notice to the parties involved to determine if any penalties should attach for the failure of a person to testify.

63.5 If any non-governmental party to the hearing requests an adjournment, the **Commissioner** who convened the hearing may, upon granting the adjournment, suspend any contract, lease, permit, or license, pending the final determination pursuant to Article 63.7 without the **City** incurring any penalty or damages for delay or otherwise.

63.6 The penalties which may attach after a final determination by the **Commissioner** may include but shall not exceed:

63.6.1 The disqualification for a period not to exceed five (5) years from the date of an adverse determination for any person, or any entity of which such person was a member at the time the testimony was sought, from submitting bids for, or transacting business with, or entering into or obtaining any contract, lease, permit or license with or from the **City**; and/or

63.6.2 The cancellation or termination of any and all such existing **City** contracts, leases, permits or licenses that the refusal to testify concerns and that have not been assigned as permitted under this **Contract**, nor the proceeds of which pledged, to an unaffiliated and unrelated institutional lender for fair value prior to the issuance of the notice scheduling the hearing, without the **City** incurring any penalty or damages on account of such cancellation or termination; monies lawfully due for goods delivered, work done, rentals, or fees accrued prior to the cancellation or termination shall be paid by the **City**.

63.7 The **Commissioner** shall consider and address in reaching his/her determination and in assessing an appropriate penalty the factors in Articles 63.7.1 and 63.7.2. The **Commissioner** may also consider, if relevant and appropriate, the criteria established in Articles 63.7.3 and 63.7.4, in addition to any other information which may be relevant and appropriate:

63.7.1 The party's good faith endeavors or lack thereof to cooperate fully and faithfully with any governmental investigation or audit, including but not limited to the discipline, discharge, or disassociation of any person failing to testify, the production of accurate and complete books and records, and the forthcoming testimony of all other members, agents, assignees or fiduciaries whose testimony is sought.

63.7.2 The relationship of the person who refused to testify to any entity that is a party to the hearing, including but not limited to, whether the person whose testimony is sought has an ownership interest in the entity and/or the degree of authority and responsibility the person has within the entity.

63.7.3 The nexus of the testimony sought to the subject entity and its contracts, leases, permits or licenses with the **City**.

63.7.4 The effect a penalty may have on an unaffiliated and unrelated party or entity that has a significant interest in an entity subject to penalties under Article 63.6, provided that the party or entity has given actual notice to the **Commissioner** upon the acquisition of the interest, or at the hearing called for in Article 63.4, gives notice and proves that such interest was previously acquired. Under either circumstance the party or entity shall present evidence at the hearing demonstrating the potential adverse impact a penalty will have on such person or entity.

#### 63.8 Definitions:

63.8.1 The term "license" or "permit" as used in this Article 63 shall be defined as a license, permit, franchise or concession not granted as a matter of right.

63.8.2 The term "person" as used in this Article 63 shall be defined as any natural person doing business alone or associated with another person or entity as a partner, director, officer, principal or employee.

63.8.3 The term "entity" as used in this Article 63 shall be defined as any firm, partnership, corporation, association, joint venture, or person that receives monies, benefits, licenses, leases, or permits from or through the City or otherwise transacts business with the City.

63.8.4 The term "member" as used in this Article 63 shall be defined as any person associated with another person or entity as a partner, director, officer, principal or employee.

63.9 In addition to and notwithstanding any other provision of this **Contract**, the **Commissioner** may in his/her sole discretion terminate this **Contract** upon not less than three (3) **Days**' written notice in the event the **Contractor** fails to promptly report in writing to the **Commissioner** of the Department of Investigations ("DOI") of the City any solicitation of money, goods, requests for future employment or other benefit or thing of value, by or on behalf of any employee of the City or other person, firm, corporation or entity for any purpose which may be related to the procurement or obtaining of this **Contract** by the **Contractor**, or affecting the performance of this **Contract**.

#### **ARTICLE 64. TERMINATION BY THE CITY**

64.1 In addition to termination pursuant to any other article of this **Contract**, the **Commissioner** may, at any time, terminate this **Contract** by written notice to the **Contractor**. In the event of termination, the **Contractor** shall, upon receipt of such notice, unless otherwise directed by the **Commissioner**:

64.1.1 Stop **Work** on the date specified in the notice;

64.1.2 Take such action as may be necessary for the protection and preservation of the City's materials and property;

64.1.3 Cancel all cancelable orders for material and equipment;

64.1.4 Assign to the City and deliver to the Site or another location designated by the **Commissioner**, any non-cancelable orders for material and equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract** and not incorporated in the **Work**;

64.1.5 Take no action which will increase the amounts payable by the City under this **Contract**.

64.2 In the event of termination by the City pursuant to this Article 64, payment to the **Contractor** shall be in accordance with Articles 64.2.1, 64.2.2 or 64.2.3, to the extent that each respective article applies.

64.2.1 Lump Sum Contracts or Items: On all lump sum **Contracts**, or on lump sum items in a **Contract**, the City will pay the **Contractor** the sum of the amounts described in Articles 64.2.1(a) and 64.2.1(b), less all payments previously made pursuant to this **Contract**. On lump sum **Contracts** only, the City will also pay the **Contractor** an additional sum as provided in Article 64.2.1(c).

64.2.1(a) For **Work** completed prior to the notice of termination, the **Contractor** shall be paid a pro rata portion of the lump sum bid amount, plus approved change orders, based upon the percent completion of the **Work**, as determined by the

**Commissioner.** For the purpose of determining the pro rata portion of the lump sum bid amount to which the **Contractor** is entitled, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be dispositive. The **Commissioner's** determination hereunder shall be final, binding, and conclusive.

64.2.1(b) For non-cancelable material and equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract**, but not yet incorporated in the **Work**, the **Contractor** shall be paid the lesser of the following, less salvage value:

64.2.1(b)(i) The Direct Cost, as defined in Article 64.2.4; or

64.2.1(b)(ii) The fair and reasonable value, if less than Direct Cost, of such material and equipment, plus necessary and reasonable delivery costs.

64.2.1(b)(iii) In addition, the **Contractor** shall be paid five (5%) percent of the amount described in Article 64.2.1(b)(i) or Article 64.2.1(b)(ii), whichever applies.

64.2.1(c) Except as otherwise provided in Article 64.2.1(d), on all lump sum **Contracts**, the **Contractor** shall be paid the percentage indicated below applied to the difference between the total lump sum bid amount and the total of all payments made prior to the notice of termination plus all payments allowed pursuant to Articles 64.2.1(a) and 64.2.1(b):

64.2.1(c)(i) Five (5%) percent of the first five million (\$5,000,000) dollars; and

64.2.1(c)(ii) Three (3%) percent of any amount between five million (\$5,000,000) dollars and fifteen million (\$15,000,000) dollars; plus

64.2.1(c)(iii) One (1%) percent of any amount over fifteen million (\$15,000,000) dollars.

64.2.1(d) In the event the **City** terminates a lump sum **Contract** pursuant to this Article 64 within ninety (90) **Days** after registration of the **Contract** with the **Comptroller**, the **Contractor** shall be paid one (1%) percent of the difference between the lump sum bid amount and the total of all payments made pursuant to this Article 64.2.

64.2.2 Unit Price Contracts or Items: On all unit price **Contracts**, or on unit price items in a **Contract**, the **City** will pay the **Contractor** the sum of the amounts described in Articles 64.2.2(a) and 64.2.2(b), less all payments previously made pursuant to this **Contract**:

64.2.2(a) For all completed units, the unit price stated in the **Contract**, and

64.2.2(b) For units that have been ordered but are only partially completed, the **Contractor** will be paid:

64.2.2(b)(i) A pro rata portion of the unit price stated in the **Contract** based upon the percent completion of the unit and

64.2.2(b)(ii) For non-cancelable material and equipment, payment will be made pursuant to Article 64.2.1(b).

64.2.3 Time and Materials Contracts or Items Based on Time and Material Records: On all **Contracts** or items in a **Contract** where payment for the **Work** is based on time and material records, the **Contractor** shall be paid in accordance with Article 26, less all payments previously made pursuant to this **Contract**.

64.2.4 Direct Costs: Direct Costs as used in this Article 64.2 shall mean:

64.2.4(a) The actual purchase price of material and equipment, plus necessary and reasonable delivery costs,

64.2.4(b) The actual cost of labor involved in construction and installation at the **Site**, and

64.2.4(c) The actual cost of necessary bonds and insurance purchased pursuant to requirements of this **Contract** less any amounts that have been or should be refunded by the **Contractor's** sureties or insurance carriers.

64.2.4(d) Direct Costs shall not include overhead.

64.3 In no event shall any payments under this Article 64 exceed the **Contract** price for such items.

64.4 All payments pursuant to Article 64 shall be in the nature of liquidated damages and shall be accepted by the **Contractor** in full satisfaction of all claims against the **City**.

64.5 The **City** may deduct or set off against any sums due and payable pursuant to this Article 64, any deductions authorized by this **Contract** or by **Law** (including but not limited to liquidated damages) and any claims it may have against the **Contractor**. The **City's** exercise of the right to terminate the **Contract** pursuant to this Article 64 shall not impair or otherwise effect the **City's** right to assert any claims it may have against the **Contractor** in a plenary action.

64.6 Where the **Work** covered by the **Contract** has been substantially completed, as determined in writing by the **Commissioner**, termination of the **Work** shall be handled as an omission of **Work** pursuant to Articles 29 and 33, in which case a change order will be issued to reflect an appropriate reduction in the **Contract** sum, or if the amount is determined after final payment, such amount shall be paid by the **Contractor**.

#### **ARTICLE 65. CHOICE OF LAW, CONSENT TO JURISDICTION AND VENUE**

65.1 This **Contract** shall be deemed to be executed in the **City** regardless of the domicile of the **Contractor**, and shall be governed by and construed in accordance with the **Laws** of the State of New York and the **Laws** of the United States, where applicable.

65.2 The parties agree that any and all claims asserted against the **City** arising under this **Contract** or related thereto shall be heard and determined in the courts of the State of New York ("New York State Courts") located in the **City** and County of New York. To effect this **Contract** and intent, the **Contractor** agrees:



65.2.1 If the **City** initiates any action against the **Contractor** in Federal court or in a New York State Court, service of process may be made on the **Contractor** either in person, wherever such **Contractor** may be found, or by registered mail addressed to the **Contractor** at its address as set forth in this **Contract**, or to such other address as the **Contractor** may provide to the **City** in writing; and

65.2.2 With respect to any action between the **City** and the **Contractor** in a New York State Court, the **Contractor** hereby expressly waives and relinquishes any rights it might otherwise have:

65.2.2(a) To move to dismiss on grounds of forum non conveniens;

65.2.2(b) To remove to Federal Court; and

65.2.2(c) To move for a change of venue to a New York State Court outside New York County.

65.2.3 With respect to any action brought by the **City** against the **Contractor** in a Federal Court located in the **City**, the **Contractor** expressly waives and relinquishes any right it might otherwise have to move to transfer the action to a Federal Court outside the **City**.

65.2.4 If the **Contractor** commences any action against the **City** in a court located other than in the **City** and County of New York, upon request of the **City**, the **Contractor** shall either consent to a transfer of the action to a New York State Court of competent jurisdiction located in the **City** and County of New York or, if the Court where the action is initially brought will not or cannot transfer the action, the **Contractor** shall consent to dismiss such action without prejudice and may thereafter reinstate the action in a New York State Court of competent jurisdiction in New York County.

65.3 If any provision(s) of this Article 65 is held unenforceable for any reason, each and all other provision(s) shall nevertheless remain in full force and effect.

#### **ARTICLE 66. PARTICIPATION IN AN INTERNATIONAL BOYCOTT**

66.1 The **Contractor** agrees that neither the **Contractor** nor any substantially owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the Federal Export Administration Act of 1979, as amended, or the regulations of the United States Department of Commerce (Commerce Department) promulgated thereunder.

66.2 Upon the final determination by the Commerce Department or any other agency of the United States as to, or conviction of the **Contractor** or a substantially-owned affiliated company thereof for participation in an international boycott in violation of the provisions of the Export Administration Act of 1979, as amended, or the regulations promulgated thereunder, the **Comptroller** may, at his/her option, render forfeit and void this **Contract**.

66.3 The **Contractor** shall comply in all respects, with the provisions of Section 6-114 of the Administrative Code and the rules and regulations issued by the **Comptroller** thereunder.

## **ARTICLE 67. LOCALLY BASED ENTERPRISE PROGRAM**

67.1 This **Contract** is subject to the requirements of Section 6-108.1 of the Administrative Code and regulations promulgated thereunder. No construction contract shall be awarded unless and until these requirements have been complied with in their entirety; however, compliance with this Article 67 is not required if the Agency sets Subcontractor Participation Goals for Minority- and Women-Owned Business Enterprises (M/WBEs).

67.2 Unless specifically waived by the **Commissioner** with the approval of the Division of Economic and Financial Opportunity of the City Department of Business Services, if any portion of the **Contract** is subcontracted, not less than ten (10%) percent of the total dollar amount of the **Contract** shall be awarded to locally based enterprises (LBEs); except that where less than ten (10%) percent of the total dollar amount of the **Contract** is subcontracted, such lesser percentage shall be so awarded.

67.3 The **Contractor** shall not require performance and payment bonds from LBE **Subcontractors**.

67.4 If the **Contractor** has indicated prior to award that no **Work** will be subcontracted, no **Work** shall be subcontracted without the prior approval of the **Commissioner**, which shall be granted only if the **Contractor** makes a good faith effort beginning at least six (6) weeks before the **Work** is to be performed to obtain LBE **Subcontractors** to perform the **Work**.

67.5 If the **Contractor** has not identified sufficient LBE **Subcontractors** prior to award, it shall sign a letter of compliance stating that it complies with Section 6-108.1 of the Administrative Code, recognizes that achieving the LBE requirement is a condition of its **Contract**, and shall submit documentation demonstrating its good faith efforts to obtain LBEs. After award, the **Contractor** shall begin to solicit LBE's to perform subcontracted **Work** at least six (6) weeks before the date such **Work** is to be performed and shall demonstrate that a good faith effort has been made to obtain LBEs on each subcontract until it meets the required percentage.

67.6 Failure of the **Contractor** to comply with the requirements of Section 6-108.1 of the Administrative Code and the regulations promulgated thereunder shall constitute a material breach of this **Contract**. Remedy for such breach may include the imposition of any or all of the following sanctions:

67.6.1 Reducing the **Contractor's** compensation by an amount equal to the dollar value of the percentage of the LBE subcontracting requirement not complied with;

67.6.2 Declaring the **Contractor** in default;

67.6.3 If the **Contractor** is an LBE, de-certifying and declaring the **Contractor** ineligible to participate in the LBE program for a period of up to three (3) years.

## **ARTICLE 68. ANTITRUST**

68.1 The **Contractor** hereby assigns, sells, and transfers to the City all right, title, and interest in and to any claims and causes of action arising under the antitrust **Laws** of New York State or of the United States relating to the particular goods or services purchased or procured by the City under this **Contract**.

## **ARTICLE 69. MacBRIDE PRINCIPLES PROVISIONS**

### **69.1 Notice To All Prospective Contractors:**

69.1.1 Local Law No. 34 of 1991 became effective on September 10, 1991 and added Section 6-115.1 of the Administrative Code. The local **Law** provides for certain restrictions on **City Contracts** to express the opposition of the people of the **City** to employment discrimination practices in Northern Ireland to promote freedom of work-place opportunity.

69.1.2 Pursuant to Section 6-115.1, prospective **Contractors** for **Contracts** to provide goods or services involving an expenditure of an amount greater than ten thousand (\$10,000.) dollars, or for construction involving an amount greater than fifteen thousand (\$15,000.) dollars, are asked to sign a rider in which they covenant and represent, as a material condition of their **Contract**, that any business operations in Northern Ireland conducted by the **Contractor** and any individual or legal entity in which the **Contractor** holds a ten (10%) percent or greater ownership interest in the **Contractor** will be conducted in accordance with the MacBride Principles of nondiscrimination in employment.

69.1.3 Prospective **Contractors** are not required to agree to these conditions. However, in the case of **Contracts** let by competitive sealed bidding, whenever the lowest responsible bidder has not agreed to stipulate to the conditions set forth in this notice and another bidder who has agreed to stipulate to such conditions has submitted a bid within five (5%) percent of the lowest responsible bid for a **Contract** to supply goods, services or construction of comparable quality, the **Agency** shall refer such bids to the Mayor, the Speaker or other officials, as appropriate, who may determine, in accordance with applicable **Law**, that it is in the best interest of the **City** that the **Contract** be awarded to other than the lowest responsible pursuant to Section 313(b)(2) of the **City Charter**.

69.1.4 In the case of **Contracts** let by other than competitive sealed bidding, if a prospective **Contractor** does not agree to these conditions, no **Agency**, elected official or the **City Council** shall award the **Contract** to that bidder unless the **Agency** seeking to use the goods, services or construction certifies in writing that the **Contract** is necessary for the **Agency** to perform its functions and there is no other responsible **Contractor** who will supply goods, services or construction of comparable quality at a comparable price.

69.2 In accordance with Section 6-115.1 of the Administrative Code, the **Contractor** stipulates that such **Contractor** and any individual or legal entity in which the **Contractor** holds a ten (10%) percent or greater ownership interest in the **Contractor** either:

69.2.1 Have no business operations in Northern Ireland, or

69.2.2 Shall take lawful steps in good faith to conduct any business operations they have in Northern Ireland in accordance with the MacBride Principles, and shall permit independent monitoring of their compliance with such principles.

69.3 For purposes of this Article, the following terms shall have the following meanings:

69.3.1 "MacBride Principles" shall mean those principles relating to nondiscrimination in employment and freedom of work-place opportunity which require employers doing business in Northern Ireland to:

69.3.1(a) increase the representation of individuals from under-represented religious groups in the workforce, including managerial, supervisory, administrative, clerical and technical jobs;

69.3.1(b) take steps to promote adequate security for the protection of employees from under-represented religious groups both at the work-place and while traveling to and from **Work**;

69.3.1(c) ban provocative religious or political emblems from the workplace;

69.3.1(d) publicly advertise all job openings and make special recruitment efforts to attract applicants from under-represented religious groups;

69.3.1(e) establish layoff, recall, and termination procedures which do not in practice favor a particular religious group;

69.3.1(f) abolish all job reservations, apprenticeship restrictions and different employment criteria which discriminate on the basis of religion;

69.3.1(g) develop training programs that will prepare substantial numbers of current employees from under-represented religious groups for skilled jobs, including the expansion of existing programs and the creation of new programs to train, upgrade, and improve the skills of workers from under-represented religious groups;

69.3.1(h) establish procedures to assess, identify, and actively recruit employees from under-represented religious groups with potential for further advancement; and

69.3.1(i) appoint a senior management staff member to oversee affirmative action efforts and develop a timetable to ensure their full implementation.

69.4 The **Contractor** agrees that the covenants and representations in Article 69.2 are material conditions to this **Contract**. In the event the **Agency** receives information that the **Contractor** who made the stipulation required by this Article 69 is in violation thereof, the **Agency** shall review such information and give the **Contractor** an opportunity to respond. If the **Agency** finds that a violation has occurred, the **Agency** shall have the right to declare the **Contractor** in default and/or terminate this **Contract** for cause and procure supplies, services or **Work** from another source in the manner the **Agency** deems proper. In the event of such termination, the **Contractor** shall pay to the **Agency**, or the **Agency** in its sole discretion may withhold from any amounts otherwise payable to the **Contractor**, the difference between the **Contract** price for the uncompleted portion of this **Contract** and the cost to the **Agency** of completing performance of this **Contract** either itself or by engaging another **Contractor** or **Contractors**. In the case of a requirement **Contract**, the **Contractor** shall be liable for such difference in price for the entire amount of supplies required by the **Agency** for the uncompleted term of **Contractor's Contract**. In the case of a construction **Contract**, the **Agency** shall also have the right to hold the **Contractor** in partial or total default in accordance with the default provisions of this **Contract**, and/or may seek debarment or suspension of the **Contractor**. The rights and remedies of the **Agency** hereunder shall be in addition to, and not in lieu of, any rights and remedies the **Agency** has pursuant to this **Contract** or by operation of Law.

## **ARTICLE 70. ELECTRONIC FILING/NYC DEVELOPMENT HUB**

70.1 The **Contractor** shall electronically file all alteration type-2 and alteration type-3 applications via the New York City Development Hub Web site, except applications for the following types of minor alterations: enlargements, curb cuts, legalizations, fire alarms, builders pavement plans, and jobs filed on Landmark Preservation Commission calendared properties. All such filings must be professionally certified. Information about electronic filing via the New York City Development Hub is available on the City Department of Buildings Web site at [www.nyc.gov/buildings](http://www.nyc.gov/buildings).

## **ARTICLE 71. PROHIBITION OF TROPICAL HARDWOODS**

71.1 Tropical hardwoods, as defined in Section 165 of the New York State Finance Law (Finance Law), shall not be utilized in the performance of this **Contract** except as expressly permitted by Section 165 of the Finance Law.

## **ARTICLE 72. CONFLICTS OF INTEREST**

72.1 Section 2604 of the City Charter and other related provisions of the City Charter, the Administrative Code, and the Penal Law are applicable under the terms of this **Contract** in relation to conflicts of interest and shall be extended to **Subcontractors** authorized to perform **Work**, labor and services pursuant to this **Contract** and further, it shall be the duty and responsibility of the **Contractor** to so inform its respective **Subcontractors**. Notice is hereby given that, under certain circumstances, penalties may be invoked against the donor as well as the recipient of any form of valuable gift.

## **ARTICLE 73. MERGER CLAUSE**

73.1 The written **Contract** herein, contains all the terms and conditions agreed upon by the parties hereto, and no other agreement, oral or otherwise, regarding the subject matter of this **Contract** shall be deemed to exist or to bind any of the parties hereto, or to vary any of the terms contained herein.

## **ARTICLE 74. STATEMENT OF WORK**

74.1 The **Contractor** shall furnish all labor and materials and perform all **Work** in strict accordance with the **Specifications** and **Addenda** thereto, numbered as shown in Schedule A.

## **ARTICLE 75. COMPENSATION TO BE PAID TO CONTRACTOR**

75.1 The City will pay and the **Contractor** will accept in full consideration for the performance of the **Contract**, subject to additions and deductions as provided herein, the total sum shown in Schedule A, this said sum being the amount at which the **Contract** was awarded to the **Contractor** at a public letting thereof, based upon the **Contractor's** bid for the **Contract**.

## **ARTICLE 76. ELECTRONIC FUNDS TRANSFER**

76.1 In accordance with Section 6-107.1 of the Administrative Code, the **Contractor** agrees to accept payments under this **Contract** from the City by electronic funds transfer (EFT). An EFT is any

transfer of funds, other than a transaction originated by check, draft or similar paper instrument, which is initiated through an electronic terminal, telephonic instrument or computer or magnetic tape so as to order, instruct or authorize a financial institution to debit or credit an account. Prior to the first payment made under this **Contract**, the **Contractor** shall designate one financial institution or other authorized payment agent and shall complete the attached "EFT Vendor Payment Enrollment Form" in order to provide the Commissioner of the City Department of Finance with information necessary for the **Contractor** to receive electronic funds transfer payments through a designated financial institution or authorized payment agent. The crediting of the amount of a payment to the appropriate account on the books of a financial institution or other authorized payment agent designated by the **Contractor** shall constitute full satisfaction by the **City** for the amount of the payment under this **Contract**. The account information supplied by the **Contractor** to facilitate the electronic funds transfer shall remain confidential to the fullest extent provided by Law.

76.2 The **Commissioner** may waive the application of the requirements of this Article 76 to payments on contracts entered into pursuant to Section 315 of the City Charter. In addition, the Commissioner of the Department of Finance and the Comptroller may jointly issue standards pursuant to which the **Agency** may waive the requirements of this Article 76 for payments in the following circumstances: (i) for individuals or classes of individuals for whom compliance imposes a hardship; (ii) for classifications or types of checks; or (iii) in other circumstances as may be necessary in the interest of the **City**.

#### **ARTICLE 77. RECORDS RETENTION**

77.1 The **Contractor** agrees to retain all books, records, and other documents relevant to this **Contract** for six years after the final payment or termination of this **Contract**, whichever is later. **City**, state, and federal auditors and any other persons duly authorized by the **City** shall have full access to and the right to examine any such books, records, and other documents during the retention period.

#### **ARTICLE 78. EXAMINATION AND VIEWING OF SITE, CONSIDERATION OF OTHER SOURCES OF INFORMATION AND CHANGED SITE CONDITIONS**

78.1 Pre-Bidding (Investigation) Viewing of Site – Bidders must carefully view and examine the **Site** of the proposed **Work**, as well as its adjacent area, and seek other usual sources of information, for they will be conclusively presumed to have full knowledge of any and all conditions and hazards on, about or above the **Site** relating to or affecting in any way the performance of the **Work** to be done under the **Contract** that were or should have been known by a reasonably prudent bidder. To arrange a date for visiting the **Site**, bidders are to contact the **Agency** contact person specified in the bid documents.

78.2 Should the **Contractor** encounter during the progress of the **Work** site conditions or environmental hazards at the **Site** materially differing from any shown on the **Contract Drawings** or indicated in the **Specifications** or such conditions or environmental hazards as could not reasonably have been anticipated by the **Contractor**, which conditions or hazards will materially affect the cost of the **Work** to be done under the **Contract**, the attention of the **Commissioner** must be called immediately to such conditions or hazards before they are disturbed. The **Commissioner** shall thereupon promptly investigate the conditions or hazards. If the **Commissioner** finds that they do so materially differ, and that they could not have been reasonably anticipated by the **Contractor**, the **Contract** may be modified with the **Commissioner's** written approval.

**ARTICLE 79. PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED  
BUSINESS ENTERPRISES IN CITY PROCUREMENT**

**NOTICE TO ALL PROSPECTIVE CONTRACTORS**

**ARTICLE I. M/WBE PROGRAM**

Local Law No. 129 of 2005 added and Local Law 1 of 2013 amended Section 6-129 of the Administrative Code of the City of New York (hereinafter "Section 6-129"). Section 6-129 establishes the program for participation in City procurement ("M/WBE Program") by minority-owned business enterprises ("MBEs") and women-owned business enterprises ("WBEs"), certified in accordance with Section 1304 of the New York City Charter. As stated in Section 6-129, the intent of the program is to address the impact of discrimination on the City's procurement process, and to promote the public interest in avoiding fraud and favoritism in the procurement process, increasing competition for City business, and lowering contract costs. The contract provisions contained herein are pursuant to Section 6-129, and the rules of the Department of Small Business Services ("DSBS") promulgated thereunder.

If this Contract is subject to the M/WBE Program established by Section 6-129, the specific requirements of MBE and/or WBE participation for this Contract are set forth in Schedule B of the Contract (entitled the "M/WBE Utilization Plan"), and are detailed below. The Contractor must comply with all applicable MBE and WBE requirements for this Contract.

All provisions of Section 6-129 are hereby incorporated in the Contract by reference and all terms used herein that are not defined herein shall have the meanings given such terms in Section 6-129. Article I, Part A, below, sets forth provisions related to the participation goals for construction, standard and professional services contracts. Article I, Part B, below, sets forth miscellaneous provisions related to the M/WBE Program.

**PART A**

**PARTICIPATION GOALS FOR CONSTRUCTION, STANDARD  
AND PROFESSIONAL SERVICES CONTRACTS OR TASK ORDERS**

1. The MBE and/or WBE Participation Goals established for this Contract or Task Orders issued pursuant to this Contract, ("Participation Goals"), as applicable, are set forth on Schedule B, Part I to this Contract (see Page 1, line 1 Total Participation Goals) or will be set forth on Schedule B, Part I to Task Orders issued pursuant to this Contract, as applicable.

The **Participation Goals** represent a percentage of the total dollar value of the Contract or Task Order, as applicable, that may be achieved by awarding subcontracts to firms certified with New York City Department of Small Business Services as MBEs and/or WBEs, and/or by crediting the participation of prime contractors and/or qualified joint ventures as provided in Section 3 below, unless the goals have been waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

2. If **Participation Goals** have been established for this Contract or Task Orders issued pursuant to this Contract, Contractor agrees or shall agree as a material term of the Contract that Contractor shall be subject to the **Participation Goals**, unless the goals are waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

3. If **Participation Goals** have been established for this Contract or Task Order issued pursuant to this Contract, a Contractor that is an MBE and/or WBE shall be permitted to count its own participation toward fulfillment of the relevant **Participation Goal**, provided that in accordance with Section 6-129 the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that the Contractor pays to direct subcontractors (as defined in Section 6-129(c)(13)), and provided further that a Contractor that is certified as both an MBE and a WBE may count its own participation either toward the goal for MBEs or the goal for WBEs, but not both.

A Contractor that is a qualified joint venture (as defined in Section 6-129(c)(30)) shall be permitted to count a percentage of its own participation toward fulfillment of the relevant **Participation Goal**. In accordance with Section 6-129, the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that Contractor pays to direct subcontractors, and then multiplying the remainder by the percentage to be applied to total profit to determine the amount to which an MBE or WBE is entitled pursuant to the joint venture agreement, provided that where a participant in a joint venture is certified as both an MBE and a WBE, such amount shall be counted either toward the goal for MBEs or the goal for WBEs, but not both.

4. A. If **Participation Goals** have been established for this Contract, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Utilization Plan, Part II (see Pages 2-4) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; and (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end. In the event that this M/WBE Utilization Plan indicates that the bidder or proposer, as applicable, does not intend to meet the **Participation Goals**, the bid or proposal, as applicable, shall be deemed non-responsive, unless Agency has granted the bidder or proposer, as applicable, a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.

B. (i) If this Contract is for a master services agreement or other requirements type contract that will result in the issuance of Task Orders that will be individually registered ("Master Services Agreement") and is subject to M/WBE **Participation Goals**, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Participation Requirements for Master Services Agreements That Will Require Individually Registered Task Orders, Part II (page 2) indicating the prospective contractor's certification and required affirmations to make all reasonable good faith efforts to meet participation goals established on each individual Task Order issued pursuant to this Contract, or if a partial waiver is obtained or such goals are modified by the Agency, to meet the modified **Participation Goals** by soliciting and obtaining the participation of certified MBE and/or WBE firms. In the event that the Schedule B indicates that the bidder or proposer, as applicable, does not intend to meet the **Participation Goals** that may be established on Task Orders issued pursuant to this Contract, the bid or proposal, as applicable, shall be deemed nonresponsive.



(ii) **Participation Goals** on a Master Services Agreement will be established for individual Task Orders issued after the Master Services Agreement is awarded. If **Participation Goals** have been established on a Task Order, a contractor shall be required to submit a Schedule B – M/WBE Utilization Plan For Independently Registered Task Orders That Are Issued Pursuant to Master Services Agreements, Part II (see Pages 2-4) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; and (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end. The contractor must engage in good faith efforts to meet the **Participation Goals** as established for the Task Order unless Agency has granted the contractor a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.

**C. THE BIDDER/PROPOSER MUST COMPLETE THE SCHEDULE B INCLUDED HEREIN (SCHEDULE B, PART II). A SCHEDULE B SUBMITTED BY THE BIDDER/PROPOSER WHICH DOES NOT INCLUDE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS (SEE SECTION V OF PART II) WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE PARTICIPATION GOALS IS GRANTED (SCHEDULE B, PART III). IN THE EVENT THAT THE CITY DETERMINES THAT THE BIDDER/PROPOSER HAS SUBMITTED A SCHEDULE B WHERE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS ARE COMPLETED BUT OTHER ASPECTS OF THE SCHEDULE B ARE NOT COMPLETE, OR CONTAIN A COPY OR COMPUTATION ERROR THAT IS AT ODDS WITH THE VENDOR CERTIFICATION AND AFFIRMATIONS, THE BIDDER/PROPOSER WILL BE NOTIFIED BY THE AGENCY AND WILL BE GIVEN FOUR (4) CALENDAR DAYS FROM RECEIPT OF NOTIFICATION TO CURE THE SPECIFIED DEFICIENCIES AND RETURN A COMPLETED SCHEDULE B TO THE AGENCY. FAILURE TO DO SO WILL RESULT IN A DETERMINATION THAT THE BID/PROPOSAL IS NON-RESPONSIVE. RECEIPT OF NOTIFICATION IS DEFINED AS THE DATE NOTICE IS E-MAILED OR FAXED (IF THE BIDDER/PROPOSER HAS PROVIDED AN E-MAIL ADDRESS OR FAX NUMBER), OR NO LATER THAN FIVE (5) CALENDAR DAYS FROM THE DATE OF MAILING OR UPON DELIVERY, IF DELIVERED.**

5. Where an M/WBE Utilization Plan has been submitted, the Contractor shall, within 30 days of issuance by Agency of a notice to proceed, submit a list of proposed persons or entities to which it intends to award subcontracts within the subsequent 12 months. In the case of multiyear contracts, such list shall also be submitted every year thereafter. The Agency may also require the Contractor to report periodically about the contracts awarded by its direct subcontractors to indirect subcontractors (as defined in Section 6-129(c)(22)). **PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor must identify all those to which it intends to award construction subcontracts for any portion of the Wicks trade work at the time of bid submission, regardless of what point in the life of the contract such subcontracts will occur. In identifying intended subcontractors in the bid submission, bidders may satisfy any Participation Goals established for this Contract by proposing one or more subcontractors that are MBEs and/or WBEs for any portion of the Wicks trade work. In the event that the Contractor's selection of a subcontractor is disapproved, the Contractor shall have a reasonable time to propose alternate subcontractors.**

6. MBE and WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the **Participation Goals**. Such certification must occur prior to the

firms' commencement of work. A list of MBE and WBE firms may be obtained from the DSBS website at [www.nyc.gov/buycertified](http://www.nyc.gov/buycertified), by emailing DSBS at [buyer@sbs.nyc.gov](mailto:buyer@sbs.nyc.gov), by calling (212) 513-6356, or by visiting or writing DSBS at 110 William St., New York, New York, 10038, 7th floor. Eligible firms that have not yet been certified may contact DSBS in order to seek certification by visiting [www.nyc.gov/getcertified](http://www.nyc.gov/getcertified), emailing [MWBE@sbs.nyc.gov](mailto:MWBE@sbs.nyc.gov), or calling the DSBS certification helpline at (212) 513-6311. A firm that is certified as both an MBE and a WBE may be counted either toward the goal for MBEs or the goal for WBEs, but not both. No credit shall be given for participation by a graduate MBE or graduate WBE, as defined in Section 6-129(c)(20).

7. Where an **M/WBE Utilization Plan** has been submitted, the Contractor shall, with each voucher for payment, and/or periodically as Agency may require, submit statements, certified under penalty of perjury, which shall include, but not be limited to, the total amount the Contractor paid to its direct subcontractors, and, where applicable pursuant to Section 6-129(j), the total amount direct subcontractors paid to indirect subcontractors; the names, addresses and contact numbers of each MBE or WBE hired as a subcontractor by the Contractor, and, where applicable, hired by any of the Contractor's direct subcontractors; and the dates and amounts paid to each MBE or WBE. The Contractor shall also submit, along with its voucher for final payment: the total amount it paid to subcontractors, and, where applicable pursuant to Section 6-129(j), the total amount its direct subcontractors paid directly to their indirect subcontractors; and a final list, certified under penalty of perjury, which shall include the name, address and contact information of each subcontractor that is an MBE or WBE, the work performed by, and the dates and amounts paid to each.

8. If payments made to, or work performed by, MBEs or WBEs are less than the amount specified in the Contractor's **M/WBE Utilization Plan**, Agency shall take appropriate action, in accordance with Section 6-129 and Article II below, unless the Contractor has obtained a modification of its **M/WBE Utilization Plan** in accordance with Section 6-129 and Part A, Section 11 below.

9. Where an **M/WBE Utilization Plan** has been submitted, and the Contractor requests a change order the value of which exceeds the greater of 10 percent of the Contract or Task Order, as applicable, or \$500,000, Agency shall review the scope of work for the Contract or Task Order, as applicable, and the scale and types of work involved in the change order, and determine whether the **Participation Goals** should be modified.

10. **Pre-award waiver of the Participation Goals.** (a) A bidder or proposer, or contractor with respect to a Task Order, may seek a pre-award full or partial waiver of the **Participation Goals** in accordance with Section 6-129, which requests that Agency change one or more **Participation Goals** on the grounds that the **Participation Goals** are unreasonable in light of the availability of certified firms to perform the services required, or by demonstrating that it has legitimate business reasons for proposing a lower level of subcontracting in its **M/WBE Utilization Plan**.

(b) To apply for a full or partial waiver of the **Participation Goals**, a bidder, proposer, or contractor, as applicable, must complete Part III (Page 5) of Schedule B and submit such request no later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due, in writing to the Agency by email at [poped@ddc.nyc.gov](mailto:poped@ddc.nyc.gov) or via facsimile at (718) 391-1886. Bidders, proposers, or contractors, as applicable, who have submitted requests will receive an Agency response by no later than two (2) calendar days prior to the due date for bids, proposals, or Task Orders; provided, however, that if that date would fall on a weekend or holiday, an Agency response will be provided by close-of-business on the business day before such weekend or holiday date.

(c) If the Agency determines that the **Participation Goals** are unreasonable in light of the availability of certified firms to perform the services required, it shall revise the solicitation and extend the deadline for bids and proposals, or revise the Task Order, as applicable.

(d) Agency may grant a full or partial waiver of the **Participation Goals** to a bidder, proposer or contractor, as applicable, who demonstrates—before submission of the bid, proposal or Task Order, as applicable—that it has legitimate business reasons for proposing the level of subcontracting in its **M/WBE Utilization Plan**. In making its determination, Agency shall consider factors that shall include, but not be limited to, whether the bidder, proposer or contractor, as applicable, has the capacity and the bona fide intention to perform the Contract without any subcontracting, or to perform the Contract without awarding the amount of subcontracts represented by the **Participation Goals**. In making such determination, Agency may consider whether the **M/WBE Utilization Plan** is consistent with past subcontracting practices of the bidder, proposer or contractor, as applicable, whether the bidder, proposer or contractor, as applicable, has made efforts to form a joint venture with a certified firm, and whether the bidder, proposer, or contractor, as applicable, has made good faith efforts to identify other portions of the Contract that it intends to subcontract.

11. **Modification of M/WBE Utilization Plan.** (a) A Contractor may request a modification of its **M/WBE Utilization Plan** after award of this Contract. **PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor may request a Modification of its M/WBE Utilization Plan as part of its bid submission.** The Agency may grant a request for Modification of a Contractor's **M/WBE Utilization Plan** if it determines that the Contractor has established, with appropriate documentary and other evidence, that it made reasonable, good faith efforts to meet the **Participation Goals**. In making such determination, Agency shall consider evidence of the following efforts, as applicable, along with any other relevant factors:

- (i) The Contractor advertised opportunities to participate in the Contract, where appropriate, in general circulation media, trade and professional association publications and small business media, and publications of minority and women's business organizations;
- (ii) The Contractor provided notice of specific opportunities to participate in the Contract, in a timely manner, to minority and women's business organizations;
- (iii) The Contractor sent written notices, by certified mail or facsimile, in a timely manner, to advise MBEs or WBEs that their interest in the Contract was solicited;
- (iv) The Contractor made efforts to identify portions of the work that could be substituted for portions originally designated for participation by MBEs and/or WBEs in the **M/WBE Utilization Plan**, and for which the Contractor claims an inability to retain MBEs or WBEs;
- (v) The Contractor held meetings with MBEs and/or WBEs prior to the date their bids or proposals were due, for the purpose of explaining in detail the scope and requirements of the work for which their bids or proposals were solicited;
- (vi) The Contractor made efforts to negotiate with MBEs and/or WBEs as relevant to perform specific subcontracts, or act as suppliers or service providers;
- (vii) Timely written requests for assistance made by the Contractor to Agency's **M/WBE liaison officer** and to DSBS;
- (viii) Description of how recommendations made by DSBS and Agency were acted upon and an explanation of why action upon such recommendations did not lead to the desired level of participation of MBEs and/or WBEs.

Agency's **M/WBE officer** shall provide written notice to the Contractor of the determination.

(b) The Agency may modify the **Participation Goals** when the scope of the work has been changed by the Agency in a manner that affects the scale and types of work that the Contractor indicated in its **M/WBE Utilization Plan** would be awarded to subcontractors.

12. If this Contract is for an indefinite quantity of construction, standard or professional services or is a requirements type contract and the Contractor has submitted an **M/WBE Utilization Plan** and has committed to subcontract work to MBEs and/or WBEs in order to meet the **Participation Goals**, the Contractor will not be deemed in violation of the M/WBE Program requirements for this Contract with regard to any work which was intended to be subcontracted to an MBE and/or WBE to the extent that the Agency has determined that such work is not needed.

13. If **Participation Goals** have been established for this Contract or a Task Order issued pursuant to this Contract, at least once annually during the term of the Contract or Task Order, as applicable, Agency shall review the Contractor's progress toward attainment of its M/WBE Utilization Plan, including but not limited to, by reviewing the percentage of work the Contractor has actually awarded to MBE and/or WBE subcontractors and the payments the Contractor made to such subcontractors.

14. If **Participation Goals** have been established for this Contract or a Task Order issued pursuant to this Contract, Agency shall evaluate and assess the Contractor's performance in meeting those goals, and such evaluation and assessment shall become part of the Contractor's overall contract performance evaluation.

#### **PART B: MISCELLANEOUS**

1. The Contractor shall take notice that, if this solicitation requires the establishment of an **M/WBE Utilization Plan**, the resulting contract may be audited by DSBS to determine compliance with Section 6-129. See §6-129(e)(10). Furthermore, such resulting contract may also be examined by the City's Comptroller to assess compliance with the **M/WBE Utilization Plan**.

2. Pursuant to DSBS rules, construction contracts that include a requirement for an **M/WBE Utilization Plan** shall not be subject to the law governing Locally Based Enterprises set forth in Section 6-108.1 of the Administrative Code of the City of New York.

3. DSBS is available to assist contractors and potential contractors in determining the availability of MBEs and/or WBEs to participate as subcontractors, and in identifying opportunities that are appropriate for participation by MBEs and/or WBEs in contracts.

4. Prospective contractors are encouraged to enter into qualified joint venture agreements with MBEs and/or WBEs as defined by Section 6-129(c)(30).

5. By submitting a bid or proposal the Contractor hereby acknowledges its understanding of the M/WBE Program requirements set forth herein and the pertinent provisions of Section 6-129, and any rules promulgated thereunder, and if awarded this Contract, the Contractor hereby agrees to comply with the M/WBE Program requirements of this Contract and pertinent provisions of Section 6-129, and any rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract. The Contractor hereby agrees to make all reasonable, good faith efforts to solicit and obtain the participation of MBEs and/or WBEs to meet the required **Participation Goals**.

#### **ARTICLE II. ENFORCEMENT**

1. If Agency determines that a bidder or proposer, as applicable, has, in relation to this procurement, violated Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, Agency may disqualify such bidder or proposer, as applicable, from competing for this Contract and the Agency may revoke such bidder's or proposer's prequalification status, if applicable.

2. Whenever Agency believes that the Contractor or a subcontractor is not in compliance with Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to any **M/WBE Utilization Plan**, Agency shall send a written notice to the Contractor describing the alleged noncompliance and offering the Contractor an opportunity to be heard. Agency shall then conduct an investigation to determine whether such Contractor or subcontractor is in compliance.

3. In the event that the Contractor has been found to have violated Section 6-129, the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to, any **M/WBE Utilization Plan**, Agency may determine that one of the following actions should be taken:

- (a) entering into an agreement with the Contractor allowing the Contractor to cure the violation;
- (b) revoking the Contractor's pre-qualification to bid or make proposals for future contracts;
- (c) making a finding that the Contractor is in default of the Contract;
- (d) terminating the Contract;
- (e) declaring the Contractor to be in breach of Contract;
- (f) withholding payment or reimbursement;
- (g) determining not to renew the Contract;
- (h) assessing actual and consequential damages;
- (i) assessing liquidated damages or reducing fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the **M/WBE Program**, or in meeting the purposes of the Contract, the costs of meeting utilization goals through additional procurements, the administrative costs of investigation and enforcement, or other factors set forth in the Contract;
- (j) exercising rights under the Contract to procure goods, services or construction from another contractor and charge the cost of such contract to the Contractor that has been found to be in noncompliance; or
- (k) taking any other appropriate remedy.

4. If an **M/WBE Utilization Plan** has been submitted, and pursuant to this Article II, Section 3, the Contractor has been found to have failed to fulfill its **Participation Goals** contained in its **M/WBE Utilization Plan** or the **Participation Goals** as modified by Agency pursuant to Article I, Part A, Section 11, Agency may assess liquidated damages in the amount of ten percent (10%) of the difference between the dollar amount of work required to be awarded to MBE and/or WBE firms to meet the **Participation Goals** and the dollar amount the Contractor actually awarded and paid, and/or credited, to MBE and/or WBE firms. In view of the difficulty of accurately ascertaining the loss which the City will suffer by reason of Contractor's failure to meet the **Participation Goals**, the foregoing amount is hereby fixed and agreed as the liquidated damages that the City will suffer by reason of such failure, and not as a penalty. Agency may deduct and retain out of any monies which may become due under this Contract the amount of any such liquidated damages; and in case the amount which may become due under this Contract shall be less than the amount of liquidated damages suffered by the City, the Contractor shall be liable to pay the difference.

5. Whenever Agency has reason to believe that an MBE and/or WBE is not qualified for certification, or is participating in a contract in a manner that does not serve a commercially useful function (as defined in Section 6-129(c)(8)), or has violated any provision of Section 6-129, Agency shall notify the Commissioner of DSBS who shall determine whether the certification of such business enterprise should be revoked.

6. Statements made in any instrument submitted to Agency pursuant to Section 6-129 shall be submitted under penalty of perjury and any false or misleading statement or omission shall be grounds for the application of any applicable criminal and/or civil penalties for perjury. The making of a false or fraudulent statement by an MBE and/or WBE in any instrument submitted pursuant to Section 6-129 shall, in addition, be grounds for revocation of its certification.

7. The Contractor's record in implementing its **M/WBE** Utilization Plan shall be a factor in the evaluation of its performance. Whenever Agency determines that a Contractor's compliance with an **M/WBE** Utilization Plan has been unsatisfactory, Agency shall, after consultation with the City Chief Procurement Officer, file an advice of caution form for inclusion in VENDEX as caution data.

IN WITNESS WHEREOF, the <sup>Deputy</sup> Commissioner, on behalf of the City of New York, and the Contractor, have executed this agreement in quadruplicate, two parts of which are to remain with the Commissioner, another to be filed with the Comptroller of the City, and the fourth to be delivered to the Contractor.

THE CITY OF NEW YORK

By:   
Deputy Commissioner

CONTRACTOR:

By:   
(Member of Firm or Officer of Corporation)

Title: President

(Where Contractor is a Corporation, add):  
Attest:

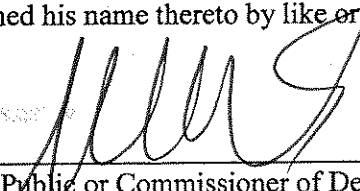
\_\_\_\_\_  
Secretary

(Seal)

ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

State of New York County of Queens ss:

On this 10<sup>th</sup> day of August, 2018, before me personally came Richard Pocken  
to me known who, being by me duly sworn did depose and say that he resides at NY, NY  
10025 that he is the President  
of the corporation described in and which executed the foregoing instrument; that he knows the seal of said  
corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of  
the directors of said corporation, and that he signed his name thereto by like order.

  
\_\_\_\_\_  
Notary Public or Commissioner of Deeds

VICTORIA AYO-VAUGHAN  
Notary Public, State of New York  
Registration #01AY5014042  
Qualified in Queens County  
Commission Expires July 15, 2019

ACKNOWLEDGEMENT OF PRINCIPAL, IF A PARTNERSHIP

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me personally appeared \_\_\_\_\_  
to me known, and known to me to be one of the members of the firm of \_\_\_\_\_  
described in and who executed the foregoing instrument; and he  
acknowledged to me that he executed the same as and for the act and deed of said firm.

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me personally appeared \_\_\_\_\_  
to me known, and known to me to be the person described in and who executed the foregoing instrument;  
and acknowledged that he executed the same.

  
\_\_\_\_\_  
Notary Public or Commissioner of Deeds



<sup>Deputy</sup>  
ACKNOWLEDGEMENT BY COMMISSIONER

State of New York County of Queens ss:

On this 13th day of August, 2018, before me personally came Eric Macfarlane to me known, and known to be the Deputy Commissioner of the Department of Design and Construction of The City of New York, the person described as such in and who as such executed the foregoing instrument and acknowledged to me that he executed the same as Deputy Commissioner for the purposes therein mentioned.

  
\_\_\_\_\_  
Notary Public or Commissioner of Deeds

VICTORIA AYO-VAUGHAN  
Notary Public, State of New York  
Registration #01AY5014042  
Qualified in Queens County  
Commission Expires July 16, 2019

AUTHORITY

MAYOR'S CERTIFICATE NO. CBX  
BUDGET DIRECTOR'S CERTIFICATE NO.

DATED  
DATED

APPROPRIATION  
COMMISSIONER'S CERTIFICATE

In conformity with the provisions of Section 6-101 of the Administrative Code of the City of New York, it is hereby certified that the estimated cost of the work, materials and supplies required by the within Contract, amounting to

twenty-nine million, seven hundred  
fifteen thousand, thirty-one

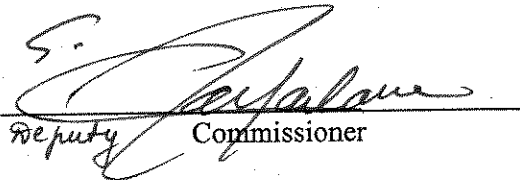
Dollars (\$ 29,715,031.00 )

is chargeable to the fund of the Department of Design and Construction entitled Code

P-1 STARLP

Department of Design and Construction

I hereby certify that the specifications contained herein comply with the terms and conditions of the BUDGET.

  
Deputy Commissioner

COMPTROLLER'S CERTIFICATE

The City of New York \_\_\_\_\_

Pursuant to the provisions of Section 6-101 of the Administrative Code of the City of New York, I hereby certify that there remains unapplied and unexpended a balance of the above mentioned fund applicable to this Contract sufficient to pay the estimated expense of executing the same viz:

\$ \_\_\_\_\_

\_\_\_\_\_  
Comptroller

**MAYOR'S CERTIFICATE OR  
CERTIFICATE OF THE DIRECTOR  
OF THE BUDGET**

**Performance Bond #1 (Pages 100 to 103): Use if the total contract price is \$5 Million Or Less.**  
**Performance Bond #1 has been approved by the U.S. Small Business Administration ("SBA")**  
**for participation in its Bond Guarantee Program.**

PERFORMANCE BOND #1 (Page 1)

**PERFORMANCE BOND #1**

**KNOW ALL PERSONS BY THESE PRESENTS:,**

That we, \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

hereinafter referred to as the "Principal,"

and, \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

hereinafter referred to as the "Surety" ("Sureties") are held and firmly bound to THE CITY OF NEW YORK, hereinafter referred to as the "City" or to its successors and assigns in the penal sum of \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(\$ \_\_\_\_\_) Dollars, lawful money of the United States for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

**WHEREAS,** the Principal is about to enter, or has entered, into a Contract in writing with the City for

\_\_\_\_\_

\_\_\_\_\_

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full;

**NOW, THEREFORE,** the conditions of this obligation are such that if the Principal, his or its representatives or assigns, shall well and faithfully perform the said Contract and all modifications, amendments, additions and alterations thereto that may hereafter be made, according to its terms and its true intent and meaning, including repair and or replacement of defective work and guarantees of maintenance for the periods stated in the Contract, and shall fully indemnify and save harmless the City from all cost and damage which it may suffer by reason of the Principal's default of the Contract, and shall fully reimburse and repay the City for all outlay and expense which the City may incur in making

**Performance Bond #1 (Pages 100 to 103):** Use if the total contract price is \$5 Million Or Less. Performance Bond #1 has been approved by the U.S. Small Business Administration ("SBA") for participation in its Bond Guarantee Program.

PERFORMANCE BOND #1 (Page 2)

good any such default and shall protect the said City of New York against, and pay any and all amounts, damages, cost and judgments which may or shall be recovered against said City or its officers or agents or which the said City of New York may be called upon to pay any person or corporation by reason of any damages arising or growing out of the Principal's default of the Contract, then this obligation shall be null and void, otherwise to remain in full force and effect.

The Surety (Sureties), for value received, hereby stipulates and agrees, upon written notice from the City that the City has determined that the Principal is in default of the Contract, to (1) pay the City the cost to complete the contract as determined by the City in excess of the balance of the Contract held by the City, plus any damages or costs to which the City is entitled, up to the full amount of the above penal sum, (2) fully perform and complete the Work to be performed under the Contract, pursuant to the terms, conditions, and covenants thereof, or (3) tender a completion Contractor that is acceptable to the City. The Surety (Sureties) further agrees, at its option, either to notify the City that it elects to pay the city the cost of completion plus any applicable damages and costs under option (1) above, or to commence and diligently perform the Work specified in the Contract, including physical site work, within twenty-five (25) business days after written notice thereof from the City and, if the Surety elects to fully perform and complete the Work, then to complete all Work within the time set forth in the Contract or such other time as agreed to between the City and Surety in accordance with the Contract. If the Surety elects to tender payment pursuant to (1) above, then the Surety shall tender such amount within fifteen (15) business days notification from the City of the cost of completion. The Surety and the City reserve all rights and defenses each may have against the other; provided, however, that the Surety expressly agrees that its reservation of rights shall not provide a basis for non-performance of its obligation to pay the City the cost of completion, to commence and complete all Work as provided herein, or to tender a completion contractor.

The Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties) and its bond shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or to the said Contract or the Work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or any moneys due or to become due thereunder; and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, and waivers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to subcontractors shall have the same effect as to said Surety (Sureties) as though done or omitted to be done by or in relation to said Principal. Notwithstanding the above, if the City makes payments to the Principal before the time required by the contract that in the aggregate exceed \$100,000 or 10% of the Contract price, whichever is less, and that have not become earned prior to the Principal being found to be in default, then all payments made to the Principal before the time required by the Contract shall be added to the remaining contract value available to be paid for the completion of the Contract as if such sums had not been paid to the Principal, but shall not provide a basis for non-performance of its obligation to pay the City the cost of completion, to commence and to complete all Work as provided herein, or to tender a completion contractor.

**Performance Bond #1 (Pages 100 to 103): Use if the total contract price is \$5 Million Or Less.**  
**Performance Bond #1 has been approved by the U.S. Small Business Administration ("SBA")**  
**for participation in its Bond Guarantee Program.**

PERFORMANCE BOND #1 (Page 3)

**IN WITNESS WHEREOF**, The Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

(Seal)

\_\_\_\_\_ (L.S.)

Principal

By: \_\_\_\_\_.

(Seal)

Surety

By: \_\_\_\_\_.

(Seal)

Surety

By: \_\_\_\_\_.

(Seal)

Surety

By: \_\_\_\_\_.

(Seal)

Surety

By: \_\_\_\_\_.

(Seal)

Surety

By: \_\_\_\_\_.

Bond Premium Rate \_\_\_\_\_.

Bond Premium Cost \_\_\_\_\_.

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by a duly authorized officer, agent, or attorney-in-fact.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Contract.

**Performance Bond #1 (Pages 100 to 103):** Use if the total contract price is \$5 Million Or Less. Performance Bond #1 has been approved by the U.S. Small Business Administration ("SBA") for participation in its Bond Guarantee Program.m.

PERFORMANCE BOND #1 (Page 4)

**ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION**

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

On this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_ before me personally came \_\_\_\_\_, to me known, who, being by me duly sworn did depose and say that he/she resides at \_\_\_\_\_

\_\_\_\_\_ ; that he/she is the \_\_\_\_\_ of the corporation described in and which executed the foregoing instrument; and that he/she signed his/her name to the foregoing instrument by order of the directors of said corporation as the duly authorized and binding act thereof.

\_\_\_\_\_  
Notary Public or Commissioner of Deeds.

**ACKNOWLEDGMENT OF PRINCIPAL IF A PARTNERSHIP**

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

On this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_ before me personally came \_\_\_\_\_, to me known, who, being by me duly sworn did depose and say that he/she resides at \_\_\_\_\_

\_\_\_\_\_ ; that he/she is \_\_\_\_\_ partner of \_\_\_\_\_, a limited/general partnership existing under the laws of the State of \_\_\_\_\_, the partnership described in and which executed the foregoing instrument; and that he/she signed his/her name to the foregoing instrument as the duly authorized and binding act of said partnership.

\_\_\_\_\_  
Notary Public or Commissioner of Deeds.

**ACKNOWLEDGMENT OF PRINCIPAL IF AN INDIVIDUAL**

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

On this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_ before me personally came \_\_\_\_\_, to me known, who, being by me duly sworn did depose and say that he/she resides at \_\_\_\_\_

\_\_\_\_\_ , and that he/she is the individual whose name is subscribed to the within instrument and acknowledged to me that by his/her signature on the instrument, said individual executed the instrument.

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

Each executed bond should be accompanied by: (a) appropriate acknowledgments of the respective parties; (b) appropriate duly certified copy of Power of Attorney or other certificate of authority where bond is executed by agent, officer or other representative of Principal or Surety; (c) a duly certified extract from By-Laws or resolutions of Surety under which Power of Attorney or other certificate of authority of its agent, officer or representative was issued, and (d) certified copy of latest published financial statement of assets and liabilities of Surety.

\*\*\*\*\*

Affix Acknowledgments and Justification of Sureties.

CITY OF NEW YORK  
DDC

**Performance Bond #2 (Pages 104 to 107): Use if the total contract price is more than \$5 Million.**

PERFORMANCE BOND #2 (Page 1)

**PERFORMANCE BOND #2**

**KNOW ALL PERSONS BY THESE PRESENTS:**

That we, MLJ Contracting Corp.

1720 Whitestone Expressway, Suite 300, Whitestone, NY 11357

hereinafter referred to as the "Principal,"

and, Liberty Mutual Insurance Company, 175 Berkeley St., Boston, MA 02116

Western Surety Company, 151 N. Franklin Street, Chicago, IL 60606

hereinafter referred to as the "Surety" ("Sureties") are held and firmly bound to THE CITY OF NEW YORK, hereinafter referred to as the "City" or to its successors and assigns in the penal sum of Twenty Nine Million Seven Hundred Fifteen Thousand Thirty One and 00/100

(\$ 29,715,031.00 ) Dollars, lawful money of the United States for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

**WHEREAS,** the Principal is about to enter, or has entered, into a Contract in writing with the City for

FMS ID: P-1STARLP, E-PIN: 85017B0106001, DDC PIN:8502017HW0048C, Bronx River Greenway: Starlight Park

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full;

**NOW, THEREFORE,** the conditions of this obligation are such that if the Principal, his or its representatives or assigns, shall well and faithfully perform the said Contract and all modifications, amendments, additions and alterations thereto that may hereafter be made, according to its terms and its true intent and meaning, including repair and or replacement of defective work and guarantees of maintenance for the periods stated in the Contract, and shall fully indemnify and save harmless the City from all cost and damage which it may suffer by reason of the Principal's default of the Contract, and shall fully reimburse and repay the City for all outlay and expense which the City may incur in making



**Performance Bond #2 (Pages 104 to 107): Use if the total contract price is more than \$5 Million.**

**PERFORMANCE BOND #2 (Page 2)**

good any such default and shall protect the said City of New York against, and pay any and all amounts, damages, cost and judgments which may or shall be recovered against said City or its officers or agents or which the said City of New York may be called upon to pay any person or corporation by reason of any damages arising or growing out of the Principal's default of the Contract, then this obligation shall be null and void, otherwise to remain in full force and effect.

The Surety (Sureties), for value received, hereby stipulates and agrees, upon written notice from the City that the City has determined that the Principal is in default of the Contract, to either (1) pay the full amount of the above penal sum in complete discharge and exoneration of this bond and of all the liabilities of the Surety relating to this bond, or (2) fully perform and complete the Work to be performed under the Contract, pursuant to the terms, conditions, and covenants thereof. The Surety (Sureties) further agrees, at its option, either to tender the penal sum or to commence and diligently perform the Work specified in the Contract, including physical site work, within twenty-five (25) business days after written notice thereof from the City and to complete all Work within the time set forth in the Contract or such other time as agreed to between the City and Surety in accordance with the Contract. The Surety and the City reserve all rights and defenses each may have against the other; provided, however, that the Surety expressly agrees that its reservation of rights shall not provide a basis for non-performance of its obligation to commence and to complete all Work as provided herein.

The Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties) and its bond shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or to the said Contract or the Work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any Work to be performed or any moneys due or to become due thereunder; and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, subcontractors, and other transferees shall have the same effect as to said Surety (Sureties) as though done or omitted to be done by or in relation to said Principal.

**Performance Bond #2 (Pages 104 to 107): Use if the total contract price is more than \$5 Million.**

**PERFORMANCE BOND #2 (Page 3)**

**IN WITNESS WHEREOF**, The Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this

\_\_\_\_\_ 6th \_\_\_\_\_ day of \_\_\_\_\_ August \_\_\_\_\_ 20 18 \_\_\_\_\_

(Seal)

MLJ Contracting Corp. \_\_\_\_\_ (L.S.)

Principal

By: \_\_\_\_\_

(Seal)

Surety

Liberty Mutual Insurance Company

By: \_\_\_\_\_  
Michelle Wannamaker, Attorney-In-Fact

(Seal)

Western Surety Company

Surety

By: \_\_\_\_\_  
Michelle Wannamaker, Attorney-In-Fact

(Seal)

Surety

By: \_\_\_\_\_

(Seal)

Surety

By: \_\_\_\_\_

(Seal)

Surety

By: \_\_\_\_\_

Bond Premium Rate \$6.70 per thousand \_\_\_\_\_

Bond Premium Cost \$235,806.00 \_\_\_\_\_

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by a duly authorized officer, agent, or attorney-in-fact.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Contract.

**Performance Bond #2 (Pages 104 to 107): Use if the total contract price is more than \$5 Million.**

PERFORMANCE BOND #2 (Page 4)

**ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION**

State of NEW YORK County of QUEENS ss:

On this 7th day of Aug., 20 18 before me personally  
came Richard Ocken,  
to me known, who, being by me duly sworn did depose and say that he resides  
at Manhattan, NY

; that he/she is the PRESIDENT  
of the corporation described in and which executed the foregoing instrument; that he/she signed his/her name to the  
foregoing instrument by order of the directors of said corporation as the duly authorized and binding act thereof.

Jamie Loprinzi  
Notary Public or Commissioner of Deeds.

**ACKNOWLEDGMENT OF PRINCIPAL IF A PARTNERSHIP**

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

On this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_ before me personally  
came \_\_\_\_\_  
to me known, who, being by me duly sworn did depose and say that he/she resides  
at \_\_\_\_\_

\_\_\_\_\_ ; that he/she is \_\_\_\_\_ partner of  
\_\_\_\_\_, a limited/general partnership existing under the laws of the State of  
\_\_\_\_\_, the partnership described in and which executed the foregoing instrument;  
and that he/she signed his/her name to the foregoing instrument as the duly authorized and binding act of  
said partnership.

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

**ACKNOWLEDGMENT OF PRINCIPAL IF AN INDIVIDUAL**

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

On this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_ before me personally  
came \_\_\_\_\_  
to me known, who, being by me duly sworn did depose and say that he/she resides  
at \_\_\_\_\_

\_\_\_\_\_, and that he/she is the individual whose name is  
subscribed to the within instrument and acknowledged to me that by his/her signature on the  
instrument, said individual executed the instrument.

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

Each executed bond should be accompanied by: (a) appropriate acknowledgments of the respective parties; (b) appropriate  
duly certified copy of Power of Attorney or other certificate of authority where bond is executed by agent, officer or other  
representative of Principal or Surety; (c) a duly certified extract from By-Laws or resolutions of Surety under which Power  
of Attorney or other certificate of authority of its agent, officer or representative was issued, and (d) certified copy of latest  
published financial statement of assets and liabilities of Surety.

\*\*\*\*\*

Affix Acknowledgments and Justification of Sureties.

CITY OF NEW YORK  
DDC

107

STANDARD CONSTRUCTION CONTRACT  
March 2017

JAMIE LOPRINZI  
NOTARY PUBLIC, STATE OF NEW YORK  
QUEENS COUNTY  
LC # 0106138413  
COMM. EXP. 3/25/2023



ACKNOWLEDGMENT OF SURETY COMPANY

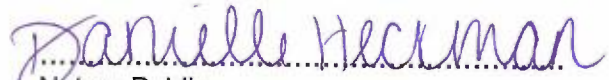
STATE OF New York } SS

COUNTY OF Nassau }

On this August 6, 2018, before me personally came Michelle Wannamaker  
to me known, who, being by me duly sworn, did depose and say; that he/she resides in  
Kings County, State of New York that he/she is the Attorney-In-Fact  
of the Liberty Mutual Insurance Company and Western Surety Company

..... the corporations described in which executed  
the above instrument; that he/she knows the seal of said corporations; that the seal affixed to  
said instrument is such corporate seal; that it was so affixed by the Board of Directors of said  
corporations; and that he/she signed his/her name thereto by like order; and the affiant did  
further depose and say that the Superintendent of Insurance of the State of New York, has  
pursuant to Section 1111 of the Insurance Law of the State of New York, issued to  
Liberty Mutual Insurance Company and Western Surety Company

..... (Sureties) his/her certificate of qualification  
evidencing the qualification of said Companies and its sufficiency under any law of the State of  
New York as surety and guarantor, and the propriety of accepting and approving is as such; and  
that such certificate has not been revoked.

  
Notary Public

NY acknowledgement

DANIELLE HECKMAN  
Notary Public, State of New York  
No. 01HE6302468  
Qualified in Suffolk County  
Commission Expires 05/05/2022



**THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.**

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 8162086

Liberty Mutual Insurance Company  
The Ohio Casualty Insurance Company      West American Insurance Company

**POWER OF ATTORNEY**

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Colette R. Chisholm; Dana Granice; Susan Lupski; Robert T. Pearson; Michelle Wannamaker; Katherine Acosta; Thomas Bean; George O. Brewster; Desiree Cardlin; Lee Ferrucci; Peter F. Jones; Gerard S. Macholz; Camille Maitland; Nelly Renchiwich; Rita Sagistano; Vincent A. Walsh

all of the city of Uniondale, state of NY each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 26th day of July, 2018.



The Ohio Casualty Insurance Company  
Liberty Mutual Insurance Company  
West American Insurance Company

By: David M. Carey  
David M. Carey, Assistant Secretary

STATE OF PENNSYLVANIA      ss  
COUNTY OF MONTGOMERY

On this 26th day of July, 2018, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Insurance Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA  
Notarial Seal  
Teresa Pastella, Notary Public  
Upper Merion Twp., Montgomery County  
My Commission Expires March 28, 2021  
Member, Pennsylvania Association of Notaries

By: Teresa Pastella  
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

**ARTICLE IV – OFFICERS** – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

**ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings.** Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

**Certificate of Designation** – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

**Authorization** – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this AUG 06 2018 day of August, 2018.



By: Renee C. Llewellyn  
Renee C. Llewellyn, Assistant Secretary





LIBERTY MUTUAL INSURANCE COMPANY  
FINANCIAL STATEMENT — DECEMBER 31, 2017

Assets		Liabilities	
Cash and Bank Deposits .....	\$370,003,299	Unearned Premiums .....	\$7,503,154,587
*Bonds — U.S Government .....	1,331,664,975	Reserve for Claims and Claims Expense .....	19,658,731,454
*Other Bonds .....	11,127,053,004	Funds Held Under Reinsurance Treaties .....	224,693,828
*Stocks .....	16,367,850,688	Reserve for Dividends to Policyholders .....	967,520
Real Estate .....	272,895,626	Additional Statutory Reserve .....	52,491,027
Agents' Balances or Uncollected Premiums .....	5,258,657,823	Reserve for Commissions, Taxes and	
Accrued Interest and Rents .....	100,341,596	Other Liabilities .....	4,049,392,852
Other Admitted Assets .....	11,192,287,530	<b>Total .....</b>	<b>\$31,489,431,268</b>
<b>Total Admitted Assets .....</b>	<b>\$46,020,754,541</b>	Special Surplus Funds .....	\$176,230,822
		Capital Stock .....	10,000,000
		Paid in Surplus .....	9,484,316,385
		Unassigned Surplus .....	4,860,776,066
		<b>Surplus to Policyholders .....</b>	<b>14,531,323,273</b>
		<b>Total Liabilities and Surplus .....</b>	<b>\$46,020,754,541</b>



\* Bonds are stated at amortized or investment value; Stocks at Association Market Values.  
The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2017, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 16<sup>th</sup> day of March, 2018.

*TAMIKOLAJEWSKI*

Assistant Secretary

# Western Surety Company

## POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

**Gerard S Macholz, Camille Maitland, Rita Sagistano, Robert T Pearson, Thomas Bean, Susan Lupski, George O Brewster, Michelle Wannamaker, Desiree Cardlin, Colette R Chisholm, Vincent A Walsh, Dana Granice, Individually**

of Uniondale, NY, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

### - In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 18th day of January, 2018.



WESTERN SURETY COMPANY

Paul T. Bruflat, Vice President

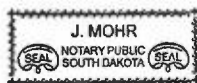
State of South Dakota  
County of Minnehaha

} ss

On this 18th day of January, 2018, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

June 23, 2021



J. Mohr, Notary Public

### CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this \_\_\_\_\_ day of AUG 06 2018.



WESTERN SURETY COMPANY

L. Nelson, Assistant Secretary

**WESTERN SURETY COMPANY**  
**Sioux Falls, South Dakota**  
**Statement of Net Admitted Assets and Liabilities**  
**December 31, 2017**

**ASSETS**

Bonds	\$ 1,895,156,151
Stocks	28,408,086
Cash, cash equivalents, and short-term investments	24,679,133
Receivables for securities	7,500,016
Investment income due and accrued	22,426,771
Premiums and considerations	37,932,713
Amounts recoverable from reinsurers	1,562,035
Current federal and foreign income taxes recoverable from CNA	
Financial Corporation	3,481,084
Net deferred tax asset	10,688,834
Receivable from parent, subsidiaries, and affiliates	11,647,470
Other assets	10,215
Total Assets	<u>\$ 2,043,492,508</u>

**LIABILITIES AND SURPLUS**


Losses	\$ 201,046,845
Loss adjustment expense	57,918,199
Commissions payable, contingent commissions and other similar charges	10,047,343
Other expenses (excluding taxes, license and fees)	943,877
Taxes, License and fees (excluding federal and foreign income taxes)	3,447,669
Unearned premiums	223,752,269
Advance premiums	5,436,181
Ceded reinsurance premiums payable	1,720,726
Amounts withheld or retained by company for account of others	7,338,456
Provision for reinsurance	239,534
Payable to parent, subsidiaries and affiliates	12,934
Payable on security transactions	4,000,000
Other liabilities	367,837
Total Liabilities	<u>\$ 516,271,870</u>

**Surplus Account:**

Common stock	\$ 4,000,000
Gross paid in and contributed surplus	280,071,837
Unassigned funds	1,243,148,801
Surplus as regards policyholders	<u>\$ 1,527,220,637</u>
Total Liabilities and Capital	<u>\$ 2,043,492,508</u>

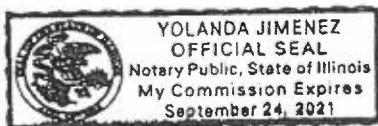
I, Troy Wray, Assistant Vice President of Western Surety Company hereby certify that the above is an accurate representation of the financial statement of the Company dated December 31, 2017, as filed with the various Insurance Departments and is a true and correct statement of the condition of Western Surety Company as of that date.

Western Surety Company

By   
Assistant Vice President

Subscribed and sworn to me this 8th day of March, 2018.

My commission expires:



  
Notary Public



**Payment Bond (Pages 108 to 111): Use for any contract for which a Payment Bond is required.**

PAYMENT BOND (Page 1)

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS, That we, MLJ Contracting Corp.

1720 Whitestone Expressway, Suite 300, Whitestone, NY 11357

hereinafter referred to as the "Principal", and Liberty Mutual Insurance Company, 175 Berkeley St., Boston, MA 02116

Western Surety Company, 151 N. Franklin Street, Chicago, IL 60606

hereinafter referred to as the "Surety" ("Sureties") are held and firmly bound to THE CITY OF NEW YORK, hereinafter referred to as the "City" or to its successors and assigns, in the penal sum of

Twenty Nine Million Seven Hundred Fifteen Thousand Thirty One and 00/100

(\$ \$29,715,031.00) Dollars, lawful money of the United States, for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is about to enter, or has entered, into a Contract in writing with the City for

FMS ID: P-1STARLP, E-PIN: 85017B0106001, DDC PIN:8502017HW0048C, Bronx River Greenway: Starlight Park

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full;

NOW, THEREFORE, the conditions of this obligation are such that if the Principal, his or its representatives or assigns and other Subcontractors to whom Work under this Contract is sublet and his or their successors and assigns shall promptly pay or cause to be paid all lawful claims for

(a) Wages and compensation for labor performed and services rendered by all persons engaged in the prosecution of the Work under said Contract, and any amendment or extension thereof or addition thereto, whether such persons be agents servants or employees of the Principal or any such Subcontractor, including all persons so engaged who perform the work of laborers or mechanics at or in the vicinity of the site

**Payment Bond (Pages 108 to 111): Use for any contract for which a Payment Bond is required.**

**PAYMENT BOND (Page 2)**

of the Project regardless of any contractual relationship between the Principal or such Subcontractors, or his or their successors or assigns, on the one hand and such laborers or mechanics on the other, but not including office employees not regularly stationed at the site of the project; and

(b) Materials and supplies (whether incorporated in the permanent structure or not), as well as teams, fuels, oils, implements or machinery furnished, used or consumed by said Principal or any subcontractor at or in the vicinity of the site of the Project in the prosecution of the Work under said Contract and any amendment or extension thereof or addition thereto; then this obligation shall be void, otherwise to remain in full force and effect.

This bond is subject to the following additional conditions, limitations and agreements:

(a) The Principal and Surety (Sureties) agree that this bond shall be for the benefit of any materialmen or laborer having a just claim, as well as the City itself.

(b) All persons who have performed labor, rendered services or furnished materials and supplies, as aforesaid, shall have a direct right of action against the Principal and his, its or their successors and assigns, and the Surety (Sureties) herein, or against either or both or any of them and their successors and assigns. Such persons may sue in their own name, and may prosecute the suit to judgment and execution without the necessity of joining with any other persons as party plaintiff.

(c) The Principal and Surety (Sureties) agree that neither of them will hold the City liable for any judgment for costs of otherwise, obtained by either or both of them against a laborer or materialman in a suit brought by either a laborer or materialman under this bond for moneys allegedly due for performing work or furnishing material.

(d) The Surety (Sureties) or its successors and assigns shall not be liable for any compensation recoverable by an employee or laborer under the Workmen's Compensation Law.

(e) In no event shall the Surety (Sureties), or its successors or assigns, be liable for a greater sum than the penalty of this bond or be subject to any suit, action or proceeding hereon that is instituted by any person, firm, or corporation hereunder later than two years after the complete performance of said Contract and final settlement thereof.

The Principal, for himself and his successors and assigns, and the Surety (Sureties), for itself and its successors and assigns, do hereby expressly waive any objection that might be interposed as to the right of the City to require a bond containing the foregoing provisions, and they do hereby further expressly waive any defense which they or either of them might interpose to an action brought hereon by any person, firm or corporation, including subcontractors, materialmen and third persons, for work, labor, services, supplies or material performed rendered, or furnished as aforesaid upon the ground that there is no law authorizing the City to require the foregoing provisions to be place in this bond.

And the Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties), and its bonds shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or of the said Contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any part thereof, or of any Work to be performed, or any moneys due to become due thereunder and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, Subcontractors, and other transferees shall have the same effect as to said Surety (Sureties) as though done or omitted to be done or in relation to said Principal.



**Payment Bond (Pages 108 to 111): Use for any contract for which a Payment Bond is required.**

**PAYMENT BOND (Page 3)**

IN WITNESS WHEREOF, the Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this 6th day of August, 2018.

(Seal)

MLJ Contracting Corp. (L.S.)

Principal

By:



(Seal)

Liberty Mutual Insurance Company

Surety

By:



Michelle Wannamaker, Attorney-In-Fact

(Seal)

Western Surety Company

Surety

By:



Michelle Wannamaker, Attorney-In-Fact

(Seal)

Surety

By:

(Seal)

Surety

By:

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

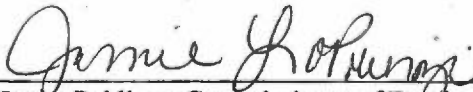
If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by a duly authorized officer, agent, or attorney-in-fact.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Contract.

**ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION**

State of NEW YORK County of QUEENS ss:

On this 7<sup>th</sup> day of Aug., 2018, before me personally came Richard Ocken to me known, who, being by me duly sworn did depose and say that he resides at Manhattan, NY that he is the PRESIDENT of the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he signed his name thereto by like order.

  
Notary Public or Commissioner of Deeds

**JAMIE LOPRINZI**  
**NOTARY PUBLIC, STATE OF NEW YORK**  
**QUEENS COUNTY**  
**LIC # 01LO6138413**  
**COMM. EXP. 3/25/20 22**

**ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP**

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me personally appeared \_\_\_\_\_ to me known, and known to me to be one of the members of the firm of \_\_\_\_\_ described in and who executed the foregoing instrument; and he acknowledged to me that he executed the same as and for the act and deed of said firm.

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

**ACKNOWLEDGMENT OF PRINCIPAL, IF AN INDIVIDUAL**

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me personally appeared \_\_\_\_\_ to me known, and known to me to be the person described in and who executed the foregoing instrument; and acknowledged that he executed the same.

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

Each executed bond should be accompanied by: (a) appropriate acknowledgments of the respective parties; (b) appropriate duly certified copy of Power of Attorney or other certificate of authority where bond is executed by agent, officer or other representative of Principal or Surety; (c) a duly certified extract from By-Laws or resolutions of Surety under which Power of Attorney or other certificate of authority of its agent, officer or representative was issued, and (d) certified copy of latest published financial statement of assets and liabilities of Surety.

\*\*\*\*\*

Affix Acknowledgments and Justification of Sureties.

ACKNOWLEDGMENT OF SURETY COMPANY

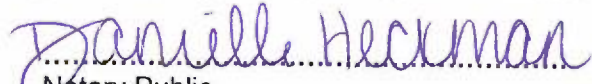
STATE OF New York } SS

COUNTY OF Nassau }

On this August 6, 2018, before me personally came Michelle Wannamaker  
to me known, who, being by me duly sworn, did depose and say; that he/she resides in  
Kings County, State of New York that he/she is the Attorney-In-Fact  
of the Liberty Mutual Insurance Company and Western Surety Company

..... the corporations described in which executed  
the above instrument; that he/she knows the seal of said corporations; that the seal affixed to  
said instrument is such corporate seal; that it was so affixed by the Board of Directors of said  
corporations; and that he/she signed his/her name thereto by like order; and the affiant did  
further depose and say that the Superintendent of Insurance of the State of New York, has  
pursuant to Section 1111 of the Insurance Law of the State of New York, issued to  
Liberty Mutual Insurance Company and Western Surety Company

..... (Sureties) his/her certificate of qualification  
evidencing the qualification of said Companies and its sufficiency under any law of the State of  
New York as surety and guarantor, and the propriety of accepting and approving is as such; and  
that such certificate has not been revoked.

  
Notary Public

NY acknowledgement

DANIELLE HECKMAN  
Notary Public, State of New York  
No. 01HE6302468  
Qualified in Suffolk County  
Commission Expires 05/05/2022



**THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.**

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 8162087

Liberty Mutual Insurance Company  
The Ohio Casualty Insurance Company West American Insurance Company

## POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Colette R. Chisholm; Dana Granice; Susan Lupski; Robert T. Pearson; Michelle Wannamaker; Katherine Acosta; Thomas Bean; George O. Brewster; Desiree Cardlin; Lee Ferrucci; Peter F. Jones; Gerard S. Macholz; Camille Maitland; Nelly Renchiwich; Rita Sagistano; Vincent A. Walsh

all of the city of Uniondale, state of NY each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 26th day of July, 2018.



The Ohio Casualty Insurance Company  
Liberty Mutual Insurance Company  
West American Insurance Company

By: David M. Carey  
David M. Carey, Assistant Secretary

STATE OF PENNSYLVANIA ss  
COUNTY OF MONTGOMERY

On this 26th day of July, 2018, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA  
Notarial Seal  
Teresa Pastella, Notary Public  
Upper Merion Twp., Montgomery County  
My Commission Expires March 28, 2021  
Member, Pennsylvania Association of Notaries

By: Teresa Pastella  
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

**ARTICLE IV – OFFICERS** – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

**ARTICLE XIII – Execution of Contracts** – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

**Certificate of Designation** – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

**Authorization** – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this AUG 06 2018 day of August, 20.



By: Renee C. Llewellyn  
Renee C. Llewellyn, Assistant Secretary

To confirm the validity of this Power of Attorney call  
1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

Not valid for mortgage, note, loan, letter of credit,  
currency rate, interest rate or residual value guarantees.





LIBERTY MUTUAL INSURANCE COMPANY  
FINANCIAL STATEMENT — DECEMBER 31, 2017

Assets		Liabilities	
Cash and Bank Deposits .....	\$370,003,299	Unearned Premiums .....	\$7,503,154,587
*Bonds — U.S Government .....	1,331,664,975	Reserve for Claims and Claims Expense .....	19,658,731,454
*Other Bonds .....	11,127,053,004	Funds Held Under Reinsurance Treaties .....	224,693,828
*Stocks .....	16,367,850,688	Reserve for Dividends to Policyholders .....	967,520
Real Estate .....	272,895,626	Additional Statutory Reserve .....	52,491,027
Agents' Balances or Uncollected Premiums .....	5,258,657,823	Reserve for Commissions, Taxes and	
Accrued Interest and Rents .....	100,341,596	Other Liabilities .....	4,049,392,852
Other Admitted Assets .....	11,192,287,530	<b>Total .....</b>	<b>\$31,489,431,268</b>
		Special Surplus Funds .....	\$176,230,822
		Capital Stock .....	10,000,000
		Paid in Surplus .....	9,484,316,385
		Unassigned Surplus .....	4,860,776,066
		<b>Surplus to Policyholders .....</b>	<b>14,531,323,273</b>
<b>Total Admitted Assets .....</b>	<b>\$46,020,754,541</b>	<b>Total Liabilities and Surplus .....</b>	<b>\$46,020,754,541</b>



\* Bonds are stated at amortized or investment value; Stocks at Association Market Values.  
The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2017, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 16<sup>th</sup> day of March, 2018.

*TAMikolajewski*

Assistant Secretary

# Western Surety Company

## POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

**Gerard S Macholz, Camille Maitland, Rita Sagistano, Robert T Pearson, Thomas Bean, Susan Lupski, George O Brewster, Michelle Wannamaker, Desiree Cardlin, Colette R Chisholm, Vincent A Walsh, Dana Granice, Individually**

of Uniondale, NY, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

### - In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 18th day of January, 2018.



WESTERN SURETY COMPANY

*Paul T. Bruflat*

Paul T. Bruflat, Vice President

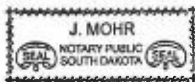
State of South Dakota  
County of Minnehaha

} ss

On this 18th day of January, 2018, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

June 23, 2021



*J. Mohr*

J. Mohr, Notary Public

### CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this \_\_\_\_\_ day of AUG 06 2018.



WESTERN SURETY COMPANY

*L. Nelson*

L. Nelson, Assistant Secretary



**WESTERN SURETY COMPANY**  
**Sioux Falls, South Dakota**  
**Statement of Net Admitted Assets and Liabilities**  
**December 31, 2017**

**ASSETS**

Bonds	\$ 1,895,156,151
Stocks	28,408,086
Cash, cash equivalents, and short-term investments	24,679,133
Receivables for securities	7,500,016
Investment income due and accrued	22,426,771
Premiums and considerations	37,932,713
Amounts recoverable from reinsurers	1,562,035
Current federal and foreign income taxes recoverable from CNA	
Financial Corporation	3,481,084
Net deferred tax asset	10,688,834
Receivable from parent, subsidiaries, and affiliates	11,647,470
Other assets	10,215
Total Assets	<u>\$ 2,043,492,508</u>

**LIABILITIES AND SURPLUS**

Losses	\$ 201,046,845
Loss adjustment expense	57,918,199
Commissions payable, contingent commissions and other similar charges	10,047,343
Other expenses (excluding taxes, license and fees)	943,877
Taxes, License and fees (excluding federal and foreign income taxes)	3,447,669
Unearned premiums	223,752,269
Advance premiums	5,436,181
Ceded reinsurance premiums payable	1,720,726
Amounts withheld or retained by company for account of others	7,338,456
Provision for reinsurance	239,534
Payable to parent, subsidiaries and affiliates	12,934
Payable on security transactions	4,000,000
Other liabilities	367,837
Total Liabilities	<u>\$ 516,271,870</u>

**Surplus Account:**

Common stock	\$ 4,000,000
Gross paid in and contributed surplus	280,071,837
Unassigned funds	<u>1,243,148,801</u>
Surplus as regards policyholders	<u>\$ 1,527,220,637</u>
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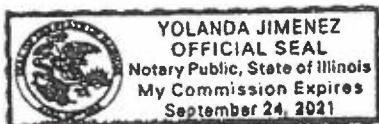
I, Troy Wray, Assistant Vice President of Western Surety Company hereby certify that the above is an accurate representation of the financial statement of the Company dated December 31, 2017, as filed with the various Insurance Departments and is a true and correct statement of the condition of Western Surety Company as of that date.

Western Surety Company

By   
Assistant Vice President

Subscribed and sworn to me this 8th day of March, 2018.

My commission expires:



  
Notary Public



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
08/07/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Construction Risk Partners a JLT Group Company Campus View Plaza 1250 Route 28, Suite 201 Branchburg, NJ 08876		1-908-566-1010	<b>CONTACT NAME:</b> Amy Klein <b>PHONE (A/C No. Ext):</b> 646-625-7100 <b>FAX (A/C No):</b> 646-625-7099 <b>E-MAIL ADDRESS:</b> certs@constructionriskpartners.com																						
<b>INSURED</b> MLJ Contracting Corp.  1720 Whitestone Expwy, Suite 300  Whitestone, NY 11357		<table border="1"><thead><tr><th colspan="2">INSURER(S) AFFORDING COVERAGE</th><th>NAIC#</th></tr></thead><tbody><tr><td>INSURER A:</td><td>ACE AMER INS CO</td><td>22667</td></tr><tr><td>INSURER B:</td><td>AACE AMER INS CO</td><td>22667</td></tr><tr><td>INSURER C:</td><td>STARR IND &amp; LIAB CO</td><td>38318</td></tr><tr><td>INSURER D:</td><td>INDIAN HARBOR INS CO</td><td>36940</td></tr><tr><td>INSURER E:</td><td></td><td></td></tr><tr><td>INSURER F:</td><td></td><td></td></tr></tbody></table>			INSURER(S) AFFORDING COVERAGE		NAIC#	INSURER A:	ACE AMER INS CO	22667	INSURER B:	AACE AMER INS CO	22667	INSURER C:	STARR IND & LIAB CO	38318	INSURER D:	INDIAN HARBOR INS CO	36940	INSURER E:			INSURER F:		
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INSURER E:																									
INSURER F:																									

**COVERAGES**

CERTIFICATE NUMBER: 53620608

REVISION NUMBER:


THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Deductible \$250,000 <input checked="" type="checkbox"/> Contractual Liability GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:		HDO G28114618 001	03/13/18	03/13/19	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 4,000,000 PRODUCTS - COMP/OP AGG \$ 4,000,000 \$
B	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY		ISA H09092158	03/13/18	03/13/19	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
C	<input checked="" type="checkbox"/> <b>UMBRELLA LIAB</b> <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$		1000584972181	03/13/18	03/13/19	EACH OCCURRENCE \$ 3,000,000 AGGREGATE \$ 3,000,000 \$
A	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) if yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input checked="" type="checkbox"/> N	C48580749	03/13/18	03/13/19	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.I. EACH ACCIDENT \$ 1,000,000 E.I. DISEASE - EA EMPLOYEE \$ 1,000,000 E.I. DISEASE - POLICY LIMIT \$ 1,000,000
D	Pollution		CE0742082003	08/14/18	08/14/19	Occ/Agg 5MM/10MM
D	Professional Liability		CE0742082003	08/14/18	08/14/19	Occ/Agg 2MM/2MM

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Re: Project #P-1STARLP, Starlight Park Phase II, Stage 2 Bridge the Critical South Bronx Gap  
City of New York including its officials and employees and New York State including its officials and employees and  
FHWA including its officials and employees are additional insured as required by written contract.

**CERTIFICATE HOLDER****CANCELLATION**

NYCDDC  30-30 Thomson Avenue  Long Island City, NY 11101-3045  USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE 
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# CERTIFICATE OF INSURANCE COVERAGE

## DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

### PART 1. To be completed by Disability and Paid Family Leave Benefits Carrier or Licensed Insurance Agent of that Carrier

<b>1a. Legal Name &amp; Address of Insured (use street address only)</b>  <b>Work Location of Insured</b> (Only required if coverage is specifically limited to certain locations in New York State, i.e., Wrap-Up Policy)	<b>1b. Business Telephone Number of Insured</b>  <b>1c. Federal Employer Identification Number of Insured or Social Security Number</b>
<b>2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)</b>	<b>3a Name of Insurance Carrier</b>  <b>3b Policy Number of Entity Listed in Box "1a"</b>  <b>3c Policy effective period</b>

**4. Policy provides the following benefits:**

- A. Both disability and paid family leave benefits.
- B. Disability benefits only.
- C. Paid family leave benefits only.

**5. Policy covers:**

- A. All of the employer's employees eligible under the NYS Disability and Paid Family Leave Benefits Law.
- B. Only the following class or classes of employer's employees:

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has NYS Disability and/or Paid Family Leave Benefits insurance coverage as described above.

Date Signed

*Elizabeth Tello*

(Signature of insurance carrier's authorized representative or NYS Licensed Insurance Agent of that insurance carrier)

Telephone Number (212) 553-8074

Name and Title: Elizabeth Tello – Assistant Director, Statutory Services

**IMPORTANT:** If Boxes 4A and 5A are checked, and this form is signed by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that carrier, this certificate is **COMPLETE**. Mail it directly to the certificate holder.

If Box 4B, 4C or 5B is checked, this certificate is **NOT COMPLETE** for purposes of Section 220, Subd. 8 of the NYS Disability and Paid Family Leave Benefits Law. It must be mailed for completion to the Workers' Compensation Board, Plans Acceptance Unit, PO Box 5200, Binghamton, NY 13902-5200.

### PART 2. To be completed by the NYS Workers' Compensation Board (Only if Box 4C or 5B of Part 1 has been checked)

#### State of New York Workers' Compensation Board

According to information maintained by the NYS Workers' Compensation Board, the above-named employer has complied with the NYS Disability and Paid Family Leave Benefits Law with respect to all of his/her employees.

Date Signed

By

(Signature of Authorized NYS Workers' Compensation Board Employee)

Telephone Number

Name and Title

**Please Note:** Only insurance carriers licensed to write NYS disability and paid family leave benefits insurance policies and NYS licensed insurance agents of those insurance carriers are authorized to issue Form DB-120.1. Insurance brokers are NOT authorized to issue this form.



## Additional Instructions for Form DB-120.1

By signing this form, the insurance carrier identified in Box 3 on this form is certifying that it is insuring the business referenced in box "1 a" for disability and/or paid family leave benefits under the New York State Disability and Paid Family Leave Benefits Law. The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed as the certificate holder in Box 2.

The insurance carrier must notify the above certificate holder and the Workers' Compensation Board within 10 days IF a policy is cancelled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from coverage indicated on this Certificate. (These notices may be sent by regular mail.) Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in Box 3c, whichever is earlier.

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Disability and/or Paid Family Leave Benefits contract of insurance only while the underlying policy is in effect.

**Please Note: Upon the cancellation of the disability and/or paid family leave benefits policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of NYS Disability and/or Paid Family Leave Benefits Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Disability and Paid Family Leave Benefits Law.**

### DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

#### §220. Subd. 8

(a) The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in employment as defined in this article, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand and twenty-one, the payment of family leave benefits for all employees has been secured as provided by this article. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any disability benefits to any such employee if so employed.

(b) The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in employment as defined in this article and notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand eighteen, the payment of family leave benefits for all employees has been secured as provided by this article.



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
08/16/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION** IS **WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Construction Risk Partners a JLT Group Company Campus View Plaza 1250 Route 28, Suite 201 Branchburg, NJ 08876	1-908-566-1010	<b>CONTACT NAME:</b> Amy Klein <b>PHONE (A/C, No. Ext):</b> 646-625-7100 <b>FAX (A/C, No):</b> 646-625-7099 <b>E-MAIL ADDRESS:</b> certs@constructionriskpartners.com
<b>INSURED</b> National Railroad Passenger Corporation (AMTRAK) CSX 30th Street Station 2955 Market Street Philadelphia, PA 19104		<b>INSURER(S) AFFORDING COVERAGE</b> <b>INSURER A:</b> WESTCHESTER FIRE INS CO <b>INSURER B:</b> <b>INSURER C:</b> <b>INSURER D:</b> <b>INSURER E:</b> <b>INSURER F:</b>
		<b>NAIC #</b> 10030

**COVERAGES****CERTIFICATE NUMBER:** 53665516**REVISION NUMBER:**


THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y / N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A				PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Railroad Protective			G71169789 001	08/15/18	11/30/20	<b>Each Occurrence</b> 2,000,000 <b>Aggregate</b> 6,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Re: Contract #: P-1STARLP - Bronx River Greenway: Starlight Park Phase II  
Location: Starlight Park - Bronx River Ave & East 172st - Park rehabilitation and construction of pedestrian bridge access to the park  
Evidence of Insurance

**CERTIFICATE HOLDER****CANCELLATION**

National Railroad Passenger Corporation (AMTRAK) CSX  30th Street Station 2955 Market Street Philadelphia, PA 19104  USA	<b>SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.</b>  <b>AUTHORIZED REPRESENTATIVE</b> 
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ACORD 25 (2016/03)

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Nhuddy  
53665516

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE**

**LABOR LAW §220 PREVAILING WAGE SCHEDULE**

Workers, Laborers and Mechanics employed on a public work project must receive not less than the prevailing rate of wage and benefits for the classification of work performed by each upon such public work. Pursuant to Labor Law §220 the Comptroller of the City of New York has promulgated this schedule solely for Workers, Laborers and Mechanics engaged by private contractors on New York City public work contracts.

This schedule is a compilation of separate determinations of the prevailing rate of wage and supplements made by the Comptroller for each trade classification listed herein pursuant to New York State Labor Law section 220 (5). The source of the wage and supplement rates, whether a collective bargaining agreement, survey data or other, is listed at the end of each classification.

Agency Chief Contracting Officers should contact the Bureau of Labor Law's Classification Unit with any questions concerning trade classifications, prevailing rates or prevailing practices with respect to procurement on New York City public works contracts. Contractors are advised to review the Comptroller's Prevailing Wage Schedule before bidding on public works contracts. Contractors with questions concerning trade classifications, prevailing rates or prevailing practices with respect to public works contracts in the procurement stage must contact the contracting agency responsible for the procurement.

Any error as to compensation under the prevailing wage law or other information as to trade classification, made by the contracting agency in the contract documents or in any other communication, will not preclude a finding against the contractor of prevailing wage violation.

Any questions concerning trade classifications, prevailing rates or prevailing practices on New York City public works contracts that have already been awarded may be directed to the Bureau of Labor Law's Classification Unit by calling (212) 669-4443. All callers must have the agency name and contract registration number available when calling with questions on public works contracts. Please direct all other compliance issues to: Bureau of Labor Law, Attn: Wasyl Kinach, P.E., Office of the Comptroller, 1 Centre Street, Room 651, New York, N.Y. 10007; Fax (212) 669-4002.

The appropriate schedule of prevailing wages and benefits must be posted at all public work sites pursuant to Labor Law §220 (3-a) (a).

This schedule is applicable to work performed during the effective period, unless otherwise noted. Changes to this schedule are published on our web site [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov). Contractors must pay the wages and supplements in effect when the worker, laborer, mechanic performs the work. Preliminary schedules for future one-year periods appear in the City Record on or about June 1 each succeeding year. Final schedules appear on or about July 1 in the City Record and on our web site [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov).

The Comptroller's Office has attempted to include all overtime, shift and night differential, Holiday, Saturday, Sunday or other premium time work. However, this schedule does not set forth every prevailing practice with respect to such rates with which employers must comply. All such practices are nevertheless part of the employer's prevailing wage obligation and contained in the collective bargaining agreements of the prevailing wage unions. These collective bargaining agreements are available for inspection by appointment. Requests for appointments may be made by calling (212) 669-4443, Monday through Friday between the hours of 9 a.m. and 5 p.m.

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE**

Prevailing rates and ratios for apprentices are attached to this schedule in the Appendix. Pursuant to Labor Law §220 (3-e), only apprentices who are individually registered in a bona fide program to which the employer contractor is a participant, registered with the New York State Department of Labor, may be employed on a public work project. Workers who are not journey persons or not registered apprentices pursuant to Labor Law §220 (3-e) may not be substituted for apprentices and must be paid as journey persons.

Public Work construction, reconstruction, demolition, excavation, rehabilitation, repair, renovation, alteration, or improvement contracts awarded pursuant to a Project Labor Agreement ("PLA") in accordance with Labor Law section 222 may have different labor standards for shift, premium and overtime work. Please refer to the PLA's pre-negotiated labor agreements for wage and benefit rates applicable to work performed outside of the regular workday. More information is available at the Mayor's Office of Contract Services (MOCS) web page at <http://www.nyc.gov/html/mocs/html/vendors/pla.shtml>.

All the provisions of Labor Law section 220 remain applicable to PLA work including, but not limited to, the enforcement of prevailing wage requirements by the Comptroller; however, we will enforce shift, premium, overtime and other non-standard rates as they appear in a project's pre-negotiated labor agreement.

In order to meet their obligation to provide prevailing supplemental benefits to each covered employee, employers must either:

- 1) Provide bona fide fringe benefits which cost the employer no less than the prevailing supplemental benefits rate; or
- 2) Supplement the employee's hourly wage by an amount no less than the prevailing supplemental benefits rate; or
- 3) Provide a combination of bona fide fringe benefits and wage supplements which cost the employer no less than the prevailing supplemental benefits rate in total.

Although prevailing wage laws do not require employers to provide bona fide fringe benefits (as opposed to wage supplements) to their employees, other laws may. For example, the Employee Retirement Income Security Act, 29 U.S.C. § 1001 et seq., the Patient Protection and Affordable Care Act, 42 U.S.C. § 18001 et seq., and the New York City Paid Sick Leave Law, N.Y.C. Admin. Code § 20-911 et seq., require certain employers to provide certain benefits to their employees. Labor agreements to which employers are a party may also require certain benefits. The Comptroller's Office does not enforce these laws or agreements.

**Employers must provide prevailing supplemental benefits at the straight time rate for each hour worked unless otherwise noted in the classification.**

**Wasył Kinach, P.E.  
Director of Classifications  
Bureau of Labor Law**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

## **ASBESTOS HANDLER**

(Hazardous Material; Disturbs, removes, encapsulates, repairs, or encloses friable asbestos material)

### **Asbestos Handler**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$36.00

Supplemental Benefit Rate per Hour: \$16.45

### **Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Sunday.

Time and one half the regular hourly rate after 40 hours in any work week.

### **Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Easter

### **Paid Holidays**

None

(Local #78 and Local #12A)

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## **BLASTER**

### **Blaster**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$46.27

Supplemental Benefit Rate per Hour: \$47.99

### **Blaster (Hydraulic)**

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$47.15  
Supplemental Benefit Rate per Hour: \$47.99

**Blaster - Trac Drill Hydraulic**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$41.29  
Supplemental Benefit Rate per Hour: \$47.99

**Blaster - Wagon: Air Trac: Quarry Bar: Drillrunners**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$40.46  
Supplemental Benefit Rate per Hour: \$47.99

**Blaster - Operators of Jack Hammers**

Chippers: Spaders: Concrete Breakers: and all other pneumatic tools of like usage: Walk Behind Self Propelled Hydraulic Asphalt and Concrete Breakers: Hydro (Water) Demolition

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$39.34  
Supplemental Benefit Rate per Hour: \$47.99

**Blaster - Powder Carriers**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$35.17  
Supplemental Benefit Rate per Hour: \$47.99

**Blaster - Hydraulic Trac Drill Chuck Tender**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$33.81  
Supplemental Benefit Rate per Hour: \$47.99

**Blaster - Chuck Tender & Nipper**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$33.00  
Supplemental Benefit Rate per Hour: \$47.99

**Blaster - Magazine Keepers: (Watch Person)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$18.22  
Supplemental Benefit Rate per Hour: \$47.99

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

## Overtime Description

### Magazine Keepers:

Time and one half for work performed in excess of forty (40) hours per week and for work performed on Saturdays, Sundays and Holidays.

### All Other Employees:

Time and one-half for the first two hours of overtime Monday through Friday, the first ten hours, the first ten hours of work on Saturday and for Make-up Time. Double time for all hours over ten Monday through Saturday (except make-up hours) and for all hours worked on Sunday and Holidays.

## Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Christmas Day

## Paid Holidays

None

## Shift Rates

A single shift shall be 8 hours plus an unpaid lunch, starting at 8:00 A.M (or between 6:00 A.M. and 10:00 A.M. on weekdays). When two (2) shifts are employed, each shift shall be 8 hours plus ½ hour unpaid lunch. When three (3) shifts are employed, each shift will work seven and one-half (7 ½) hours, but will be paid for eight (8) hours, since only one-half (½) hour is allowed for mealtime. When two (2) or more shifts are employed, single time will be paid for each shift. The first 8 hours of any and all work performed Monday through Friday inclusive of any off-shift shall be at the single time rate.

(Local #29)

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## BOILERMAKER

### Boilermaker

Effective Period: 7/1/2017 - 12/31/2017

Wage Rate per Hour: \$55.23

Supplemental Benefit Rate per Hour: \$42.96

Supplemental Note: For time and one half overtime - \$63.82 For double overtime - \$84.68

Effective Period: 1/1/2018 - 6/30/2018

Wage Rate per Hour: \$57.17

Supplemental Benefit Rate per Hour: \$43.62

Supplemental Note: For time and one half overtime - \$64.81 For double overtime - \$86.00

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

## Overtime Description

For Repair and Maintenance work:

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

For New Construction work:

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

## Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Columbus Day

Election Day

Veteran's Day

Thanksgiving Day

Christmas Day

Quadruple time the regular rate for work on the following holiday(s).

Labor Day

## Paid Holidays

Good Friday

Day after Thanksgiving

Day before Christmas

Day before New Year's Day

## Shift Rates

When shifts are required, the first shift shall work eight (8) hours at the regular straight-time hourly rate. The second shift shall work seven and one-half (7 ½) hours and receive eight hours at the regular straight time hourly rate plus twenty-five cents (\$0.25) per hour. The third shift shall work seven (7) hours and receive eight hours at the regular straight time hourly rate plus fifty cents (\$0.50) per hour. A thirty (30) minute lunch period shall not be considered as time worked. Work in excess of the above shall be paid overtime at the appropriate new construction work or repair work overtime wage and supplemental benefit hourly rate.

(Local #5)

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## BRICKLAYER

### Bricklayer

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$55.10

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: \$31.20

**Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

**Shift Rates**

Overtime rates to be paid outside the regular scheduled work day.

(Bricklayer District Council)

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**CARPENTER - BUILDING COMMERCIAL**

**Building Commercial**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$52.50

Supplemental Benefit Rate per Hour: \$46.28

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

Washington's Birthday

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Presidential Election Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

**Shift Rates**

The second shift will receive one hour at the double time rate of pay for the last hour of the shift; eight hours pay for seven hours of work, nine hours pay for eight hours of work. There must be a first shift in order to work a second shift.

(Carpenters District Council)

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**CARPENTER - HEAVY CONSTRUCTION WORK**  
(Construction of Engineering Structures and Building Foundations)

**Heavy Construction Work**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$52.63

Supplemental Benefit Rate per Hour: \$49.66

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Presidential Election Day  
Thanksgiving Day  
Christmas Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Paid Holidays**

None

**Shift Rates**

Off shift work commencing between 5:00 P.M. and 11:00 P.M. shall work eight and one half hours allowing for one half hour for lunch. The wage rate shall be 113% of the straight time hourly wage rate.

(Carpenters District Council)

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**CARPENTER - HIGH RISE CONCRETE FORMS**  
(Excludes Engineering Structures and Building Foundations)

**Carpenter High Rise A**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$50.78**

Supplemental Benefit Rate per Hour: **\$41.49**

**Carpenter High Rise B**

Carpenter High Rise B worker is excluded from high risk operations such as erection decking, perimeter debris netting, leading edge work, self-climbing form systems, and the installation of cocoon systems unless directly supervised by a Carpenter High Rise A worker.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$39.07**

Supplemental Benefit Rate per Hour: **\$16.65**

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

**Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day



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Presidential Election Day  
Thanksgiving Day  
Christmas Day

**Paid Holidays**

None

**Shift Rates**

The second shift wage rate shall be 113% of the straight time hourly wage rate. There must be a first shift in order to work a second shift.

(Carpenters District Council)

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**CARPENTER - SIDEWALK SHED, SCAFFOLD AND HOIST**

**Carpenter - Hod Hoist**

(Assisted by Mason Tender)

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$50.50

Supplemental Benefit Rate per Hour: \$39.46

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

None

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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### Shift Rates

The second shift will receive one hour at the double time rate of pay for the last hour of the shift; eight hours pay for seven hours of work, nine hours pay for eight hours of work. There must be a first shift in order to work a second shift.

(Carpenters District Council)

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## CEMENT & CONCRETE WORKER

### Cement & Concrete Worker

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$42.48

Supplemental Benefit Rate per Hour: \$26.00

Supplemental Note: \$29.50 on Saturdays; \$33.00 on Sundays & Holidays

### Cement & Concrete Worker - (Hired after 2/6/2016)

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$32.00

Supplemental Benefit Rate per Hour: \$18.00

Supplemental Note: \$19.50 on Saturdays; \$21.00 on Sundays & Holidays

### Overtime Description

Time and one half the regular rate after 7 hour day (time and one half the regular rate after an 8 hour day when working with Dockbuilders on pile cap forms and for work below street level to the top of the foundation wall, not to exceed 2 feet or 3 feet above the sidewalk-brick shelf, when working on the foundation and structure.)

### Overtime

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

### Paid Holidays

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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1/2 day before Christmas Day  
1/2 day before New Year's Day

## Shift Rates

On shift work extending over a twenty-four hour period, all shifts are paid at straight time.

(Cement Concrete Workers District Council)

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## CEMENT MASON

### Cement Mason

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$42.62**

Supplemental Benefit Rate per Hour: **\$38.96**

Supplemental Note: For time and one half overtime - \$48.21; For double overtime - \$57.46

### Overtime Description

Time and one-half the regular rate after an 8 hour day, double time the regular rate after 10 hours. Time and one-half the regular rate on Saturday, double time the regular rate after 10 hours. Double time the regular rate on Sunday.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

### Paid Holidays

Any worker who reports to work on Christmas Eve or New Year's Eve pursuant to his employer's instruction shall be entitled to three (3) hours afternoon pay without working.

### Shift Rates

For an off shift day, (work at times other than the regular 7:00 A.M. to 3:30 P.M. work day) a cement mason shall be paid at the regular hourly rate plus a 25% per hour differential. Four Days a week at Ten (10)hour day.

(Local #780) (BCA)

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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## **CORE DRILLER**

### **Core Driller**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$38.82**

Supplemental Benefit Rate per Hour: **\$24.66**

### **Core Driller Helper**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$30.96**

Supplemental Benefit Rate per Hour: **\$24.66**

### **Core Driller Helper(Third year in the industry)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$27.86**

Supplemental Benefit Rate per Hour: **\$24.66**

### **Core Driller Helper (Second year in the industry)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$24.77**

Supplemental Benefit Rate per Hour: **\$24.66**

### **Core Driller Helper (First year in the industry)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$21.67**

Supplemental Benefit Rate per Hour: **\$24.66**

## **Overtime Description**

Time and one half the regular rate for work on a holiday plus Holiday pay when worked.

## **Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Time and one half the regular rate for work on the following holiday(s).

## **Paid Holidays**

New Year's Day

Memorial Day

Independence Day

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Labor Day  
Thanksgiving Day  
Christmas Day

### **Shift Rates**

The shift day shall be the continuous eight and one-half (8½) hours from 6:00 A.M. to 2:30 P.M. and from 2:30 P.M. to 11:00 P.M., including one-half (½) hour of employees regular rate of pay for lunch. When two (2) or more shifts are employed, single time shall be paid for each shift, but those employees employed on a shift other than from 8:00 A.M. to 5:00 P.M. shall, in addition, receive seventy-five cents (\$0.75) per hour differential for each hour worked. When three (3) shifts are needed, each shift shall work seven and one-half (7 ½) hours paid for eight (8) hours of labor and be permitted one-half (½) hour for mealtime.

(Carpenters District Council)

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## **DERRICKPERSON AND RIGGER**

### **Derrick Person & Rigger**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$46.86**

Supplemental Benefit Rate per Hour: **\$51.40**

Supplemental Note: The above supplemental rate applies for work performed in Manhattan, Bronx, Brooklyn and Queens. \$52.82 - For work performed in Staten Island.

### **Derrick Person & Rigger - Site Work**

Assists the Stone Mason-Setter in the setting of stone

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$40.29**

Supplemental Benefit Rate per Hour: **\$39.23**

### **Overtime Description**

The first two hours of overtime on weekdays and the first seven hours of work on Saturdays are paid at time and one half for wages and supplemental benefits. All additional overtimes is paid at double time for wages and supplemental benefits. Deduct \$1.42 from the Staten Island hourly benefits rate before computing overtime.

### **Overtime**

Double time the regular rate for Sunday.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
Washington's Birthday  
Good Friday  
Memorial Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day

**Paid Holidays**

1/2 day on Christmas Eve if work is performed in the A.M.

(Local #197)

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**DIVER**

**Diver (Marine)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$66.66

Supplemental Benefit Rate per Hour: \$49.66

**Diver Tender (Marine)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$47.34

Supplemental Benefit Rate per Hour: \$49.66

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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## Shift Rates

When three shifts are utilized each shift shall work seven and one half-hours (7 1/2 hours) and paid for 8 hours, allowing for one half hour for lunch.

(Carpenters District Council)

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## DOCKBUILDER - PILE DRIVER

### Dockbuilder - Pile Driver

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$52.63**

Supplemental Benefit Rate per Hour: **\$49.66**

### Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

### Paid Holidays

None

### Shift Rates

Off shift work commencing between 5:00 P.M. and 11:00 P.M. shall work eight and one half hours allowing for one half hour for lunch. The wage rate shall be 113% of the straight time hourly wage rate.

(Carpenters District Council)

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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## **DRIVER: TRUCK (TEAMSTER)**

### **Driver - Dump Truck**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.18**

Supplemental Benefit Rate per Hour: **\$44.79**

Supplemental Note: Over 40 hours worked: at time and one half rate - \$19.94; at double time rate - \$26.58

### **Driver - Tractor Trailer**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$42.22**

Supplemental Benefit Rate per Hour: **\$45.40**

Supplemental Note: Over 40 hours worked: at time and one half rate - \$17.55; at double time rate - \$23.40

### **Driver - Euclid & Turnapull Operator**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$42.78**

Supplemental Benefit Rate per Hour: **\$45.40**

Supplemental Note: Over 40 hours worked: at time and one half rate - \$17.55 at double time rate - \$23.40

## **Overtime Description**

For Paid Holidays: Holiday pay for all holidays shall be prorated based two hours per day for each day worked in the holiday week, not to exceed 8 hours of holiday pay. For Thanksgiving week, the prorated share shall be 5 1/3 hours of holiday pay for each day worked in Thanksgiving week.

## **Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

## **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

## **Paid Holidays**

New Year's Day

President's Day

Memorial Day



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Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

### Shift Rates

Off single shift work commencing between 6:00 P.M. and 5:00 A.M. shall work eight and one half hours allowing for one half hour for lunch and receive 9 hours pay for 8 hours of work.

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### Driver Redi-Mix (Sand & Gravel)

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$38.40

Supplemental Benefit Rate per Hour: \$42.12

Supplemental Note: Over 40 hours worked: time and one half rate \$15.99, double time rate \$21.33

### Overtime Description

For Paid Holidays: Employees working two (2) days in the calendar week in which the holiday falls are to paid for these holidays, provided they shape each remaining workday during that calendar week.

### Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

President's Day  
Columbus Day  
Veteran's Day

Triple time the regular rate for work on the following holiday(s).

New Year's Day  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day

### Paid Holidays

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Election Day  
Thanksgiving Day  
Christmas Day

(Local #282)

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## **ELECTRICIAN**

(Including all low voltage cabling carrying data; video; and voice in combination with data and or video.)

### **Electrician "A" (Regular Day / Day Shift)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$56.00

Supplemental Benefit Rate per Hour: \$54.35

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$56.00

Supplemental Benefit Rate per Hour: \$55.72

### **Electrician "A" (Regular Day Overtime after 7 hrs / Day Shift Overtime after 8 hrs)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$84.00

Supplemental Benefit Rate per Hour: \$57.86

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$84.00

Supplemental Benefit Rate per Hour: \$59.23

### **Electrician "A" (Swing Shift)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$65.71

Supplemental Benefit Rate per Hour: \$61.94

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$65.71

Supplemental Benefit Rate per Hour: \$63.52

### **Electrician "A" (Swing Shift Overtime After 7.5 hours)**

Effective Period: 7/1/2017 - 5/9/2018

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Wage Rate per Hour: \$98.57**  
**Supplemental Benefit Rate per Hour: \$66.05**

**Effective Period: 5/10/2018 - 6/30/2018**  
**Wage Rate per Hour: \$98.57**  
**Supplemental Benefit Rate per Hour: \$67.64**

**Electrician "A" (Graveyard Shift)**

**Effective Period: 7/1/2017 - 5/9/2018**  
**Wage Rate per Hour: \$73.60**  
**Supplemental Benefit Rate per Hour: \$68.33**

**Effective Period: 5/10/2018 - 6/30/2018**  
**Wage Rate per Hour: \$73.60**  
**Supplemental Benefit Rate per Hour: \$70.09**

**Electrician "A" (Graveyard Shift Overtime After 7 hours)**

**Effective Period: 7/1/2017 - 5/9/2018**  
**Wage Rate per Hour: \$110.40**  
**Supplemental Benefit Rate per Hour: \$72.95**

**Effective Period: 5/10/2018 - 6/30/2018**  
**Wage Rate per Hour: \$110.40**  
**Supplemental Benefit Rate per Hour: \$74.70**

**Overtime**

Time and one half the regular rate after a 7 hour day.  
Time and one half the regular rate for Saturday.  
Time and one half the regular rate for Sunday.

**Overtime Holidays**

Time and one half the regular rate for work on a holiday.  
New Year's Day  
Martin Luther King Jr. Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

**Shift Rates**

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When so elected by the Employer, one or more shifts of at least five days duration may be scheduled as follows:  
Day Shift: 8:00 am to 4:30 pm, Swing Shift 4:30 pm to 12:30 am, Graveyard Shift: 12:30 am to 8:00 am.

For multiple shifts of temporary light and/or power, the temporary light and/or power employee shall be paid for 8 hours at the straight time rate. For three or less workers performing 8 hours temporary light and/or power the supplemental benefit rate is \$25.67 and effective 5/10/18 \$25.92.

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**Electrician "M" (First 8 hours)**

"M" rated work shall be defined as jobbing: electrical work of limited duration and scope, also consisting of repairs and/or replacement of electrical and tele-data equipment. Includes all work necessary to retrofit, service, maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: **\$28.50**

Supplemental Benefit Rate per Hour: **\$22.10**

First and Second Year "M" Wage Rate Per Hour: **\$24.00**

First and Second Year "M" Supplemental Rate: **\$19.80**

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: **\$29.00**

Supplemental Benefit Rate per Hour: **\$22.65**

First and Second Year "M" Wage Rate Per Hour: **\$24.50**

First and Second Year "M" Supplemental Rate: **\$20.30**

**Electrician "M" (Overtime After First 8 hours)**

"M" rated work shall be defined as jobbing: electrical work of limited duration and scope, also consisting of repairs and/or replacement of electrical and tele-data equipment. Includes all work necessary to retrofit, service, maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: **\$42.75**

Supplemental Benefit Rate per Hour: **\$23.89**

First and Second Year "M" Wage Rate Per Hour: **\$36.00**

First and Second Year "M" Supplemental Rate: **\$21.30**

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: **\$43.50**

Supplemental Benefit Rate per Hour: **\$24.47**

First and Second Year "M" Wage Rate Per Hour: **\$36.75**

First and Second Year "M" Supplemental Rate: **\$21.84**

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

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**Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day  
Martin Luther King Jr. Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

(Local #3)

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**ELECTRICIAN - ALARM TECHNICIAN**

(Scope of Work - Inspect, test, repair, and replace defective, malfunctioning, or broken devices, components and controls of Fire, Burglar and Security Systems)

**Alarm Technician**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$32.40

Supplemental Benefit Rate per Hour: \$16.10

Supplemental Note: \$14.60 only after 8 hours worked in a day

**Overtime Description**

Time and one half the regular rate for work on the following holidays: Columbus Day, Veterans Day, Day after Thanksgiving.

Double time the regular rate for work on the following holidays: New Year's day, Martin Luther King Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day.

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Paid Holidays**

New Year's Day

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Martin Luther King Jr. Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

### Shift Rates

Night Differential is based upon a ten percent (10%) differential between the hours of 4:00 P.M. and 12:30 A.M. and a fifteen percent (15%) differential for the hours 12:00 A.M. to 8:00 A.M.

### Vacation

At least 1 year of employment.....ten (10) days  
5 years or more of employment.....fifteen (15) days  
10 years of employment.....twenty (20) days  
Plus one Personal Day per year

#### Sick Days:

One day per Year. Up to 4 vacation days may be used as sick days.

(Local #3)

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## ELECTRICIAN-STREET LIGHTING WORKER

### Electrician - Electro Pole Electrician

Effective Period: 7/1/2017 - 5/15/2018

Wage Rate per Hour: \$56.00

Supplemental Benefit Rate per Hour: \$56.26

Effective Period: 5/16/2018 - 6/30/2018

Wage Rate per Hour: \$56.00

Supplemental Benefit Rate per Hour: \$57.63

### Electrician - Electro Pole Foundation Installer

Effective Period: 7/1/2017 - 5/15/2018

Wage Rate per Hour: \$41.54

Supplemental Benefit Rate per Hour: \$41.02

Effective Period: 5/16/2018 - 6/30/2018

Wage Rate per Hour: \$42.16

Supplemental Benefit Rate per Hour: \$42.19

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§220 PREVAILING WAGE SCHEDULE

**Electrician - Electro Pole Maintainer**

Effective Period: 7/1/2017 - 5/16/2018

Wage Rate per Hour: **\$35.58**

Supplemental Benefit Rate per Hour: **\$36.89**

Effective Period: 5/17/2018 - 6/30/2018

Wage Rate per Hour: **\$36.11**

Supplemental Benefit Rate per Hour: **\$37.93**

**Overtime Description**

Electrician - Electro Pole Electrician: Time and one half the regular rate after a 7 hour day and after 5 consecutive days worked per week.

Electrician - Electro Pole Foundation Installer: Time and one half the regular rate after 8 hours within a 24 hour period and Saturday and Sunday.

Electrician - Electro Pole Maintainer: Time and one half the regular rate after a 7 hour day and after 5 consecutive days worked per week. Saturdays and Sundays may be used as a make-up day at straight time when a day is lost during the week to inclement weather.

**Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

None

(Local #3)

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**ELEVATOR CONSTRUCTOR**

**Elevator Constructor**

Effective Period: 7/1/2017 - 3/16/2018

Wage Rate per Hour: **\$62.64**

Supplemental Benefit Rate per Hour: **\$34.25**

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE**

**Effective Period: 3/17/2018 - 6/30/2018**

**Wage Rate per Hour: \$64.48**

**Supplemental Benefit Rate per Hour: \$35.85**

**Overtime Description**

**For New Construction: work performed after 7 or 8 hour day, Saturday, Sunday or between 4:30pm and 7:00am shall be paid at double time rate.**

**Existing buildings: work performed after an 8 hour day, Saturday, Sunday or between 5:30pm and 7:00 am shall be paid time and one half.**

**Overtime**

**Double time the regular rate for work on the following holiday(s).**

**Paid Holidays**

**New Year's Day**

**President's Day**

**Good Friday**

**Memorial Day**

**Independence Day**

**Labor Day**

**Columbus Day**

**Veteran's Day**

**Thanksgiving Day**

**Day after Thanksgiving**

**Christmas Day**

**Vacation**

**Employer contributes 8% of regular basic hourly rate as vacation pay for employees with more than 15 years of service, and 6% for employees with 5 to 15 years of service, and 4% for employees with less than 5 years of service.**

**(Local #1)**

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**ELEVATOR REPAIR & MAINTENANCE**

**Elevator Service/Modernization Mechanic**

**Effective Period: 7/1/2017 - 3/16/2018**

**Wage Rate per Hour: \$49.14**

**Supplemental Benefit Rate per Hour: \$34.11**

**Effective Period: 3/17/2018 - 6/30/2018**

**Wage Rate per Hour: \$50.49**

**Supplemental Benefit Rate per Hour: \$35.71**



**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE**

**Overtime Description**

For Scheduled Service Work: Double time - work scheduled in advance by two or more workers performed on Sundays, Holidays, and between midnight and 7:00am.

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Time and one half the regular rate for work on a holiday plus the day's pay.

**Paid Holidays**

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Shift Rates**

Afternoon shift - regularly hourly rate plus a (15%) fifteen percent differential. Graveyard shift - time and one half the regular rate.

**Vacation**

Employer contributes 8% of regular basic hourly rate as vacation pay for employees with more than 15 years of service, and 6% for employees with 5 to 15 years of service, and 4% for employees with less than 5 years of service.

(Local #1)

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**ENGINEER**

**Engineer - Heavy Construction Operating Engineer I**

Cherry pickers 20 tons and over and Loaders (rubber tired and/or tractor type with a manufacturer's minimum rated capacity of six cubic yards and over).

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$67.32**

Supplemental Benefit Rate per Hour: **\$36.87**

Supplemental Note: **\$66.34** on overtime

Shift Wage Rate: **\$107.71**

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE**

**Engineer - Heavy Construction Operating Engineer II**

Backhoes, Basin Machines, Groover, Mechanical Sweepers, Bobcat, Boom Truck, Barrier Transport (Barrier Mover) & machines of similar nature. Operation of Churn Drills and machines of a similar nature, Stetco Silent Hoist and machines of similar nature, Vac-Alls, Meyers Machines, John Beam and machines of a similar nature, Ross Carriers and Travel Lifts and machines of a similar nature, Bulldozers, Scrapers and Turn-a-Pulls; Tugger Hoists (Used exclusively for handling excavated material); Tractors with attachments, Hyster and Roustabout Cranes, Cherrypickers. Austin Western, Grove and machines of a similar nature, Scoopmobiles, Monorails, Conveyors, Trenchers: Loaders-Rubber Tired and Tractor: Barber Greene and Eimco Loaders and Eimco Backhoes; Mighty Midget and similar breakers and Tampers, Curb and Gutter Pavers and Motor Patrol, Motor Graders and all machines of a similar nature. Locomotives 10 Tons or under. Mini-Max, Break-Tech and machines of a similar nature; Milling machines, robotic and demolition machines and machines of a similar nature, shot blaster, skid steer machines and machines of a similar nature including bobcat, pile rig rubber-tired excavator (37,000 lbs. and under), 2 man auger.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$65.31**

Supplemental Benefit Rate per Hour: **\$36.87**

Supplemental Note: \$66.34 on overtime

Shift Wage Rate: **\$104.50**

**Engineer - Heavy Construction Operating Engineer III**

Minor Equipment such as Tractors, Post Hole Diggers, Ditch Witch (Walk Behind), Road Finishing Machines, Rollers five tons and under, Tugger Hoists, Dual Purpose Trucks, Fork Lifts, and Dempsey Dumpers, Fireperson.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$61.93**

Supplemental Benefit Rate per Hour: **\$36.87**

Supplemental Note: \$66.34 on overtime

Shift Wage Rate: **\$99.09**

**Engineer - Heavy Construction Maintenance Engineer I**

Installing, Repairing, Maintaining, Dismantling and Manning of all equipment including Steel Cutting, Bending and Heat Sealing Machines, Mechanical Heaters, Grout Pumps, Bentonite Pumps & Plants, Screening Machines, Fusion Coupling Machines, Tunnel Boring Machines Moles and Machines of a similar nature, Power Packs, Mechanical Hydraulic Jacks; all drill rigs including but not limited to Churn, Rotary Caisson, Raised Bore & Drills of a similar nature; Personnel, Inspection & Safety Boats or any boats used to perform functions of same, Mine Hoists, Whirlies, all Climbing Cranes, all Tower Cranes, including but not limited to Truck Mounted and Crawler Type and machines of similar nature; Maintaining Hydraulic Drills and machines of a similar nature; Well Point System-Installation and dismantling; Burning, Welding, all Pumps regardless of size and/or motor power, except River Cofferdam Pumps and Wells Point Pumps; Motorized Buggies (three or more); equipment used in the cleaning and televising of sewers, but not limited to jet-rodder/vacuum truck, vacall/vactor, closed circuit television inspection equipment; high powered water pumps, jet pumps; screed machines and concrete finishing machines of a similar nature; vermeers.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$65.00**

Supplemental Benefit Rate per Hour: **\$36.87**

Supplemental Note: \$66.34 on overtime

Shift Wage Rate: **\$104.00**

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE**

**Engineer - Heavy Construction Maintenance Engineer II**

On Base Mounted Tower Cranes

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$85.53**

Supplemental Benefit Rate per Hour: **\$36.87**

Supplemental Note: \$66.34 on overtime

Shift Wage Rate: **\$136.85**

**Engineer - Heavy Construction Maintenance Engineer III**

On Generators, Light Towers

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$42.73**

Supplemental Benefit Rate per Hour: **\$36.87**

Supplemental Note: \$66.34 on overtime

Shift Wage Rate: **\$68.37**

**Engineer - Heavy Construction Maintenance Engineer IV**

On Pumps and Mixers including mud sucking

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$43.86**

Supplemental Benefit Rate per Hour: **\$36.87**

Supplemental Note: \$66.34 on overtime

Shift Wage Rate: **\$70.18**

**Engineer - Heavy Construction Oilers I**

Gradalls, Cold Planer Grader, Concrete Pumps, Driving Truck Cranes, Driving and Operating Fuel and Grease Trucks.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$58.57**

Supplemental Benefit Rate per Hour: **\$36.87**

Supplemental Note: \$66.34 on overtime

Shift Wage Rate: **\$93.71**

**Engineer - Heavy Construction Oilers II**

All gasoline, electric, diesel or air operated Shovels, Draglines, Backhoes, Keystones, Pavers, Gunitite Machines, Battery of Compressors, Crawler Cranes, two-person Trenching Machines.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$40.36**

Supplemental Benefit Rate per Hour: **\$36.87**

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Supplemental Note: \$66.34 on overtime  
Shift Wage Rate: \$64.58

**Engineer - Steel Erection Maintenance Engineers**

Derrick, Travelers, Tower, Crawler Tower and Climbing Cranes

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$61.13  
Supplemental Benefit Rate per Hour: \$35.41  
Supplemental Note: \$63.67 on overtime  
Shift Wage Rate: \$97.81

**Engineer - Steel Erection Oiler I**

On a Truck Crane

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$57.21  
Supplemental Benefit Rate per Hour: \$35.41  
Supplemental Note: \$63.67 on overtime  
Shift Wage Rate: \$91.54

**Engineer - Steel Erection Oiler II**

On a Crawler Crane

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$43.54  
Supplemental Benefit Rate per Hour: \$35.41  
Supplemental Note: \$63.67 on overtime  
Shift Wage Rate: \$69.66

**Overtime Description**

On jobs of more than one shift, if the next shift employee fails to report for work through any cause over which the employer has no control, the employee on duty who works the next shift continues to work at the single time rate.

**Overtime**

Double time the regular rate after an 8 hour day.  
Double time the regular time rate for Saturday.  
Double time the regular rate for Sunday.  
Double time the regular rate for work on the following holiday(s).

**Paid Holidays**

New Year's Day  
Lincoln's Birthday  
President's Day  
Memorial Day  
Independence Day

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE**

Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

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### **Engineer - Building Work Maintenance Engineers I**

Installing, repairing, maintaining, dismantling (of all equipment including: Steel Cutting and Bending Machines, Mechanical Heaters, Mine Hoists, Climbing Cranes, Tower Cranes, Linden Peine, Lorain, Liebherr, Mannes, or machines of a similar nature, Well Point Systems, Deep Well Pumps, Concrete Mixers with loading Device, Concrete Plants, Motor Generators when used for temporary power and lights), skid steer machines of a similar nature including bobcat.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$58.30**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime

### **Engineer - Building Work Maintenance Engineers II**

On Pumps, Generators, Mixers and Heaters

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$45.28**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime

### **Engineer - Building Work Oilers I**

All gasoline, electric, diesel or air operated Gradealls: Concrete Pumps, Overhead Cranes in Power Houses: Their duties shall be to assist the Engineer in oiling, greasing and repairing of all machines; Driving Truck Cranes: Driving and Operating Fuel and Grease Trucks, Cherrypickers (hydraulic cranes) over 70,000 GVW, and machines of a similar nature.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$55.42**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime

### **Engineer - Building Work Oilers II**

Oilers on Crawler Cranes, Backhoes, Trenching Machines, Gunite Machines, Compressors (three or more in Battery).

Effective Period: 7/1/2017 - 6/30/2018

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE**

**Wage Rate per Hour: \$41.16**

**Supplemental Benefit Rate per Hour: \$35.41**

**Supplemental Note: \$63.67 on overtime**

**Overtime Description**

On jobs of more than one shift, if an Employee fails to report for work through any cause over which the Employer has no control, the Employee on duty will continue to work at the rate of single time.

**Overtime**

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

Double time the regular rate for work on the following holiday(s).

**Paid Holidays**

New Year's Day

Lincoln's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

**Shift Rates**

Off Shift: double time the regular hourly rate.

(Local #15)

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**ENGINEER - CITY SURVEYOR AND CONSULTANT**

**Party Chief**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$38.18**

**Supplemental Benefit Rate per Hour: \$20.15**

**Supplemental Note: Overtime Benefit Rate - \$27.65 per hour (time & one half) \$35.15 per hour (double time).**

**Instrument Person**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$31.47**

**Supplemental Benefit Rate per Hour: \$20.15**

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\$220 PREVAILING WAGE SCHEDULE**

**Supplemental Note: Overtime Benefit Rate - \$27.65 per hour (time & one half) \$35.15 per hour (double time).**

**Rodperson**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$27.24**

**Supplemental Benefit Rate per Hour: \$20.15**

**Supplemental Note: Overtime Benefit Rate - \$27.65 per hour (time & one half) \$35.15 per hour (double time).**

**Overtime Description**

**Time and one half the regular rate after an 8 hour day, Time and one half the regular rate for Saturday for the first eight hours worked, Double time the regular time rate for Saturday for work performed in excess of eight hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.**

**Paid Holidays**

**New Year's Day**

**Lincoln's Birthday**

**President's Day**

**Memorial Day**

**Independence Day**

**Labor Day**

**Columbus Day**

**Veteran's Day**

**Thanksgiving Day**

**Day after Thanksgiving**

**Christmas Day**

**Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday**

**(Operating Engineer Local #15-D)**

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**ENGINEER - FIELD (BUILDING CONSTRUCTION)  
(Construction of Building Projects, Concrete Superstructures, etc.)**

**Field Engineer - BC Party Chief**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$60.10**

**Supplemental Benefit Rate per Hour: \$32.15**

**Supplemental Note: Overtime Benefit Rate - \$44.90 per hour (time & one half) \$57.65 per hour (double time).**

**Field Engineer - BC Instrument Person**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$46.69**

**Supplemental Benefit Rate per Hour: \$32.15**

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§220 PREVAILING WAGE SCHEDULE**

**Supplemental Note: Overtime Benefit Rate - \$44.90 per hour (time & one half) \$57.65 per hour (double time).**

**Field Engineer - BC Rodperson**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$30.20**

**Supplemental Benefit Rate per Hour: \$32.15**

**Supplemental Note: Overtime Benefit Rate - \$44.90 per hour (time & one half) \$57.65 per hour (double time).**

**Overtime Description**

**Time and one half the regular rate after a 7 hour work and time and one half the regular rate for Saturday for the first seven hours worked, Double time the regular time rate for Saturday for work performed in excess of seven hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.**

**Paid Holidays**

**New Year's Day**

**President's Day**

**Good Friday**

**Memorial Day**

**Independence Day**

**Labor Day**

**Columbus Day**

**Veteran's Day**

**Thanksgiving Day**

**Christmas Day**

**Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday**

**(Operating Engineer Local #15-D)**

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**ENGINEER - FIELD (HEAVY CONSTRUCTION)**

**(Construction of Roads, Tunnels, Bridges, Sewers, Building Foundations, Engineering Structures etc.)**

**Field Engineer - HC Party Chief**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$70.25**

**Supplemental Benefit Rate per Hour: \$34.18**

**Supplemental Note: Overtime benefit rate - \$47.82 per hour (time & one half), \$61.46 per hour (double time).**

**Field Engineer - HC Instrument Person**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$51.64**



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**Supplemental Benefit Rate per Hour: \$34.18**

**Supplemental Note: Overtime benefit rate - \$47.82 per hour (time & one half), \$61.46 per hour (double time).**

**Field Engineer - HC Rodperson**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$43.37**

**Supplemental Benefit Rate per Hour: \$34.18**

**Supplemental Note: Overtime benefit rate - \$47.82 per hour (time & one half), \$61.46 per hour (double time).**

**Overtime Description**

Time and one half the regular rate after an 8 hour day, Time and one half the regular rate for Saturday for the first eight hours worked, Double time the regular time rate for Saturday for work performed in excess of eight hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

**Paid Holidays**

New Year's Day

Lincoln's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

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**ENGINEER - FIELD (STEEL ERECTION)**

**Field Engineer - Steel Erection Party Chief**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$63.64**

**Supplemental Benefit Rate per Hour: \$33.04**

**Supplemental Note: Overtime benefit rate - \$46.11 per hour (time & one half), \$59.18 per hour (double time).**

**Field Engineer - Steel Erection Instrument Person**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$49.59**

**Supplemental Benefit Rate per Hour: \$33.04**

**Supplemental Note: Overtime benefit rate - \$46.11 per hour (time & one half), \$59.18 per hour (double time).**

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§220 PREVAILING WAGE SCHEDULE

**Field Engineer - Steel Erection Rodperson**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$33.20

Supplemental Benefit Rate per Hour: \$33.04

Supplemental Note: Overtime benefit rate - \$46.11 per hour (time & one half), \$59.18 per hour (double time).

**Overtime Description**

Time and one half the regular rate for Saturday for the first eight hours worked.

Double time the regular rate for Saturday for work performed in excess of eight hours.

**Overtime**

Time and one half the regular rate after an 8 hour day.

Double time the regular rate for Sunday.

Double time the regular rate for work on the following holiday(s).

**Paid Holidays**

New Year's Day

Lincoln's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

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**ENGINEER - OPERATING**

**Operating Engineer - Road & Heavy Construction I**

Back Filling Machines, Cranes, Mucking Machines and Dual Drum Paver.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$76.60

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$122.56

**Operating Engineer - Road & Heavy Construction II**

Backhoes, Power Shovels, Hydraulic Clam Shells, Steel Erection, Moles and machines of a similar nature.

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**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$79.28**

**Supplemental Benefit Rate per Hour: \$31.10**

**Supplemental Note: \$56.50 overtime hours**

**Shift Wage Rate: \$126.85**

**Operating Engineer - Road & Heavy Construction III**

**Mine Hoists, Cranes, etc. (Used as Mine Hoists)**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$81.80**

**Supplemental Benefit Rate per Hour: \$31.10**

**Supplemental Note: \$56.50 overtime hours**

**Shift Wage Rate: \$130.88**

**Operating Engineer - Road & Heavy Construction IV**

**Gradealls, Keystones, Cranes on land or water (with digging buckets), Bridge Cranes, Vermeer Cutter and machines of a similar nature, Trenching Machines.**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$79.85**

**Supplemental Benefit Rate per Hour: \$31.10**

**Supplemental Note: \$56.50 overtime hours**

**Shift Wage Rate: \$127.76**

**Operating Engineer - Road & Heavy Construction V**

**Pile Drivers & Rigs (employing Dock Builder foreperson): Derrick Boats, Tunnel Shovels.**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$78.29**

**Supplemental Benefit Rate per Hour: \$31.10**

**Supplemental Note: \$56.50 overtime hours**

**Shift Wage Rate: \$125.26**

**Operating Engineer - Road & Heavy Construction VI**

**Mixers (Concrete with loading attachment), Concrete Pavers, Cableways, Land Derricks, Power Houses (Low Air Pressure Units).**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$74.42**

**Supplemental Benefit Rate per Hour: \$31.10**

**Supplemental Note: \$56.50 overtime hours**

**Shift Wage Rate: \$119.07**

**Operating Engineer - Road & Heavy Construction VII**

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**Barrier Movers , Barrier Transport and Machines of a Similar Nature.**

**Effective Period: 7/1/2017 - 6/30/2018**  
**Wage Rate per Hour: \$60.22**  
**Supplemental Benefit Rate per Hour: \$31.10**  
**Supplemental Note: \$56.50 overtime hours**  
**Shift Wage Rate: \$96.35**

**Operating Engineer - Road & Heavy Construction VIII**

**Utility Compressors**

**Effective Period: 7/1/2017 - 6/30/2018**  
**Wage Rate per Hour: \$46.88**  
**Supplemental Benefit Rate per Hour: \$31.10**  
**Supplemental Note: \$56.50 overtime hours**  
**Shift Wage Rate: \$58.92**

**Operating Engineer - Road & Heavy Construction IX**

**Horizontal Boring Rig**

**Effective Period: 7/1/2017 - 6/30/2018**  
**Wage Rate per Hour: \$70.79**  
**Supplemental Benefit Rate per Hour: \$31.10**  
**Supplemental Note: \$56.50 overtime hours**  
**Shift Wage Rate: \$113.26**

**Operating Engineer - Road & Heavy Construction X**

**Elevators (manually operated as personnel hoist).**

**Effective Period: 7/1/2017 - 6/30/2018**  
**Wage Rate per Hour: \$65.12**  
**Supplemental Benefit Rate per Hour: \$31.10**  
**Supplemental Note: \$56.50 overtime hours**  
**Shift Wage Rate: \$104.19**

**Operating Engineer - Road & Heavy Construction XI**

**Compressors (Portable 3 or more in battery), Driving of Truck Mounted Compressors, Well-point Pumps, Tugger Machines Well Point Pumps, Churn Drill.**

**Effective Period: 7/1/2017 - 6/30/2018**  
**Wage Rate per Hour: \$50.73**  
**Supplemental Benefit Rate per Hour: \$31.10**  
**Supplemental Note: \$56.50 overtime hours**  
**Shift Wage Rate: \$81.17**

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**Operating Engineer - Road & Heavy Construction XII**

All Drills and Machines of a similar nature.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$75.19**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$120.30**

**Operating Engineer - Road & Heavy Construction XIII**

Concrete Pumps, Concrete Plant, Stone Crushers, Double Drum Hoist, Power Houses (other than above).

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$72.84**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$116.54**

**Operating Engineer - Road & Heavy Construction XIV**

Concrete Mixer

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$69.67**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$111.47**

**Operating Engineer - Road & Heavy Construction XV**

Compressors (Portable Single or two in Battery, not over 100 feet apart), Pumps (River Cofferdam) and Welding Machines, Push Button Machines, All Engines Irrespective of Power (Power-Pac) used to drive auxiliary equipment, Air, Hydraulic, etc.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$47.18**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$75.49**

**Operating Engineer - Road & Heavy Construction XVI**

Concrete Breaking Machines, Hoists (Single Drum), Load Masters, Locomotives (over ten tons) and Dinkies over ten tons, Hydraulic Crane-Second Engineer.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$66.56**

Supplemental Benefit Rate per Hour: **\$31.10**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$106.50

**Operating Engineer - Road & Heavy Construction XVII**

On-Site concrete plant engineer, On-site Asphalt Plant Engineer, and Vibratory console.

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$67.07  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$107.31

**Operating Engineer - Road & Heavy Construction XVIII**

Tower Crane

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$95.98  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$153.57

**Operating Engineer - Paving I**

Asphalt Spreaders, Autogrades (C.M.I.), Roto/Mil

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$74.42  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$119.07

**Operating Engineer - Paving II**

Asphalt Roller

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$72.50  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$116.00

**Operating Engineer - Paving III**

Asphalt Plants

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$61.43

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Supplemental Benefit Rate per Hour: \$31.10**  
**Supplemental Note: \$56.50 overtime hours**  
**Shift Wage Rate: \$98.29**

**Operating Engineer - Concrete I**

**Cranes**

**Effective Period: 7/1/2017 - 6/30/2018**  
**Wage Rate per Hour: \$79.50**  
**Supplemental Benefit Rate per Hour: \$31.10**  
**Supplemental Note: \$56.50 overtime hours**

**Operating Engineer - Concrete II**

**Compressors**

**Effective Period: 7/1/2017 - 6/30/2018**  
**Wage Rate per Hour: \$47.54**  
**Supplemental Benefit Rate per Hour: \$31.10**  
**Supplemental Note: \$56.50 overtime hours**

**Operating Engineer - Concrete III**

**Micro-traps (Negative Air Machines), Vac-All Remediation System.**

**Effective Period: 7/1/2017 - 6/30/2018**  
**Wage Rate per Hour: \$63.66**  
**Supplemental Benefit Rate per Hour: \$31.10**  
**Supplemental Note: \$56.50 overtime hours**

**Operating Engineer - Steel Erection I**

**Three Drum Derricks**

**Effective Period: 7/1/2017 - 6/30/2018**  
**Wage Rate per Hour: \$82.23**  
**Supplemental Benefit Rate per Hour: \$31.10**  
**Supplemental Note: \$56.50 overtime hours**  
**Shift Wage Rate: \$131.57**

**Operating Engineer - Steel Erection II**

**Cranes, 2 Drum Derricks, Hydraulic Cranes, Fork Lifts and Boom Trucks.**

**Effective Period: 7/1/2017 - 6/30/2018**  
**Wage Rate per Hour: \$79.04**  
**Supplemental Benefit Rate per Hour: \$31.10**  
**Supplemental Note: \$56.50 overtime hours**  
**Shift Wage Rate: \$126.46**

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**Operating Engineer - Steel Erection III**

Compressors, Welding Machines.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$47.14**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$75.42**

**Operating Engineer - Steel Erection IV**

Compressors - Not Combined with Welding Machine.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$44.91**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$71.86**

**Operating Engineer - Building Work I**

Forklifts, Plaster (Platform machine), Plaster Bucket, Concrete Pump and all other equipment used for hoisting material.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$62.87**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Building Work II**

Compressors, Welding Machines (Cutting Concrete-Tank Work), Paint Spraying, Sandblasting, Pumps (with the exclusion of Concrete Pumps), All Engines irrespective of Power (Power-Pac) used to drive Auxiliary Equipment, Air, Hydraulic, Jacking System, etc.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$47.01**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Building Work III**

Double Drum

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$71.60**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours



**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Operating Engineer - Building Work IV**

Stone Derrick, Cranes, Hydraulic Cranes Boom Trucks.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$75.87**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: **\$56.50** overtime hours

**Operating Engineer - Building Work V**

Dismantling and Erection of Cranes, Relief Engineer.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$69.88**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: **\$56.50** overtime hours

**Operating Engineer - Building Work VI**

4 Pole Hoist, Single Drum Hoists.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$69.14**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: **\$56.50** overtime hours

**Operating Engineer - Building Work VII**

Rack & Pinion and House Cars

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$54.92**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: **\$56.50** overtime hours

For New House Car projects Wage Rate per Hour **\$43.77**

**Overtime Description**

On jobs of more than one shift, if an Employee fails to report for work through any cause over which the Employer has no control, the Employee on duty will continue to work at the rate of single time.

For House Cars and Rack & Pinion only: Overtime paid at time and one-half for all hours in excess of eight hours in a day, Saturday, Sunday and Holidays worked.

**Overtime**

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

Double time the regular rate for work on the following holiday(s).

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Paid Holidays**

New Year's Day  
Lincoln's Birthday  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

**Shift Rates**

For Steel Erection Only: Shifts may be worked at the single time rate at other than the regular working hours (8:00 A.M. to 4:30 P.M.) on the following work ONLY: Heavy construction jobs on work below the street level, over railroad tracks and on building jobs.

(Operating Engineer Local #14)

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**FLOOR COVERER**

(Interior vinyl composition tile, sheath vinyl linoleum and wood parquet tile including site preparation and synthetic turf not including site preparation)

**Floor Coverer**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$50.50

Supplemental Benefit Rate per Hour: \$45.88

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Presidential Election Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

### **Paid Holidays**

1/2 day on Christmas Eve if work is performed in the A.M.  
1/2 day on New Year's Eve if work is performed in the A.M.

### **Shift Rates**

Two shifts may be utilized with the first shift working 8:00 A.M. to the end of the shift at the straight time of pay. The second shift will receive one hour at double time rate for the last hour of the shift. (eight for seven, nine for eight).

(Carpenters District Council)

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## **GLAZIER**

(New Construction, Remodeling, and Alteration)

### **Glazier**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$44.70**

Supplemental Benefit Rate per Hour: **\$40.99**

Supplemental Note: Supplemental Benefit Overtime Rate: **\$50.09**

### **Overtime Description**

An optional 8th hour can be worked at straight time rate. If 9th hour is worked, then both hours or more (8th & 9th or more) will be at the double time rate of pay.

### **Overtime**

Double time the regular rate after a 7 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

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**Paid Holidays**

None

**Shift Rates**

Shifts shall be any 7 hours beyond 4:00 P.M. for which the glazier shall receive 8 hours pay for 7 hours worked.

(Local #1281)

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**GLAZIER - REPAIR & MAINTENANCE**

(For the Installation of Glass - All repair and maintenance work on a particular building, whenever performed, where the total cumulative contract value is under \$127,628. Except where enumerated (i.e. plate glass windows) does not apply to non-residential buildings.)

**Craft Jurisdiction for repair, maintenance and fabrication**

Plate glass replacement, Residential glass replacement, Residential mirrors and shower doors, Storm windows and storm doors, Residential replacement windows, Herculite door repairs, Door closer repairs, Retrofit apartment house (non commercial buildings), Glass tinting.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$24.13**

Supplemental Benefit Rate per Hour: **\$21.12**

**Overtime**

Time and one half the regular rate after an 8 hour day.

Double time the regular rate for Sunday.

Time and one half the regular hourly rate after 40 hours in any work week.

**Paid Holidays**

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

(Local #1281)

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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## HEAT AND FROST INSULATOR

### Heat & Frost Insulator

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$58.38

Supplemental Benefit Rate per Hour: \$39.46

### Overtime Description

Double time shall be paid for supplemental benefits during overtime work.

8th hour paid at time and one half.

### Overtime

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Triple time the regular rate for work on the following holiday(s).

Labor Day

### Paid Holidays

None

### Shift Rates

The first shift shall work seven hours at the regular straight time rate. The second and third shift shall work seven hours the regular straight time hourly rate plus a fourteen percent wage and benefit premium.

Off hour work in occupied or retail buildings may be worked on weekdays with an increment of \$1.00 per hour and eight hours pay for seven (7) hours worked. Double time will apply for over seven (7) hours worked on weekdays, weekends or holidays.

(Local #12) (BCA)

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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## HOUSE WRECKER (TOTAL DEMOLITION)

### House Wrecker - Tier A

On all work sites the first, second, eleventh and every third House Wrecker thereafter will be Tier A House Wreckers (i.e. 1st, 2nd, 11th, 14th etc). Other House Wreckers may be Tier B House Wreckers.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$36.33**

Supplemental Benefit Rate per Hour: **\$29.22**

### House Wrecker - Tier B

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$25.56**

Supplemental Benefit Rate per Hour: **\$21.63**

### **Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### **Paid Holidays**

None

(Mason Tenders District Council)

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## IRON WORKER - ORNAMENTAL

### Iron Worker - Ornamental

Effective Period: 7/1/2017 - 6/30/2018

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Wage Rate per Hour: \$44.20**

**Supplemental Benefit Rate per Hour: \$51.57**

**Supplemental Note:** Supplemental benefits are to be paid at the applicable overtime rate when overtime is in effect.

**Overtime Description**

Time and one half the regular rate after a 7 hour day for a maximum of two hours on any regular work day (the 8th and 9th hour) and double time shall be paid for all work on a regular work day thereafter, time and one half the regular rate for Saturday for the first seven hours of work and double time shall be paid for all work on a Saturday thereafter.

**Overtime**

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day

**Paid Holidays**

None

**Shift Rates**

For off shift work - 8 hours pay for 7 hours of work. When two or three shifts are employed on a job, Monday through Friday, the workday for each shift shall be seven hours and paid for ten and one-half hours at the single time rate. When two or three shifts are worked on Saturday, Sunday or holidays, each shift shall be seven hours and paid fifteen and three-quarters hours.

(Local #580)

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**IRON WORKER - STRUCTURAL**

**Iron Worker - Structural**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$50.05**

**Supplemental Benefit Rate per Hour: \$72.53**

**Supplemental Note:** Supplemental benefits are to be paid at the applicable overtime rate when overtime is in effect.

**Overtime Description**

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Monday through Friday- the first eight hours are paid at straight time, the 9th and 10th hours are paid at time and one-half the regular rate, all additional weekday overtime is paid at double the regular rate. Saturdays- the first eight hours are paid at time and one-half the regular rate, double time thereafter. Sunday-all shifts are paid at double time.

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

1/2 day on Christmas Eve if work is performed in the A.M.

1/2 day on New Year's Eve if work is performed in the A.M.

**Shift Rates**

Monday through Friday - First Shift: First eight hours are paid at straight time, the 9th & 10th hours are paid at time and a half, double time paid thereafter. Second and third Shifts: First eight hours are paid at time and one-half, double time thereafter. Saturdays: All shifts, first eight hours paid at time and one-half, double time thereafter: Sunday all shifts are paid at double time.

(Local #40 & #361)

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**LABORER**

**(Foundation, Concrete, Excavating, Street Pipe Layer and Common)**

**Laborer**

Excavation and foundation work for buildings, heavy construction, engineering work, and hazardous waste removal in connection with the above work. Landscaping tasks in connection with heavy construction work, engineering work and building projects. Projects include, but are not limited to pollution plants, sewers, parks, subways, bridges, highways, etc.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$41.50

Supplemental Benefit Rate per Hour: \$40.63



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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### **Overtime**

Time and one half the regular rate after an 8 hour day.  
Time and one half the regular rate for Saturday.  
Double time the regular rate for Sunday.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Thanksgiving Day  
Christmas Day

### **Paid Holidays**

Labor Day  
Thanksgiving Day

### **Shift Rates**

When two shifts are employed, single time rate shall be paid for each shift. When three shifts are found necessary, each shift shall work seven and one half hours (7 ½), but shall be paid for eight (8) hours of labor, and be permitted one half hour for lunch.

(Local #731)

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## **LANDSCAPING**

(Landscaping tasks, as well as tree pruning, tree removing, spraying and maintenance in connection with the planting of street trees and the planting of trees in city parks but not when such activities are performed as part of, or in connection with, other construction or reconstruction projects.)

### **Landscaper (Above 6 years experience)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$28.75

Supplemental Benefit Rate per Hour: \$15.55

### **Landscaper (3 - 6 years experience)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$27.75

Supplemental Benefit Rate per Hour: \$15.55

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Landscaper (up to 3 years experience)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$25.25  
Supplemental Benefit Rate per Hour: \$15.55

**Groundperson**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$25.25  
Supplemental Benefit Rate per Hour: \$15.55

**Tree Remover / Pruner**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$33.75  
Supplemental Benefit Rate per Hour: \$15.55

**Landscaper Sprayer (Pesticide Applicator)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$23.75  
Supplemental Benefit Rate per Hour: \$15.55

**Watering - Plant Maintainer**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$18.72  
Supplemental Benefit Rate per Hour: \$15.55

**Overtime Description**

For all overtime work performed, supplemental benefits shall include an additional seventy-five (\$0.75) cents per hour.

**Overtime**

Time and one half the regular rate after an 8 hour day.  
Time and one half the regular rate for Saturday.  
Double time the regular rate for Sunday.  
Time and one half the regular rate for work on a holiday plus the day's pay.

**Paid Holidays**

New Year's Day  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day

**Shift Rates**

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE**

Work performed on a 4pm to 12am shift has a 15% differential. Work performed on a 12am to 8am shift has a 20% differential.

(Local #175)

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## **MARBLE MECHANIC**

### **Marble Setter**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$52.74**

Supplemental Benefit Rate per Hour: **\$38.67**

### **Marble Finisher**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.46**

Supplemental Benefit Rate per Hour: **\$36.64**

### **Marble Polisher**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$37.93**

Supplemental Benefit Rate per Hour: **\$28.33**

## **Overtime Description**

Supplemental Benefit contributions are to be made at the applicable overtime rates. Time and one half the regular rate after a 7 hour day or time and one half the regular rate after an 8 hour day - chosen by Employer at the start of the project and then would last for the full duration of the project.

## **Overtime**

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

## **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Christmas Day

**Paid Holidays**

None

(Local #7)

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**MASON TENDER**

**Mason Tender**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$37.90

Supplemental Benefit Rate per Hour: \$30.59

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

**Shift Rates**

The Employer may work two (2) shifts with the first shift at the straight time wage rate and the second shift receiving eight (8) hours paid for seven (7) hours work at the straight time wage rate.

(Local #79)

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

## MASON TENDER (INTERIOR DEMOLITION WORKER)

### Mason Tender Tier A

Tier A Interior Demolition Worker performs all burning, chopping, and other technically skilled tasks related to interior demolition work.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$36.19

Supplemental Benefit Rate per Hour: \$24.25

### Mason Tender Tier B

Tier B Interior Demolition Worker performs manual work and work incidental to demolition work, such as loading and carting of debris from the work site to an area where it can be loaded in to bins/trucks for removal. Also performs clean-up of the site when demolition is completed.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$25.38

Supplemental Benefit Rate per Hour: \$18.57

### **Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Sunday.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### **Paid Holidays**

None

(Local #79)

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## METALLIC LATHER

### Metallic Lather

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Wage Rate per Hour: **\$46.28**

Supplemental Benefit Rate per Hour: **\$42.92**

Supplemental Note: Supplemental benefits for overtime are paid at the appropriate overtime rate.

### **Overtime Description**

Overtime would be time and one half the regular rate after a seven (7) or eight (8) hours workday, which would be set at the start of the job.

### **Overtime**

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

Washington's Birthday

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Christmas Day

### **Paid Holidays**

1/2 day on Christmas Eve if work is performed in the A.M.

1/2 day on New Year's Eve if work is performed in the A.M.

### **Shift Rates**

There will be no shift differential paid on the first shift if more than one shift is employed. The shift differential will remain \$12/hour on the second and third shift for the first eight (8) hours if worked. There will be no pyramiding on overtime worked on second and third shifts. The time and one half (1.5x) rate will be against the base wage rate, not the shift differential

(Local #46)

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## **MILLWRIGHT**

### **Millwright**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$51.50**

Supplemental Benefit Rate per Hour: **\$52.41**

### **Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
President's Day  
Good Friday  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Presidential Election Day  
Thanksgiving Day  
Christmas Day

### **Paid Holidays**

1/2 day on Christmas Eve if work is performed in the A.M.

1/2 day on New Year's Eve if work is performed in the A.M.

### **Shift Rates**

The first shift shall receive the straight time rate of pay. The second shift receives the straight time rate of pay plus fifteen (15%) per cent. Members of the second shift shall be allowed one half hour to eat, with this time being included in the hours of the workday established. There must be a first shift to work a second shift. All additional hours worked shall be paid at the time and one-half rate of pay plus fifteen (15%) per cent for weekday hours.

(Local #740)

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## **MOSAIC MECHANIC**

### **Mosaic Mechanic - Mosaic & Terrazzo Mechanic**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$46.86**

Supplemental Benefit Rate per Hour: **\$40.65**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$51.67 per hour.

### **Mosaic Mechanic - Mosaic & Terrazzo Finisher**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$45.26**

Supplemental Benefit Rate per Hour: **\$40.63**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$51.65 per hour.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Mosaic Mechanic - Machine Operator Grinder**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$45.26**

Supplemental Benefit Rate per Hour: **\$40.63**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$51.65 per hour.

**Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

Washington's Birthday

Good Friday

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

None

(Local #7)

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**PAINTER**

**Painter - Brush & Roller**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$42.50**

Supplemental Benefit Rate per Hour: **\$28.62**

Supplemental Note: \$ 33.25 on overtime

**Spray & Scaffold / Decorative / Sandblast**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$45.50**

Supplemental Benefit Rate per Hour: **\$28.62**

Supplemental Note: \$ 33.25 on overtime



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**Overtime**

Time and one half the regular rate after a 7 hour day.  
Time and one half the regular rate for Saturday.  
Time and one half the regular rate for Sunday.

**Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Thanksgiving Day  
Christmas Day

**Paid Holidays**

None

(District Council of Painters #9)

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**PAINTER - METAL POLISHER**

**METAL POLISHER**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$29.73  
Supplemental Benefit Rate per Hour: \$7.06

**METAL POLISHER - NEW CONSTRUCTION**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$30.68  
Supplemental Benefit Rate per Hour: \$7.06

**METAL POLISHER - SCAFFOLD OVER 34 FEET**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$33.23  
Supplemental Benefit Rate per Hour: \$7.06

**Overtime Description**

All work performed on Saturdays shall be paid at time-in-a half. The exception being; for suspended scaffold work and work deemed as a construction project; an eight (8) hour shift lost during the week due to

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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circumstances beyond the control of the employer, up to a maximum of eight (8) hours per week, may be worked on Saturday at the straight time rate.

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Triple time the regular rate for work on the following holiday(s).

**Paid Holidays**

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Shift Rates**

Four Days a week at Ten (10) hours straight a day.

Local 8A-28A

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**PAINTER - STRIPER**

**Striper (paint)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$35.00**

Supplemental Benefit Rate per Hour: **\$12.37**

Supplemental Note: Overtime Supplemental Benefit rate - \$8.02; New Hire Rate (0-3 months) - \$0.00

**Lineperson (thermoplastic)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$39.00**

Supplemental Benefit Rate per Hour: **\$12.37**

Supplemental Note: Overtime Supplemental Benefit rate - \$8.02; New Hire Rate (0-3 months) - \$0.00

**Overtime**

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Time and one half the regular rate after an 8 hour day.  
Time and one half the regular rate for Saturday.  
Double time the regular rate for Sunday.  
Time and one half the regular rate for work on the following holiday(s).

**Paid Holidays**

New Year's Day  
Good Friday  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Presidential Election Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Shift Rates**

Employees hired before April 1, 2003: 15% night shift premium differential for work commenced at 9:00 PM or later.

**Vacation**

Employees with one to two years service shall accrue vacation based on hours worked: 250 hours worked - 1 day vacation; 500 hours worked - 2 days vacation; 750 hours worked - 3 days vacation; 900 hours worked - 4 days vacation; 1,000 hours worked - 5 days vacation. Employees with two to five years service receive two weeks vacation. Employees with five to twenty years service receive three weeks vacation. Employees with twenty to twenty-five years service receive four weeks vacation. Employees with 25 or more years service receive five weeks vacation. Vacation must be taken during winter months. 2 Personal Days except employees hired after 4/1/12 who do not have 2 years of service.

(Local #917)

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**PAINTER - STRUCTURAL STEEL**

**Painters on Structural Steel**

Effective Period: 7/1/2017 - 9/30/2017  
Wage Rate per Hour: **\$49.50**  
Supplemental Benefit Rate per Hour: **\$37.08**

Effective Period: 10/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$50.00**  
Supplemental Benefit Rate per Hour: **\$38.33**

**Painter - Power Tool**

Effective Period: 7/1/2017 - 9/30/2017  
Wage Rate per Hour: **\$55.50**

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Supplemental Benefit Rate per Hour: **\$37.08**

Overtime Wage Rate: \$6.00 above the "Painters on Structural Steel" overtime rate.

Effective Period: 10/1/2017 - 6/30/2018

Wage Rate per Hour: **\$56.00**

Supplemental Benefit Rate per Hour: **\$38.33**

Overtime Wage Rate: \$6.00 above the "Painters on Structural Steel" overtime rate.

### **Overtime Description**

Supplemental Benefits shall be paid for each hour worked, up to forty (40) hours per week for the period of May 1st to November 15th or up to fifty (50) hours per week for the period of November 16th to April 30th.

### **Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### **Paid Holidays**

None

### **Shift Rates**

Regular hourly rates plus a ten per cent (10%) differential

(Local #806)

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## **PAPERHANGER**

### **Paperhanger**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$44.89**

Supplemental Benefit Rate per Hour: **\$31.13**

Supplemental Note: Supplemental benefits are to be paid at the appropriate straight time and overtime rate.

### **Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Time and one half the regular rate for Sunday.

**Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

**Shift Rates**

Evening shift - 4:30 P.M. to 12:00 Midnight (regular rate of pay); any work performed before 7:00 A.M. shall be at time and one half the regular base rate of pay.

(District Council of Painters #9)

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**PAVER AND ROADBUILDER**

**Paver & Roadbuilder - Formsetter**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$45.85**

Supplemental Benefit Rate per Hour: **\$40.98**

**Paver & Roadbuilder - Laborer**

Paving and road construction work, regardless of material used, including but not limited to preparation of job sites, removal of old surfaces, asphalt and/or concrete, by whatever method, including but not limited to milling; laying of concrete; laying of asphalt for temporary, patchwork, and utility paving (but not production paving); site preparation and incidental work before the installation of rubberized materials and similar surfaces; installation and repair of temporary construction fencing; slurry seal coating, maintenance of safety surfaces; play equipment installation, and other related work.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.98**

Supplemental Benefit Rate per Hour: **\$40.98**

**Production Paver & Roadbuilder - Screed Person**

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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(Production paving is asphalt paving when using a paving machine or on a project where a paving machine is traditionally used)

Adjustment of paving machinery on production paving jobs.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$46.45**

Supplemental Benefit Rate per Hour: **\$40.98**

**Production Paver & Roadbuilder - Raker**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$45.85**

Supplemental Benefit Rate per Hour: **\$40.98**

**Production Paver & Roadbuilder - Shoveler**

General laborer (except removal of surfaces - see Paver and Roadbuilder-Laborer) including but not limited to tamper, AC paint and liquid tar work.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$42.37**

Supplemental Benefit Rate per Hour: **\$40.98**

**Overtime Description**

If an employee works New Year's Day or Christmas Day, they receive the single time rate plus 25%.

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

**Shift Rates**

When two shifts are employed, the work period for each shift shall be a continuous eight (8) hours. When three shifts are employed, each shift will work seven and one half (7 ½) hours but will be paid for eight (8) hours since only one half (1/2) hour is allowed for meal time.

When two or more shifts are employed, single time will be paid for each shift.

**Night Work** - On night work, the first eight (8) hours of work will be paid for at the single time rate, except that production paving work shall be paid at 10% over the single time rate for the screed person, rakers and shovelers directly involved only. This differential is to be paid when there is only one shift and the shift works at night. All other workers will be exempt. Hours worked over eight (8) hours during said shift shall be paid for at the time and one-half rate.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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(Local #1010)

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## PLASTERER

### Plasterer

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$44.93**

Supplemental Benefit Rate per Hour: **\$25.15**

### Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### Paid Holidays

None

### Shift Rates

When it is not possible to conduct alteration work during regular work hours, in a building occupied by tenants, said work shall proceed on a shift basis: however work over seven (7) hours in any twenty four (24) hour period, the time after seven (7) hours shall be considered overtime.

The second shift shall start at a time between 3:30 p.m. and 7:00 p.m. and shall consist of seven (7) working hours and shall receive eight (8) hours of wages and benefits at the straight time rate. The workers on the second shift shall be allowed one-half (½) hour to eat with this time being included in the seven (7) hours of work.

(Local #262)

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

## **PLASTERER - TENDER**

### **Plasterer - Tender**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$37.90**

Supplemental Benefit Rate per Hour: **\$30.59**

### **Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

Washington's Birthday

Memorial Day

Independence Day

Labor Day

Presidential Election Day

Thanksgiving Day

Christmas Day

### **Paid Holidays**

None

### **Shift Rates**

When work commences outside regular work hours, workers receive an hour additional (differential) wage and supplement payment. Eight hours pay for seven hours work or nine hours pay for eight hours work.

(Mason Tenders District Council)

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## **PLUMBER**

### **Plumber**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$67.25**

Supplemental Benefit Rate per Hour: **\$31.80**

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

### **Plumber - Temporary Services**



**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Temporary Services** - When there are no Plumbers on the job site, there may be three shifts designed to cover the entire twenty-four hour period, including weekends if necessary, at the following rate straight time.

**Effective Period:** 7/1/2017 - 6/30/2018

**Wage Rate per Hour:** \$53.88

**Supplemental Benefit Rate per Hour:** \$25.36

### **Overtime Description**

Double time the regular rate after a 7 hour day - unless for new construction site work where the plumbing contract price is \$1.5 million or less, the hours of labor can be 8 hours per day at the employers option. On Alteration jobs when other mechanical trades at the site are working an eighth hour at straight time, then the plumber shall also work an eighth hour at straight time.

### **Overtime**

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

### **Shift Rates**

Shift work, when directly specified in public agency or authority documents where plumbing contract is \$8 million or less, will be permitted. 30% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shifts Monday to Friday. 50% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shift work performed on weekends. For shift work on holidays, double time wages and fringe benefits shall be paid.

(Plumbers Local #1)

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## **PLUMBER (MECHANICAL EQUIPMENT AND SERVICE)**

(Mechanical Equipment and Service work shall include any repair and/or replacement of the present plumbing system.)

### **Plumber**

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$41.20**

**Supplemental Benefit Rate per Hour: \$15.41**

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

**Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

None

(Plumbers Local # 1)

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**PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME  
CONSTRUCTION)**

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$46.66**

**Supplemental Benefit Rate per Hour: \$22.95**

**Overtime**

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

**Shift Rates**

30% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shifts Monday to Friday.  
50% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shift work performed on weekends. For shift work on holidays, double time wages and fringe benefits shall be paid.

(Plumbers Local #1)

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**PLUMBER: PUMP & TANK**

Oil Trades (Installation and Maintenance)

**Plumber - Pump & Tank**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$64.22

Supplemental Benefit Rate per Hour: \$23.21

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

**Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

None

**Shift Rates**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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All work outside the regular workday (8:00 A.M. to 3:30 P.M.) is to be paid at time and one half the regular hourly rate

(Plumbers Local #1)

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**POINTER, WATERPROOFER, CAULKER, SANDBLASTER,  
STEAMBLASTER**  
(Exterior Building Renovation)

**Journeyperson**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$52.57

Supplemental Benefit Rate per Hour: \$25.80

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

**Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

**Shift Rates**

All work outside the regular work day (an eight hour workday between the hours of 6:00 A.M. and 4:30 P.M.) is to be paid at time and one half the regular rate.

(Bricklayer District Council)

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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## ROOFER

### Roofer

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.50**

Supplemental Benefit Rate per Hour: **\$32.27**

### Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

### Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### Paid Holidays

None

### Shift Rates

Second shift - Regular hourly rate plus a 10% differential. Third shift - Regular hourly rate plus a 15% differential.

(Local #8)

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## SHEET METAL WORKER

### Sheet Metal Worker

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$48.90**

Supplemental Benefit Rate per Hour: **\$48.00**

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

### Sheet Metal Worker - Fan Maintenance

(The temporary operation of fans or blowers in new or existing buildings for heating and/or ventilation, and/or air conditioning prior to the completion of the project.)

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Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$39.12  
Supplemental Benefit Rate per Hour: \$48.00

**Sheet Metal Worker - Duct Cleaner**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$12.90  
Supplemental Benefit Rate per Hour: \$8.07

**Overtime**

Time and one half the regular rate after an 8 hour day.  
Time and one half the regular rate for Saturday.  
Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
Martin Luther King Jr. Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

**Shift Rates**

Work that can only be performed outside regular working hours (eight hours of work between 7:30 A.M. and 3:30 P.M.) - First shift (work between 3:30 P.M. and 11:30 P.M.) - 10% differential above the established hourly rate.  
Second shift (work between 11:30 P.M. and 7:30 A.M.) - 15% differential above the established hourly rate.

For Fan Maintenance: On all full shifts of fan maintenance work the straight time hourly rate of pay will be paid for each shift, including nights, Saturdays, Sundays, and holidays.

(Local #28)

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**SHEET METAL WORKER - SPECIALTY**  
**(Decking & Siding)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

**Sheet Metal Specialty Worker**

The first worker to perform this work must be paid at the rate of the Sheet Metal Worker. The second and third workers shall be paid the Specialty Worker Rate. The ratio of One Sheet Metal Worker, then Two Specialty Workers shall be utilized thereafter.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$44.57**

Supplemental Benefit Rate per Hour: **\$25.02**

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

(Local #28)

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**SHIPYARD WORKER**

**Shipyard Mechanic - First Class**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$28.12**

Supplemental Benefit Rate per Hour: **\$3.03**

**Shipyard Mechanic - Second Class**

Effective Period: 7/1/2017 - 6/30/2018

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Wage Rate per Hour: \$23.35**  
**Supplemental Benefit Rate per Hour: \$2.85**

**Shipyard Laborer - First Class**

**Effective Period: 7/1/2017 - 6/30/2018**  
**Wage Rate per Hour: \$20.96**  
**Supplemental Benefit Rate per Hour: \$2.76**

**Shipyard Laborer - Second Class**

**Effective Period: 7/1/2017 - 6/30/2018**  
**Wage Rate per Hour: \$15.24**  
**Supplemental Benefit Rate per Hour: \$2.54**

**Shipyard Dockhand - First Class**

**Effective Period: 7/1/2017 - 6/30/2018**  
**Wage Rate per Hour: \$22.89**  
**Supplemental Benefit Rate per Hour: \$2.83**

**Shipyard Dockhand - Second Class**

**Effective Period: 7/1/2017 - 6/30/2018**  
**Wage Rate per Hour: \$16.51**  
**Supplemental Benefit Rate per Hour: \$2.58**

**Overtime Description**

Work performed on holiday is paid double time the regular hourly wage rate plus holiday pay.

**Overtime**

Time and one half the regular rate after an 8 hour day.  
Time and one half the regular rate for Saturday.  
Double time the regular rate for Sunday.  
Time and one half the regular hourly rate after 40 hours in any work week.

**Paid Holidays**

New Year's Day  
Martin Luther King Jr. Day  
President's Day  
Good Friday  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

Based on Survey Data



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

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**SIGN ERECTOR**  
(Sheet Metal, Plastic, Electric, and Neon)

**Sign Erector**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$47.67

Supplemental Benefit Rate per Hour: \$50.67

**Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Time and one half the regular rate for work on the following holiday(s).

**Paid Holidays**

New Year's Day

Washington's Birthday

Memorial Day

Independence Day

Labor Day

Columbus Day

Election Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Shift Rates**

Time and one half the regular hourly rate is to be paid for all hours worked outside the regular workday either (7:00 A.M. through 2:30 P.M.) or (8:00 A.M. through 3:30 P.M.)

(Local #137)

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**STEAMFITTER**

**Steamfitter I**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$55.50

Supplemental Benefit Rate per Hour: \$55.29

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Supplemental Note: Overtime supplemental benefit rate: \$109.84

**Steamfitter -Temporary Services**

The steamfitters shall not do any other work and shall not be permitted to work more than one shift in a twenty-four hour day. When steamfitters are present during the regular working day, no temporary services steamfitter will be required

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$42.18

Supplemental Benefit Rate per Hour: \$44.84

**Overtime**

Double time the regular rate after a 7 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

None

**Shift Rates**

Work performed between 3:30 P.M. and 7:00 A.M. and on Saturdays, Sundays and Holidays shall be at double time the regular hourly rate and paid at the overtime supplemental benefit rate above.

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**Steamfitter II**

For heating, ventilation, air conditioning and mechanical public works contracts with a dollar value not to exceed \$15,000,000 and for fire protection/sprinkler public works contracts not to exceed \$1,500,000.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$55.50

Supplemental Benefit Rate per Hour: \$55.29

Supplemental Note: Overtime supplemental benefit rate: \$109.84

**Steamfitter -Temporary Services**

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE**

The steamfitters shall not do any other work and shall not be permitted to work more than one shift in a twenty-four hour day. When steamfitters are present during the regular working day, no temporary services steamfitter will be required.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$42.18**

Supplemental Benefit Rate per Hour: **\$44.84**

### **Overtime**

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

### **Paid Holidays**

None

### **Shift Rates**

May be performed outside of the regular workday except Saturday, Sunday and Holidays. A shift shall consist of eight working hours. All work performed in excess of eight hours shall be paid at double time. No shift shall commence after 7:00 P.M. on Friday or 7:00 P.M. the day before holidays. All work performed after 12:01 A.M. Saturday or 12:01 A.M. the day before a Holiday will be paid at double time. When shift work is performed the wage rate for regular time worked is a thirty percent premium together with fringe benefits.

On Transit Authority projects, where work is performed in the vicinity of tracks all shift work on weekends and holidays may be performed at the regular shift rates.

Local #638

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## **STEAMFITTER - REFRIGERATION AND AIR CONDITIONER (Maintenance and Installation Service Person)**

### **Refrigeration and Air Conditioner Mechanic**

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$39.50**  
Supplemental Benefit Rate per Hour: **\$15.81**

**Refrigeration and Air Conditioner Service Person V**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$32.46**  
Supplemental Benefit Rate per Hour: **\$14.16**

**Refrigeration and Air Conditioner Service Person IV**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$26.89**  
Supplemental Benefit Rate per Hour: **\$12.80**

**Refrigeration and Air Conditioner Service Person III**

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$23.08**  
Supplemental Benefit Rate per Hour: **\$11.79**

**Refrigeration and Air Conditioner Service Person II**

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$19.14**  
Supplemental Benefit Rate per Hour: **\$10.85**

**Refrigeration and Air Conditioner Service Person I**

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$14.00**  
Supplemental Benefit Rate per Hour: **\$9.76**

**Overtime**

Time and one half the regular rate after an 8 hour day.  
Time and one half the regular rate for Saturday.  
Double time the regular rate for Sunday.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
Independence Day  
Labor Day  
Veteran's Day  
Thanksgiving Day  
Christmas Day

Double time and one half the regular rate for work on the following holiday(s).

Martin Luther King Jr. Day  
President's Day  
Memorial Day  
Columbus Day

**Paid Holidays**

New Year's Day  
Martin Luther King Jr. Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Christmas Day

(Local #638B)

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**STONE MASON - SETTER**

**Stone Mason - Setter**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$53.62

Supplemental Benefit Rate per Hour: \$41.65

**Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
Washington's Birthday  
Good Friday

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day

**Paid Holidays**

1/2 day on Christmas Eve if work is performed in the A.M.

**Shift Rates**

For all work outside the regular workday (8:00 A.M. to 3:30 P.M. Monday through Friday), the pay shall be straight time plus a ten percent (10%) differential.

(Bricklayers District Council)

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**TAPER**

**Drywall Taper**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$47.82

Supplemental Benefit Rate per Hour: \$22.68

**Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

**Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

Any worker who reports to work on Christmas Eve or New Year's Eve pursuant to his employer's instruction shall be entitled to three (3) hours afternoon pay without working.

(Local #1974)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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**TELECOMMUNICATION WORKER**  
**(Voice Installation Only)**

**Telecommunication Worker**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$40.35**

Supplemental Benefit Rate per Hour: **\$13.19**

Supplemental Note: The above rate applies for Manhattan, Bronx, Brooklyn, Queens. \$12.64 for Staten Island only.

**Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

**Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Lincoln's Birthday

Washington's Birthday

Memorial Day

Independence Day

Labor Day

Columbus Day

Election Day

Veteran's Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

New Year's Day

Lincoln's Birthday

Washington's Birthday

Memorial Day

Independence Day

Labor Day

Columbus Day

Election Day

Veteran's Day

Thanksgiving Day

Christmas Day

Employees have the option of observing either Martin Luther King's Birthday or the day after Thanksgiving instead of Lincoln's Birthday

**Shift Rates**

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE**

For any workday that starts before 8A.M. or ends after 6P.M. there is a 10% differential for the applicable worker's hourly rate.

**Vacation**

After 6 months.....one week.  
After 12 months but less than 7 years.....two weeks.  
After 7 or more but less than 15 years.....three weeks.  
After 15 years or more but less than 25 years.....four weeks.

(C.W.A.)

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**TILE FINISHER**

**Tile Finisher**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.13**

Supplemental Benefit Rate per Hour: **\$31.18**

**Overtime**

Time and one half the regular rate after a 7 hour day.  
Time and one half the regular rate for Saturday.  
Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
President's Day  
Good Friday  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

**Shift Rates**

Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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## **TILE LAYER - SETTER**

### **Tile Layer - Setter**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$53.19**

Supplemental Benefit Rate per Hour: **\$35.35**

### **Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

### **Shift Rates**

Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

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## **TIMBERPERSON**

### **Timberperson**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$48.00**

Supplemental Benefit Rate per Hour: **\$49.16**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Time and one half the regular hourly rate after 40 hours in any work week.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

**Shift Rates**

Off shift work commencing between 5:00 P.M. and 11:00 P.M. shall work eight and one half hours allowing for one half hour for lunch. The wage rate shall be 113% of the straight time hourly wage rate.

(Local #1536)

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**TUNNEL WORKER**

**Blasters, Mucking Machine Operators (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$62.37

Supplemental Benefit Rate per Hour: \$52.39

**Tunnel Workers (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$60.21

Supplemental Benefit Rate per Hour: \$50.65

**Top Nipper (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$59.11

Supplemental Benefit Rate per Hour: \$49.74

**Outside Lock Tender, Outside Gauge Tender, Muck Lock Tender (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$58.04

Supplemental Benefit Rate per Hour: \$48.81

**Bottom Bell & Top Bell Signal Person: Shaft Person (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$58.04

Supplemental Benefit Rate per Hour: \$48.81

**Changehouse Attendant: Powder Watchperson (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$50.87

Supplemental Benefit Rate per Hour: \$46.11

**Blasters (Free Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$59.52

Supplemental Benefit Rate per Hour: \$50.03

**Tunnel Workers (Free Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$56.97

Supplemental Benefit Rate per Hour: \$47.89

**All Others (Free Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$52.63

Supplemental Benefit Rate per Hour: \$44.29

**Microtunneling (Free Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$45.58

Supplemental Benefit Rate per Hour: \$38.31

**Overtime Description**

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE**

For Repair-Maintenance Work on Existing Equipment and Facilities - Time and one half the regular rate after a 7 hour day, or for Saturday, or for Sunday. Double time the regular rate for work on a holiday.  
For Small-Bore Micro Tunneling Machines - Time and one-half the regular rate shall be paid for all overtime.

**Overtime**

Double time the regular rate after an 8 hour day.  
Double time the regular time rate for Saturday.  
Double time the regular rate for Sunday.  
Double time the regular rate for work on the following holiday(s).

**Paid Holidays**

New Year's Day  
Lincoln's Birthday  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Election Day  
Veteran's Day  
Thanksgiving Day  
Christmas Day

(Local #147)

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**WELDER**

**TO BE PAID AT THE RATE OF THE JOURNEYPERSON IN THE TRADE  
PERFORMING THE WORK.**

## **OFFICE OF THE COMPTROLLER**

### **CITY OF NEW YORK**

## **220 APPRENTICESHIP PREVAILING WAGE SCHEDULE**

### **APPENDIX**

Pursuant to Labor Law §220 (3-e), only apprentices who are individually registered in a bona fide program to which the employer contractor is a participant and registered with the New York State Department of Labor, may be employed on a public work project.

Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the journey person wage rate for the classification of work he actually performed.

Apprentice ratios are established to ensure the proper safety, training and supervision of apprentices. A ratio establishes the number of journey workers required for each apprentice in a program and on a job site. Ratios are interpreted as follows: in the case of a 1:1, 1:4 ratio, there must be one journey worker for the first apprentice, and four additional journey workers for each subsequent apprentice.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

## **ASBESTOS HANDLER**

(Ratio of Apprentice Journeyperson: 1 to 1, 1 to 3)

### **Asbestos Handler (First 1000 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 78% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$14.25

### **Asbestos Handler (Second 1000 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$14.25

### **Asbestos Handler (Third 1000 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 83% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$14.25

### **Asbestos Handler (Fourth 1000 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 89% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$14.25

(Local #78)

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## **BOILERMAKER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

### **Boilermaker (First Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$30.84  
Effective 1/1/2018 - Supplemental Benefit Rate Per Hour: \$31.26

### **Boilermaker (Second Year: 1st Six Months)**

Effective Period: 7/1/2017 - 6/30/2018

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE**

Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$32.57  
Effective 1/1/2018 - Supplemental Benefit Rate Per Hour: \$33.02

**Boilermaker (Second Year: 2nd Six Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$34.29  
Effective 1/1/2018 - Supplemental Benefit Rate Per Hour: \$34.78

**Boilermaker (Third Year: 1st Six Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$36.03  
Effective 1/1/2018 - Supplemental Benefit Rate Per Hour: \$36.56

**Boilermaker (Third Year: 2nd Six Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 85% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$37.76  
Effective 1/1/2018 - Supplemental Benefit Rate Per Hour: \$38.32

**Boilermaker (Fourth Year: 1st Six Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 90% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$39.51  
Effective 1/1/2018 - Supplemental Benefit Rate Per Hour: \$40.09

**Boilermaker (Fourth Year: 2nd Six Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 95% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$41.22  
Effective 1/1/2018 - Supplemental Benefit Rate Per Hour: \$41.84

(Local #5)

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**BRICKLAYER**

**(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)**

**Bricklayer (First 750 Hours)**



**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

**Bricklayer (Second 750 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

**Bricklayer (Third 750 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

**Bricklayer (Fourth 750 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

**Bricklayer (Fifth 750 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 90% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

**Bricklayer (Sixth 750 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 95% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

(Bricklayer District Council)

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**CARPENTER**

**(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)**

**Carpenter (First Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 40% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$33.03

**Carpenter (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$33.03

**Carpenter (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$33.03

**Carpenter (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$33.03

(Carpenters District Council)

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**CARPENTER - HIGH RISE CONCRETE FORMS**  
**(Ratio of Apprentice to Journeyperson: 1 to 1, 2 to 5)**

**Carpenter - High Rise (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$16.86

Supplemental Benefit Rate per Hour: \$16.20

**Carpenter - High Rise (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$23.16

Supplemental Benefit Rate per Hour: \$16.33

**Carpenter - High Rise (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$29.61

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: \$16.46

**Carpenter - High Rise (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$37.07

Supplemental Benefit Rate per Hour: \$16.61

(Carpenters District Council)

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**CEMENT MASON**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

**Cement Mason (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's Rate

**Cement Mason (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's Rate

**Cement Mason (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 70% of Journeyperson's Rate

(Local #780)

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**CEMENT AND CONCRETE WORKER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Cement & Concrete Worker (First 1333 hours)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$17.75

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Cement & Concrete Worker (Second 1333 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$23.03

**Cement & Concrete Worker (Last 1334 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$24.30

**Cement & Concrete Worker (Hired after 2/6/2016 - First 1334 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: \$16.96  
Supplemental Benefit Rate Per Hour: \$11.80

**Cement & Concrete Worker (Hired after 2/6/2016 - Second 1334 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: \$22.08  
Supplemental Benefit Rate Per Hour: \$16.49

**Cement & Concrete Worker (Hired after 2/6/2016 - Last 1334 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: \$27.20  
Supplemental Benefit Rate Per Hour: \$17.33

(Cement Concrete Workers District Council)

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**DERRICKPERSON & RIGGER (STONE)**  
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

**Derrickperson & Rigger (stone) - First Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: 50% of Journeyperson's rate

**Derrickperson & Rigger (stone) - Second Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyperson's rate

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Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

**Derrickperson & Rigger (stone) - Second Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

**Derrickperson & Rigger (stone) - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 90% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

(Local #197)

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**DOCKBUILDER/PILE DRIVER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

**Dockbuilder/Pile Driver (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 40% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$33.03

**Dockbuilder/Pile Driver (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$33.03

**Dockbuilder/Pile Driver (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$33.03

**Dockbuilder/Pile Driver (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$33.03

(Carpenters District Council)

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## **ELECTRICIAN**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

### **Electrician (First Term: 0-6 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$14.00

Supplemental Benefit Rate per Hour: \$12.37

Overtime Supplemental Rate Per Hour: \$13.29

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$14.50

Supplemental Benefit Rate per Hour: \$12.63

Overtime Supplemental Rate Per Hour: \$13.58

### **Electrician (First Term: 7-12 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$15.00

Supplemental Benefit Rate per Hour: \$12.88

Overtime Supplemental Rate Per Hour: \$13.87

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$15.50

Supplemental Benefit Rate per Hour: \$13.14

Overtime Supplemental Rate Per Hour: \$14.16

### **Electrician (Second Term: 0-6 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$16.00

Supplemental Benefit Rate per Hour: \$13.39

Overtime Supplemental Rate Per Hour: \$14.44

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$16.50

Supplemental Benefit Rate per Hour: \$13.64

Overtime Supplemental Rate Per Hour: \$14.73

### **Electrician (Second Term: 7-12 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$17.00

Supplemental Benefit Rate per Hour: \$13.90

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**Overtime Supplemental Rate Per Hour: \$15.02**

**Effective Period: 5/10/2018 - 6/30/2018**

**Wage Rate per Hour: \$17.50**

**Supplemental Benefit Rate per Hour: \$14.15**

**Overtime Supplemental Rate Per Hour: \$15.31**

**Electrician (Third Term: 0-6 Months)**

**Effective Period: 7/1/2017 - 5/9/2018**

**Wage Rate per Hour: \$18.00**

**Supplemental Benefit Rate per Hour: \$14.41**

**Overtime Supplemental Rate Per Hour: \$15.59**

**Effective Period: 5/10/2018 - 6/30/2018**

**Wage Rate per Hour: \$18.50**

**Supplemental Benefit Rate per Hour: \$14.66**

**Overtime Supplemental Rate Per Hour: \$15.88**

**Electrician (Third Term: 7-12 Months)**

**Effective Period: 7/1/2017 - 5/9/2018**

**Wage Rate per Hour: \$19.00**

**Supplemental Benefit Rate per Hour: \$14.92**

**Overtime Supplemental Rate Per Hour: \$16.17**

**Effective Period: 5/10/2018 - 6/30/2018**

**Wage Rate per Hour: \$19.50**

**Supplemental Benefit Rate per Hour: \$15.17**

**Overtime Supplemental Rate Per Hour: \$16.45**

**Electrician (Fourth Term: 0-6 Months)**

**Effective Period: 7/1/2017 - 5/9/2018**

**Wage Rate per Hour: \$20.00**

**Supplemental Benefit Rate per Hour: \$15.43**

**Overtime Supplemental Rate Per Hour: \$16.74**

**Effective Period: 5/10/2018 - 6/30/2018**

**Wage Rate per Hour: \$20.50**

**Supplemental Benefit Rate per Hour: \$15.68**

**Overtime Supplemental Rate Per Hour: \$17.03**

**Electrician (Fourth Term: 7-12 Months)**

**Effective Period: 7/1/2017 - 5/9/2018**

**Wage Rate per Hour: \$22.00**

**Supplemental Benefit Rate per Hour: \$16.44**

**Overtime Supplemental Rate Per Hour: \$17.89**

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Effective Period: 5/10/2018 - 6/30/2018  
Wage Rate per Hour: **\$22.50**  
Supplemental Benefit Rate per Hour: **\$16.70**  
Overtime Supplemental Rate Per Hour: **\$18.18**

**Electrician (Fifth Term: 0-12 Months)**

Effective Period: 7/1/2017 - 5/9/2018  
Wage Rate per Hour: **\$24.00**  
Supplemental Benefit Rate per Hour: **\$19.80**  
Overtime Supplemental Rate Per Hour: **\$21.30**

Effective Period: 5/10/2018 - 6/30/2018  
Wage Rate per Hour: **\$24.50**  
Supplemental Benefit Rate per Hour: **\$20.30**  
Overtime Supplemental Rate Per Hour: **\$21.84**

**Electrician (Fifth Term: 13-18 Months)**

Effective Period: 7/1/2017 - 5/9/2018  
Wage Rate per Hour: **\$28.50**  
Supplemental Benefit Rate per Hour: **\$22.10**  
Overtime Supplemental Rate Per Hour: **\$23.89**

Effective Period: 5/10/2018 - 6/30/2018  
Wage Rate per Hour: **\$29.00**  
Supplemental Benefit Rate per Hour: **\$22.65**  
Overtime Supplemental Rate Per Hour: **\$24.47**

**Overtime Description**

Overtime Wage paid at time and one half the regular rate

(Local #3)

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**ELEVATOR CONSTRUCTOR**

**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 2)**

**Elevator (Constructor) - First Year**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: **\$29.88**

Effective Period: 3/17/2018 - 6/30/2018



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Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$31.35

**Elevator (Constructor) - Second Year**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$30.31

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$31.80

**Elevator (Constructor) - Third Year**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Rate Per Hour: \$31.19

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Rate Per Hour: \$32.70

**Elevator (Constructor) - Fourth Year**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$32.07

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$33.60

(Local #1)

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**ELEVATOR REPAIR & MAINTENANCE**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)

**Elevator Service/Modernization Mechanic (First Year)**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$29.80

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate

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Supplemental Benefit Per Hour: \$31.28

**Elevator Service/Modernization Mechanic (Second Year)**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$30.23

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$31.72

**Elevator Service/Modernization Mechanic (Third Year)**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$31.09

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$32.60

**Elevator Service/Modernization Mechanic (Fourth Year)**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$31.95

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$33.49

(Local #1)

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**ENGINEER**

**(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 5)**

**Engineer - First Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$24.77  
Supplemental Benefit Rate per Hour: \$24.62

**Engineer - Second Year**

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Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$30.97  
Supplemental Benefit Rate per Hour: \$24.62

**Engineer - Third Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$34.06  
Supplemental Benefit Rate per Hour: \$24.62

**Engineer - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$37.16  
Supplemental Benefit Rate per Hour: \$24.62

(Local #15)

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**ENGINEER - OPERATING**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 5)

**Operating Engineer - First Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour 40% of Journeyperson's Rate  
Supplemental Benefit Per Hour: \$20.85

**Operating Engineer - Second Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's Rate  
Supplemental Benefit Per Hour: \$20.85

**Operating Engineer - Third Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's Rate  
Supplemental Benefit Per Hour: \$20.85

(Local #14)

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## **FLOOR COVERER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

### **Floor Coverer (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 40% of Journeyperson's rate

Supplemental Rate Per Hour: \$31.14

### **Floor Coverer (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$31.14

### **Floor Coverer (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Rate Per Hour: \$31.14

### **Floor Coverer (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: \$31.14

(Carpenters District Council)

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## **GLAZIER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

### **Glazier (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 40% of Journeyperson's rate

Supplemental Rate Per Hour: \$15.26

### **Glazier (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 50% of Journeyperson's rate

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Supplemental Rate Per Hour: \$25.36

**Glazier (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Rate Per Hour: \$28.62

**Glazier (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: \$34.67

(Local #1281)

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**HEAT & FROST INSULATOR**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Heat & Frost Insulator (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

**Heat & Frost Insulator (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

**Heat & Frost Insulator (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

**Heat & Frost Insulator (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #12)

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**HOUSE WRECKER  
(TOTAL DEMOLITION)**

**(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)**

**House Wrecker - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$21.17**

Supplemental Benefit Rate per Hour: **\$18.54**

**House Wrecker - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$22.32**

Supplemental Benefit Rate per Hour: **\$18.54**

**House Wrecker - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$23.97**

Supplemental Benefit Rate per Hour: **\$18.54**

**House Wrecker - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$26.53**

Supplemental Benefit Rate per Hour: **\$18.54**

(Mason Tenders District Council)

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**IRON WORKER - ORNAMENTAL**

**(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)**

**Iron Worker (Ornamental) - 1st Ten Months**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: **\$39.40**

**Iron Worker (Ornamental) - 11 -16 Months**

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Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$40.62

**Iron Worker (Ornamental) - 17 - 22 Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$41.83

**Iron Worker (Ornamental) - 23 - 28 Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$44.27

**Iron Worker (Ornamental) - 29 - 36 Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$46.70

(Local #580)

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**IRON WORKER - STRUCTURAL**  
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

**Iron Worker (Structural) - 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$26.12  
Supplemental Benefit Rate per Hour: \$50.22

**Iron Worker (Structural) - 7- 18 Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$26.72  
Supplemental Benefit Rate per Hour: \$50.22

**Iron Worker (Structural) - 19 - 36 months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$27.32

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Supplemental Benefit Rate per Hour: \$50.22

(Local #40 and #361)

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**LABORER (FOUNDATION, CONCRETE, EXCAVATING, STREET PIPE  
LAYER & COMMON)**

(Ratio Apprentice to Journeyman: 1 to 1, 1 to 3)

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - First  
1000 hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 50% of Journeyman's rate

Supplemental Rate Per Hour: \$40.63

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) -  
Second 1000 hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 60% of Journeyman's rate

Supplemental Rate Per Hour: \$40.63

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) -  
Third 1000 hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 75% of Journeyman's rate

Supplemental Rate Per Hour: \$40.63

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) -  
Fourth 1000 hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 90% of Journeyman's rate

Supplemental Rate Per Hour: \$40.63

(Local #731)

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## **MARBLE MECHANICS**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

### **Cutters & Setters - First 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

### **Cutters & Setters - Second 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 55% of Journeyperson's rate

### **Cutters & Setters - Third 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 65% of Journeyperson's rate

### **Cutters & Setters - Fourth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

### **Cutters & Setters - Fifth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 85% of Journeyperson's rate

### **Cutters & Setters - Sixth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 95% of Journeyperson's rate

### **Polishers & Finishers - First 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

### **Polishers & Finishers - Second 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

### **Polishers & Finishers - Third 750 Hours**

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Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

**Polishers & Finishers - Fourth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 90% of Journeyperson's rate

(Local #7)

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**MASON TENDER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Mason Tender - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$21.39

Supplemental Benefit Rate per Hour: \$19.65

**Mason Tender - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$22.54

Supplemental Benefit Rate per Hour: \$19.65

**Mason Tender - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$24.29

Supplemental Benefit Rate per Hour: \$19.70

**Mason Tender - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$26.95

Supplemental Benefit Rate per Hour: \$19.70

(Local #79)

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**METALLIC LATHER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Metallic Lather (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$28.38

Supplemental Benefit Rate per Hour: \$10.96

**Metallic Lather (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$32.38

Supplemental Benefit Rate per Hour: \$12.96

**Metallic Lather (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$35.38

Supplemental Benefit Rate per Hour: \$17.12

**Metallic Lather (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$37.38

Supplemental Benefit Rate per Hour: \$17.92

(Local #46)

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**MILLWRIGHT**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

**Millwright (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$28.33

Supplemental Benefit Rate per Hour: \$34.28

**Millwright (Second Year)**

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Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$33.48**  
Supplemental Benefit Rate per Hour: **\$37.88**

**Millwright (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$38.63**  
Supplemental Benefit Rate per Hour: **\$42.13**

**Millwright (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$48.93**  
Supplemental Benefit Rate per Hour: **\$48.69**

(Local #740)

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**PAVER AND ROADBUILDER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Paver and Roadbuilder - First Year (Minimum 1000 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$27.86**  
Supplemental Benefit Rate per Hour: **\$19.25**

**Paver and Roadbuilder - Second Year (Minimum 1000 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$29.50**  
Supplemental Benefit Rate per Hour: **\$19.25**

(Local #1010)

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**PAINTER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

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**Painter - Brush & Roller - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$17.00

Supplemental Benefit Rate per Hour: \$13.42

**Painter - Brush & Roller - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$21.25

Supplemental Benefit Rate per Hour: \$17.43

**Painter - Brush & Roller - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$25.50

Supplemental Benefit Rate per Hour: \$20.50

**Painter - Brush & Roller - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$34.00

Supplemental Benefit Rate per Hour: \$26.20

(District Council of Painters)

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**PAINTER - METAL POLISHER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

**Metal Polisher (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$11.75

Supplemental Benefit Rate per Hour: \$5.13

**Metal Polisher (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$13.00

Supplemental Benefit Rate per Hour: \$5.13

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**Metal Polisher (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$15.75  
Supplemental Benefit Rate per Hour: \$5.13

(Local 8A-28)

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**PAINTER - STRUCTURAL STEEL**  
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Painters - Structural Steel (First Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

**Painters - Structural Steel (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

**Painters - Structural Steel (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #806)

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**PLASTERER**  
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Plasterer - First Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 40% of Journeyperson's rate  
Supplemental Rate Per Hour: \$13.59

**Plasterer - First Year: 2nd Six Months**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 45% of Journeyperson's rate  
Supplemental Rate Per Hour: \$14.07

**Plasterer - Second Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$16.04

**Plasterer - Second Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$17.12

**Plasterer - Third Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$19.29

**Plasterer - Third Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$20.37

(Local #530)

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**PLASTERER - TENDER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Plasterer Tender - First Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$21.39  
Supplemental Benefit Rate per Hour: \$19.65

**Plasterer Tender - Second Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$22.54

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: \$19.65

**Plasterer Tender - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$24.29

Supplemental Benefit Rate per Hour: \$19.70

**Plasterer Tender - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$26.95

Supplemental Benefit Rate per Hour: \$19.70

(Local #79)

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**PLUMBER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Plumber - First Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$16.28

Supplemental Benefit Rate per Hour: \$5.43

**Plumber - First Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$19.28

Supplemental Benefit Rate per Hour: \$6.43

**Plumber - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$26.35

Supplemental Benefit Rate per Hour: \$17.10

**Plumber - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$28.45

Supplemental Benefit Rate per Hour: \$17.10



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Plumber - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$31.30  
Supplemental Benefit Rate per Hour: \$17.10

**Plumber - Fifth Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$32.70  
Supplemental Benefit Rate per Hour: \$17.10

**Plumber - Fifth Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$44.77  
Supplemental Benefit Rate per Hour: \$17.10

(Plumbers Local #1)

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**POINTER, WATERPROOFER, CAULKER, SANDBLASTER,  
STEAMBLASTER**

(Exterior Building Renovation)

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

**Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - First Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$25.89  
Supplemental Benefit Rate per Hour: \$13.64

**Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Second Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$28.97  
Supplemental Benefit Rate per Hour: \$18.15

**Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Third Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$34.12  
Supplemental Benefit Rate per Hour: \$20.90

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.33**

Supplemental Benefit Rate per Hour: **\$21.60**

(Bricklayer District Council)

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**ROOFER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 2)

**Roofer - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 35% of Journeyman's Rate

**Roofer - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 50% of Journeyman's Rate

**Roofer - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 60% of Journeyman's Rate

**Roofer - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 75% of Journeyman's Rate

(Local #8)

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**SHEET METAL WORKER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

**Sheet Metal Worker (0-6 Months)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 25% of Journeyperson's rate  
Supplemental Rate Per Hour: \$6.35

**Sheet Metal Worker (7-18 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 35% of Journeyperson's rate  
Supplemental Rate Per Hour: \$17.12

**Sheet Metal Worker (19-30 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 45% of Journeyperson's rate  
Supplemental Rate Per Hour: \$23.54

**Sheet Metal Worker (31-36 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$27.70

**Sheet Metal Worker (37-42 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$29.11

**Sheet Metal Worker (43-48 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$33.96

**Sheet Metal Worker (49-54 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$36.07

**Sheet Metal Worker (55-60 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$38.15

(Local #28)

## **SIGN ERECTOR**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

### **Sign Erector - First Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 35% of Journeyperson's rate  
Supplemental Rate Per Hour: \$14.72

### **Sign Erector - First Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 40% of Journeyperson's rate  
Supplemental Rate Per Hour: \$16.71

### **Sign Erector - Second Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 45% of Journeyperson's rate  
Supplemental Rate Per Hour: \$18.68

### **Sign Erector - Second Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$20.68

### **Sign Erector - Third Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$27.72

### **Sign Erector - Third Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$30.57

### **Sign Erector - Fourth Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Rate Per Hour: \$33.31

### **Sign Erector - Fourth Year: 2nd Six Months**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$35.83

**Sign Erector - Fifth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$38.32

**Sign Erector - Sixth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$40.81

(Local #137)

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**STEAMFITTER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Steamfitter - First Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate and Supplemental Per Hour: 40% of Journeyperson's rate

**Steamfitter - Second Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate and Supplemental Rate Per Hour: 50% of Journeyperson's rate.

**Steamfitter - Third Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate and Supplemental Rate per Hour: 65% of Journeyperson's rate.

**Steamfitter - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate and Supplemental Rate Per Hour: 80% of Journeyperson's rate.

**Steamfitter - Fifth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate and Supplemental Rate Per Hour: 85% of Journeyperson's rate.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

(Local #638)

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**STONE MASON - SETTER**  
(Ratio Apprentice of Journeyperson: 1 to 1, 1 to 2)

**Stone Mason - Setters - First 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

**Stone Mason - Setters - Second 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

**Stone Mason - Setters - Third 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 70% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

**Stone Mason - Setters - Fourth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

**Stone Mason - Setters - Fifth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 90% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

**Stone Mason - Setters - Sixth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 100% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

(Bricklayers District Council)

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

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**TAPER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

**Drywall Taper - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 40% of Journeyman's rate

**Drywall Taper - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 60% of Journeyman's rate

**Drywall Taper - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 80% of Journeyman's rate

(Local #1974)

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**TILE LAYER - SETTER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

**Tile Layer - Setter - First 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 50% of Journeyman's rate

**Tile Layer - Setter - Second 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 55% of Journeyman's rate

**Tile Layer - Setter - Third 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 65% of Journeyman's rate

**Tile Layer - Setter - Fourth 750 Hours**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

**Tile Layer - Setter - Fifth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 85% of Journeyperson's rate

**Tile Layer - Setter - Sixth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 95% of Journeyperson's rate

(Local #7)

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**TIMBERPERSON**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

**Timberperson - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 40% of Journeyperson's rate

Supplemental Rate Per Hour: \$32.79

**Timberperson - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$32.79

**Timberperson - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 65% of Journeyperson's rate

Supplemental Rate Per Hour: \$32.79

**Timberperson - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: \$32.79

(Local #1536)



**(NO TEXT THIS PAGE)**



Leonard A. Mancusi  
SENIOR ASSISTANT COMPTROLLER

THE CITY OF NEW YORK  
OFFICE OF THE COMPTROLLER  
1 CENTRE STREET ROOM 1120  
NEW YORK, N.Y. 10007-2341

TELEPHONE: (212) 669-3  
FAX NUMBER: (212) 669-8

ALAN G. HEVESI  
COMPTROLLER

**MEMORANDUM**

November 6, 2000

To Agency Chief Contracting Officers

From: Leonard A. Mancusi *LMancusi*

Re: Security at Construction Sites  
.....

*Prior to the enactment of Administrative Code §6-109, security guards on construction sites were not subject to prevailing wages. Security guards under the New York State labor law are covered under §230 which provides that prevailing wages are to be paid for security guards in existing buildings. §6-109 of the Administrative Code which was enacted in 1996 closed this loophole by including all security guards working pursuant to a city contract as a prevailing wage trade.*

*Although some construction contract boilerplate language has been amended to include §6-109, sub-contractors performing security services have advised us that they were not aware of this provision and, since traditionally, security guards were not a covered trade on construction sites, and they were not advised by a prime contractor that they would have to pay prevailing wages, they have not been doing so.*

*To avoid the possibility of issuing stop payments against prime contractors for the failure of their security service sub-contractors to pay*

*prevailing wages, we suggest that you write to all your existing security guard sub-contractors and their primes and in the future, upon approval of a security guard sub-contractor, advise the contractors of their obligation to pay prevailing wages under §6-109 of the Administrative Code.*

*As always, your cooperation is appreciated.*

**LAM:er**  
**ACCO.SECURITY AT SITES**



**Department of  
Design and  
Construction**

**INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN**

**VOLUME 2 OF 3**

**PROJECT ID: P-1STARLP**

**BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II, STAGE 2 BRIDGE THE  
CRITICAL SOUTH BRONX GAP**

**BETWEEN WESTCHESTER AVENUE AND EAST 174TH STREET**

**INCLUDING CONSTRUCTION OF EAST 172ND STREET PEDESTRIAN BRIDGE OVER  
AMTRAK (BIN#: 2-24124-0), SOUTH GREENWAY PEDESTRIAN BRIDGE OVER THE  
BRONX RIVER (BIN#: 2-26990-0), DRAINAGE, RETAINING STRUCTURES,  
GREENWAY, STREET LIGHTING, LANDSCAPING AND TRAFFIC WORK**

**Together With All Work Incidental Thereto**

**BOROUGH OF THE BRONX  
CITY OF NEW YORK**

*Contractor.*

Dated \_\_\_\_\_, 20\_\_\_\_

**APPROVED AS TO FORM  
CERTIFIED AS TO LEGAL AUTHORITY**

*Acting Corporation Counsel*

JP  
4.19.18

Dated April 19, 20 18



**Department of  
Design and  
Construction**

**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

30-30 THOMSON AVENUE  
LONG ISLAND CITY, NEW YORK 11101-3045  
TELEPHONE (718) 391-1000  
WEBSITE [www1.nyc.gov/site/ddc/index.page](http://www1.nyc.gov/site/ddc/index.page)

**VOLUME 3 OF 3**

**SCHEDULE A  
SPECIFICATIONS AND  
REVISIONS TO STANDARD  
SPECIFICATIONS**

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND  
REQUIRED FOR:

**PROJECT ID: P-1STARLP**

**BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II, STAGE 2  
BRIDGE THE CRITICAL SOUTH BRONX GAP**

**BETWEEN WESTCHESTER AVENUE AND EAST 174TH STREET**

**INCLUDING CONSTRUCTION OF EAST 172ND STREET PEDESTRIAN  
BRIDGE OVER AMTRAK (BIN#: 2-24124-0), SOUTH GREENWAY  
PEDESTRIAN BRIDGE OVER THE BRONX RIVER (BIN#: 2-26990-0),  
DRAINAGE, RETAINING STRUCTURES, GREENWAY, STREET  
LIGHTING, LANDSCAPING AND TRAFFIC WORK**

Together With All Work Incidental Thereto

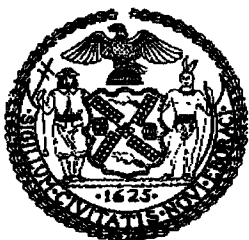
**BOROUGH OF THE BRONX  
CITY OF NEW YORK**

FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY

*THE RBA GROUP*

**MAY 22, 2017**

NYS DOT PIN X027.08  
Fed. Aid Project No. \_\_\_\_\_





## SPECIFICATIONS AND STANDARDS OF NEW YORK CITY

The following New York City Department of Transportation (NYCDOT) reference documents are available on-line at:

<http://www1.nyc.gov/site/ddc/resources/publications.page> or for purchase between 9:00 A.M. and 3:00 P.M. at 55 Water St., Ground Floor, NYC, N.Y. 10041. Contact: Ms. Vivian Valdez, Tel. (212) 839-9434

1. NYCDOT Standard Highway Specifications, August 1, 2015
2. NYCDOT Standard Highway Details of Construction, July 1, 2010

The following New York City Department of Transportation (NYCDOT) reference documents are available on-line at:

<http://www.nyc.gov/html/dot/html/about/dotlibrary.shtml#spec> or for purchase between 9:00 A.M. and 3:00 P.M. at 55 Water St., Ground Floor, NYC, N.Y. 10041. Contact: Ms. Vivian Valdez, Tel. (212) 839-9434

1. Specifications for furnishing all labor and material necessary and required for the installation, removal or relocation of street lighting equipment in the City of New York, 1992.
2. Standard Drawings, Division of Street Lighting
3. Specifications for Traffic Signals and Intelligent Transportation Systems Construction and Equipment
4. Standard Drawings for Traffic Signals

The following reference documents for New York City Department of Environmental Protection (NYCDEP) are available on-line at:

<http://www1.nyc.gov/site/ddc/resources/publications.page> or for pick up between 8:00 A.M. and 4:00 P.M. at 30-30 Thomson Avenue, 3rd Floor, Division of Infrastructure, Long Island City, N.Y. 11101. Contact: Mr. Nader Soliman, Tel. (718) 391-1179

1. NYCDEP Standard Sewer and Water Main Specifications, July 1, 2014
2. NYCDEP Instructions for Concrete Specifications, Jan. 92
3. NYCDEP General Specification 11-Concrete, November 1991
4. NYCDEP Sewer Design Standards, (September 2007) Revised January 2009

The following reference documents for New York City Department of Environmental Protection (NYCDEP) are available on-line at:

<http://www1.nyc.gov/site/ddc/resources/publications.page> or for pick up between 8:00 A.M. and 4:00 P.M. at 30-30 Thomson Avenue, 3rd Floor, Division of Infrastructure, Long Island City, N.Y. 11101. Contact: Mr. Robert Kuhlmann, Tel. (718) 391-2145

1. NYCDEP Water Main Standard Drawings, November 2010
2. Specifications for Trunk Main Work, July 2014
3. Standards for Green Infrastructure, latest version, available only on-line at:  
[http://www.nyc.gov/html/dep/html/stormwater/green\\_infrastructure\\_standards.shtml](http://www.nyc.gov/html/dep/html/stormwater/green_infrastructure_standards.shtml)

Water main work material specifications are available at the Department of Environmental Protection, 59-17 Junction Boulevard, 3rd Floor Low-Rise Building, Flushing, N.Y. 11373-5108.

Contact: Mr. Tarlock Sahansra, P.E., Tel. (718) 595-5302  
E-mail: TSAHANSRA@DEP.NYC.GOV

## SPECIFICATIONS AND STANDARDS OF NEW YORK CITY

Standard Specifications and Drawings for New York City Fire Department Communications facilities are available from the FDNY Facilities Management Bureau, Plant Operations Engineering, 316 Sgt. Beers Avenue Cluster 1 Box 16, Fort Totten, N.Y. 11359.  
Contact: Mr. Ed Durkin, Tel. (718) 281-3933

Tree Planting Standards of the City of New York Parks & Recreation are available at the following Department of Parks & Recreation website:  
<http://www.nycgovparks.org/pagefiles/53/Tree-Planting-Standards.pdf>

## SPECIFICATIONS AND STANDARDS OF PRIVATE UTILITIES

The Following reference document for Private Utility Work is available for pick up between 8:30 A.M. and 4:00 P.M. at 30-30 Thomson Avenue, First Floor Bid Procurement Room, L.I.C., N.Y. 11101.

1. CET SPECIFICATIONS AND SKETCHES dated November 2010



**VOLUME 3 OF 3****TABLE OF CONTENTS**

<b><u>SECTION</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>PAGES</u></b>
SCHEDULE A	GENERAL CONDITIONS TO CONSTRUCTION CONTRACT	SA-1 to SA-12
I - PAGES	NEW SECTIONS	I-1 to I-154
S – PAGES	SPECIAL PROVISIONS	S-1 to S-406
TF-PAGES	FHWA FUNDED PROJECTS FHWA FUNDING ATTACHMENTS	TF-1 to TF-K2
SW-PAGES	SEWER AND WATER MAIN REVISIONS TO SPECIFICATIONS	SW1 to SW4
U - PAGES	SECTION U (VERSION 2.0)	U-1 to U-16

PROJECT ID.: P-1STARLP

(NO TEXT ON THIS PAGE)

**SCHEDULE A****(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT  
(INCLUDING GENERAL CONDITIONS RELATED TO ARTICLE 22 – INSURANCE)****PART I. REQUIRED INFORMATION**

<p><b><u>INFORMATION FOR BIDDERS SECTION 26 BID SECURITY</u></b></p> <p>The <b>Contractor</b> shall obtain a bid security in the amount indicated to the right.</p>	<p>Required provided the TOTAL BID PRICE set forth on the Bid Form is \$1,000,000. or more.</p> <p>Certified Check: 5% of Bid Amount or Bond: 10% of Bid Amount</p>
<p><b><u>INFORMATION FOR BIDDERS SECTION 26 PERFORMANCE AND PAYMENT BONDS</u></b></p> <p>The <b>Contractor</b> shall obtain performance and payment bonds in the amount indicated to the right.</p>	<p>Required for contracts in the amount of \$1,000,000 or more.</p> <p>Performance Security and Payment Security shall each be in an amount equal to 100% of the Contract Price.</p>
<p><b><u>INFORMATION FOR BIDDERS DEPARTMENT OF DESIGN AND CONSTRUCTION SAFETY REQUIREMENTS</u></b></p> <p>The <b>Contractor</b> shall provide the safety personnel as indicated to the right.</p>	<p>■ Project Safety Representative</p> <p>■ Dedicated, full-time Project Safety Manager</p>
<p><b><u>CONTRACT ARTICLE 14 DATE FOR SUBSTANTIAL COMPLETION</u></b></p> <p>The <b>Contractor</b> shall substantially complete the <b>Work</b> in the number of calendar days indicated to the right.</p>	<p>See Page SA-4</p>
<p><b><u>CONTRACT ARTICLE 15 LIQUIDATED DAMAGES</u></b></p> <p>If the <b>Contractor</b> fails to substantially complete the <b>Work</b> within the time fixed for substantial completion plus authorized time extensions or if the <b>Contractor</b>, in the sole determination of the <b>Commissioner</b>, has abandoned the <b>Work</b>, the <b>Contractor</b> shall pay to the <b>City</b> the amount indicated to the right.</p>	<p>\$7,000.00 for each consecutive calendar day over substantial completion time</p>
<p><b><u>CONTRACT ARTICLE 17. SUB-CONTRACTOR</u></b></p> <p>The <b>Contractor</b> shall not make subcontracts totaling an amount more than the percentage of the total <b>Contract</b> price indicated to the right.</p>	<p>Not to exceed <u>49</u> % of the <b>Contract</b> price</p>

<p align="center"><b><u>CONTRACT ARTICLE 21.</u></b> <b><u>RETAINAGE</u></b></p> <p>The <b>Commissioner</b> shall deduct and retain until the substantial completion of the <b>Work</b> the percent value of the <b>Work</b> indicated to the right.</p>	<p><u>0</u> % of the value of the <b>Work</b></p>
<p align="center"><b><u>CONTRACT ARTICLE 22.</u></b> <b><u>(Per Directions Below)</u></b></p>	<p>See pages SA-5 through SA-14</p>
<p align="center"><b><u>CONTRACT ARTICLE 24.</u></b> <b><u>DEPOSIT GUARANTEE</u></b></p> <p>As security for the faithful performance of its obligations, the <b>Contractor</b>, upon filing its requisition for payment on <b>Substantial Completion</b>, shall deposit with the <b>Commissioner</b> a sum equal to the percentage of the <b>Contract</b> price indicated to the right.</p>	<p>1% of <b>Contract</b> price</p>
<p align="center"><b><u>CONTRACT ARTICLE 24.</u></b> <b><u>PERIOD OF GUARANTEE</u></b></p> <p>Periods of maintenance and guarantee other than the period set forth in Article 24.1 are indicated to the right.</p>	<p>Twenty-four (24) Months for Tree Planting</p>
<p align="center"><b><u>CONTRACT ARTICLE 74.</u></b> <b><u>STATEMENT OF WORK</u></b></p> <p>The <b>Contractor</b> shall furnish all labor and materials and perform all <b>Work</b> in strict accordance with the <b>Contract Drawings</b>, <b>Specifications</b>, and all <b>Addenda</b> thereto, as shown in the column to the right.</p>	<p><b>Addenda</b>, numbered:</p> <p>_____</p> <p>_____</p>
<p align="center"><b><u>CONTRACT ARTICLE 75.</u></b> <b><u>COMPENSATION TO BE PAID TO CONTRACTOR</u></b></p> <p>The <b>City</b> shall pay and the <b>Contractor</b> shall accept in full consideration for the performance of the <b>Contract</b>, subject to additions and deductions as provided herein, the total sum <b>shown in the column to the right</b>, being the amount at which the <b>Contract</b> was awarded to the <b>Contractor</b> at a public letting thereof, based upon the <b>Contractor's</b> bid for the <b>Contract</b>.</p>	<p>Amount for which the <b>Contract</b> was Awarded:</p> <p>_____ Dollars</p> <p>(\$ _____)</p>
<p align="center"><b><u>CONTRACT ARTICLE 79.</u></b> <b><u>PARTICIPATION BY MINORITY-OWNED AND</u></b> <b><u>WOMEN-OWNED BUSINESS ENTERPRISES IN CITY</u></b> <b><u>PROCUREMENT</u></b></p>	<p>FHWA DBE goal of 14%, see page TF-D1, herein this book Volume 3 of 3</p>

<p align="center"><b><u>NYS STANDARD SPECIFICATIONS</u></b>  <b><u>SECTION 637</u></b>  <b><u>LIQUIDATED DAMAGES FOR ENGINEER'S FIELD OFFICE, LABORATORY AND EQUIPMENT</u></b></p> <p>If the Contractor fails to satisfactorily provide the field office and all equipment specified in <b>Section 637 - Engineer's Field Office, Laboratory and Equipment</b> and/or if a cited deficiency exceed seventy two (72) hours after notice from the Engineer in writing, or is permitted to recur, liquidated damages will be assessed in the amount specified herein for each subsequent calendar day or part thereof that a cited deficiency resulting in nonpayment, as described in <b>Section 637-5.01</b>, is not corrected.</p>	<p>\$ <u>500.00</u> for each calendar day of deficiency</p>
<p align="center"><b><u>STANDARD HIGHWAY SPECIFICATIONS</u></b>  <b><u>SECTION 619</u></b>  <b><u>NON-PAYMENT AND LIQUIDATED DAMAGES FOR WORK ZONE TRAFFIC CONTROL</u></b></p>	<p>\$ <u>3,000.00</u> for each calendar day during which there are substantial deficiencies in compliance with the requirements of this section, <b><u>no payment</u></b> will be made under basic work zone traffic control.</p> <p><b><u>Dollar-Cents</u></b> amount for <b><u>liquidated damage</u></b> for any item in this section will be assessed for each calendar day or part thereof in addition to non-payment above and will be calculated by <b>Engineer</b> as per Department guidance.</p>

\* For additional liquidated damages see Page S-8 (Book 3 of 3).

**Date for Substantial Completion (Reference: Article 14)**

The Contractor shall substantially complete the Work within the Final Contract Duration determined in accordance with the terms and conditions set forth herein.

The Base Contract Duration for this project is 820 consecutive calendar days ("ccds").

The Final Contract Duration shall be the Base Contract Duration when a check mark is indicated before the word "NO", below, and shall be the Base Contract Duration adjusted by the table set forth below when a check mark is indicated before the word "YES", below.

✓ YES        NO

When the Final Contract Duration is indicated above to be adjusted by the table below, the table may increase the Base Contract Duration depending on the date of scheduled substantial completion to avoid a scheduled substantial completion of the Work during the winter months. The date of scheduled substantial completion shall be determined by adding the Base Contract Duration to the date specified to commence work in the written Notice to Proceed. The Final Contract Duration shall then be determined as follows:

- (a) Find the row that corresponds to the month of substantial completion based on the Base Contract Duration added to the date specified to commence work in the written Notice to Proceed.
- (b) Find the number of days to be added to the Base Contract Duration in the table below. Add that number of days to the Base Contract Duration to obtain the Final Contract Duration in consecutive calendar days.

<b>Month of Substantial Completion based on the Base Contract Duration</b>	<b>Number of Days of adjustment</b>
<b>January</b>	150
<b>February</b>	120
<b>March</b>	90
<b>April</b>	60
<b>May</b>	30
<b>June</b>	0
<b>July</b>	0
<b>August</b>	0
<b>September</b>	0
<b>October</b>	0
<b>November – December 15</b>	0
<b>December 16 – December 31</b>	180

In addition, should Item No. 9.30, "Storm Water Pollution Prevention," exist in the Contract and the required Storm Water Pollution Prevention Plan (SWPPP) does not conform to NYSDEC's recommended Standards, an additional 60 ccd shall be added to the above Final Contract Duration.

**(GENERAL CONDITIONS RELATING TO ARTICLE 22 – INSURANCE)****PART II. TYPES OF INSURANCE, MINIMUM LIMITS AND SPECIAL CONDITIONS**

**Note:** All certificate(s) of insurance submitted pursuant to Contract Article 22.3. 3 must be accompanied by a Certification by Broker consistent with Part III below and include the following information:

- For each insurance policy, the name and NAIC number of issuing company, number of policy, and effective dates;
- Policy limits consistent with the requirements listed below;
- Additional insureds or loss payees consistent with the requirements listed below; and
- The number assigned to the Contract by the City (in the “Description of Operations” field).

Insurance indicated by a blackened box (■) or by X in a □ to left will be required under this contract

Types of Insurance (per Article 22 in its entirety, including listed paragraph)	Minimum Limits and Special Conditions
<p>■ Commercial General Liability Art. 22.1.1</p>	<p>The minimum limits shall be \$ <u>3,000,000</u> per occurrence and \$ <u>6,000,000</u> per project aggregate applicable to this <b>Contract</b>.</p> <p>Additional Insureds:</p> <ol style="list-style-type: none"> <li>1. City of New York, including its officials and employees, with coverage at least as broad as ISO Form CG 20 10 and CG 20 37,</li> <li>2. All person(s) or organization(s), if any, that Article 22.1.1(b) of the <b>Contract</b> requires to be named as Additional Insured(s), with coverage at least as broad as ISO Form CG 20 26. The Additional Insured endorsement shall either specify the entity's name, if known, or the entity's title (e.g., Project Manager),</li> <li>3. All person(s) or organization(s) serving in the functions defined in Article 2, such as: Engineer, Architect, Project Manager, Resident Engineer, etc.</li> <li>4. New York State, including its officials and employees,</li> <li>5. Federal Highway Administration (FHWA), its officials and employees.</li> <li>6. AMTRAK Rail Road including its officials and employees</li> <li>7. CSXT Rail Road including its officials and employees.</li> </ol>

<p> <input checked="" type="checkbox"/> Workers' Compensation      Art. 22.1.2  <input checked="" type="checkbox"/> Disability Benefits Insurance      Art. 22.1.2  <input checked="" type="checkbox"/> Employers' Liability      Art. 22.1.2  <input checked="" type="checkbox"/> Jones Act      Art. 22.1.3  <input checked="" type="checkbox"/> U.S. Longshoremen's and Harbor Workers Compensation Act      Art. 22.1.3 </p>	<p>Workers' Compensation, Employers' Liability, and Disability Benefits Insurance: Statutory per New York State law without regard to jurisdiction.</p> <p>Note: The following forms are acceptable: (1) New York State Workers' Compensation Board Form No. C-105.2, (2) State Insurance Fund Form No. U-26.3, (3) New York State Workers' Compensation Board Form No. DB-120.1 and (4) Request for WC/DB Exemption Form No. CE-200. The City will not accept an ACORD form as proof of Workers' Compensation or Disability Insurance.</p> <p>Jones Act and U.S. Longshoremen's and Harbor Workers' Compensation Act: Statutory per U.S. Law.</p> <p><input type="checkbox"/> Additional Requirements:</p> <p>(1) NYCT "OUTSIDE CONTRACT" INSURANCE REQUIREMENTS: Workers' Compensation Insurance (including Employer's Liability Insurance) with limits of not less than \$2,000,000, which limit may be met by a combination of primary and excess insurance meeting the statutory limits of New York State. (2) Two (2) certificates of such insurance shall be furnished to the Director, Risk Management, MTA Risk and Insurance Management Standards, Enforcement and Claims Unit, 2 Broadway, 21st Floor, New York, NY 10004.</p>
<p><input type="checkbox"/> Builders' Risk      Art. 22.1.4</p>	<p><input type="checkbox"/> Required: 100% of total bid amount</p> <p><input type="checkbox"/> Required: 100 % of total bid amount for Item(s):</p> <p><b>Contractor</b> the Named Insured; the <b>City</b> both an Additional Insured and one of the loss payees as its interests may appear.</p> <p>If the <b>Work</b> does not involve construction of a new building or gut renovation work, the <b>Contractor</b> may provide an installation floater in lieu of Builders Risk insurance.</p> <p>Note: Builders Risk Insurance may terminate upon <b>Substantial Completion</b> of the <b>Work</b> in its entirety.</p>



<input checked="" type="checkbox"/> Commercial Auto Liability      Art. 22.1.5	<p>\$ <u>2,000,000</u> per accident combined single limit</p> <p>If vehicles are used for transporting hazardous materials, the <b>Contractor</b> shall provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90</p> <p>Additional Insureds:</p> <p>(1) City of New York, including its officials and employees, and</p> <p>(2) New York State, including its officials and employees; and,</p> <p>(3) FHWA, including its officials and employees.</p>
<input checked="" type="checkbox"/> Contractors Pollution Liability      Art. 22.1.6	<p>\$ <u>5,000,000</u> per occurrence \$ <u>5,000,000</u> aggregate</p> <p>Additional Insureds:</p> <p>1. City of New York, including its officials and employees, and</p> <p>2. _____</p> <p>3. _____</p>
<input type="checkbox"/> Marine Protection and Indemnity Art. 22.1.7(a)	<p>\$ _____ each occurrence \$ _____ aggregate</p> <p>Additional Insureds:</p> <p>1. City of New York, including its officials and employees, and</p> <p>2. _____</p> <p>3. _____</p>
<input type="checkbox"/> Hull and Machinery Insurance      Art. 22.1.7(b)	<p>\$ _____ per occurrence \$ _____ aggregate</p> <p>Additional Insureds:</p> <p>1. City of New York, including its officials and employees, and</p> <p>2. _____</p> <p>3. _____</p>

<p>■ Marine Pollution Liability Art. 22.1.7(c)</p>	<p>\$ <u>1,000,000</u> per occurrence</p> <p>\$ <u>1,000,000</u> aggregate</p> <p>Additional Insureds:</p> <ol style="list-style-type: none"> <li>1. City of New York, including its officials and employees, and</li> <li>2. _____</li> <li>3. _____</li> </ol>
<p>[OTHER] Art. 22.1.8</p> <p>■ Railroad Protection Liability Policy</p> <p>(ISO-RIMA or equivalent form) approved by Permittor covering the work to be performed at the designated site and affording protection for damages arising out of bodily injury or death, physical damage to or destruction of property, including damage to the Insured's own property and conforming to the following:</p> <ul style="list-style-type: none"> <li>• Policy Endorsement CG 28 31 - Pollution Exclusion Amendment is required to be endorsed onto the policy when environmental-related work and/or exposures exist.</li> <li>• Indicate the Name and address of the Contractor to perform the work, the Contract # and the name of the railroad property where the work is being performed and the Agency Permit.</li> <li>• Evidence of Railroad Protective Liability Insurance, must be provided in the form of the <u>Original Policy. A detailed Insurance Binder (ACORD or Manuscript Form) will be accepted pending issuance of the Original Policy, which must be provided within 30 days of the Binder Approval.</u></li> </ul>	<p>\$ <u>2,000,000</u> per occurrence</p> <p>\$ <u>6,000,000</u> annual aggregate</p> <p>Named Insureds:</p> <ol style="list-style-type: none"> <li>1. AMTRAK</li> <li>2. CSXT</li> </ol>

[OTHER]

Art. 22.1.8

■ Professional Liability

- A. The Contractor's Professional Engineer shall maintain and submit evidence of Professional Liability Insurance in the minimum amount of \$1,000,000 per claim. The policy or policies shall include an endorsement to cover the liability assumed by the Contractor under this Contract arising out of the negligent performance of professional services or caused by an error, omission or negligent act of the Contractor's Professional Engineer or anyone employed by the Contractor's Professional Engineer.
- B. Claims-made policies will be accepted for Professional Liability Insurance. All such policies shall have an extended reporting period option or automatic coverage of not less than two (2) years. If available as an option, the Contractor's Professional Engineer shall purchase extended reporting period coverage effective on cancellation or termination of such insurance unless a new policy is secured with a retroactive date, including at least the last policy year.

[OTHER]

Art. 22.1.8

■ Engineer's Field Office

**Section 637, NYS DOT Standard Highway Specifications**

Fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage in the amount of \$40,000

[OTHER]

Art. 22.1.8

☐ The Following Additional Insurance Must Be Provided:

**Umbrella/Excess Liability Insurance** - The Contractor shall provide Umbrella/Excess Liability Insurance in the minimum amount of \$10,000,000 per Occurrence and \$10,000,000 in Aggregate. The policy terms and condition should be at least as broad as the underlying policies. The underlying policies should comply with the insurance provision as outlined by the contract. Defense cost should be in addition to the limit of liability. The City of New York, including its officials and employees, should be included as additional insured as respects to the noted project.

**SCHEDULE A**  
**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)**  
**(GENERAL CONDITIONS RELATING TO ARTICLE 22 – INSURANCE)**

**PART III. CERTIFICATES OF INSURANCE**

All certificates of insurance (except certificates of insurance solely evidencing Workers' Compensation Insurance, Employer's Liability Insurance, and/or Disability Benefits Insurance) must be accompanied by one of the following:

- (1) the Certification by Insurance Broker or Agent on the following page setting forth the required information and signatures;

-- OR --

- (2) copies of all policies as certified by an authorized representative of the issuing insurance carrier that are referenced in such certificate of insurance. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.



**SCHEDULE A**

**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)**

**PART IV. ADDRESS OF COMMISSIONER**

Wherever reference is made in Article 7 or Article 22 to documents to be sent to the **Commissioner** (e.g., notices, filings, or submissions), such documents shall be sent to the address set forth below or, in the absence of such address, to the **Commissioner's** address as provided elsewhere in this **Contract**.

\_\_\_\_\_  
DDC Director, Insurance Risk Manager

\_\_\_\_\_  
30 – 30 Thomson Avenue, 4th Floor (IDCNY Building)

\_\_\_\_\_  
Long Island City, NY 11101

\_\_\_\_\_  
(NO FURTHER TEXT ON THIS PAGE)

**I - PAGES**

## **NEW SECTIONS**

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### **NOTICE**

THE PAGES CONTAINED HEREIN ARE NEW SECTION OF WORK THAT SHALL APPLY TO AND BECOME A PART OF THE CONTRACT.

UNLESS OTHERWISE SPECIFIED, ALL SECTIONS, SUBSECTIONS, ARTICLES, AND SUBARTICLES AS REFERRED TO HEREIN (I-PAGES) ARE TO THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION'S (NYSDOT'S) STANDARD SPECIFICATIONS, DATED JANUARY 1, 2017.

ALL REFERENCES THEREIN THE I-PAGES, TO THE "DEPARTMENT", "MATERIALS BUREAU", "REGIONAL ENGINEER", "REGIONAL LANDSCAPE ARCHITECT ", "LANDSCAPE ARCHITECT", "DCETS" ETC., SHALL BE DEEMED TO MEAN THE "ENGINEER" AND/OR HIS DULY AUTHORIZED REPRESENTATIVE;. WHERE ANY REFERENCE IS MADE ON THE PLANS OR SPECIFICATIONS TO THE "STATE" OR ANY OF ITS OFFICIALS, THE CONTRACTOR SHALL SUBSTITUTE THE CITY OF NEW YORK, DEPARTMENT OF DESIGN AND CONSTRUCTION, AND ITS OFFICIALS AND EMPLOYEES. THE NYSDOT SPECIFICATIONS DESCRIBED ABOVE NEITHER IMPLY THE STATE'S INVOLVEMENT IN ANY TESTING AND APPROVAL OF MATERIALS, NOR IN THE SUPERVISION OF CONSTRUCTION.

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Project ID. P-1STARLP

(NO TEXT ON THIS PAGE)

**ITEM 203.02990006 PAVEMENT EXCAVATION**

**DESCRIPTION:**

Under this item, the Contractor shall remove and dispose of existing cement concrete pavement or asphalt overlaid cement concrete pavement as indicated in the plans or as ordered by the Engineer.

**MATERIALS:** Not specified.

**CONSTRUCTION DETAILS:**

The Contractor shall carefully line cut the perimeter of concrete pavement to be removed so as to form boundaries to the removal.

**METHOD OF MEASUREMENT:**

The quantity to be paid for under this item shall be the number of square feet of cement concrete pavement or asphalt overlaid concrete pavement removed and disposed of as shown on the Plans or ordered by the Engineer.

**BASIS OF PAYMENT:**

The unit price bid per square foot for this item shall include the cost of furnishing all labor, materials, and equipment necessary to remove and dispose of concrete pavement, mesh reinforcement, transverse joints and longitudinal ties including all required line cutting.

Payment shall be the same regardless of whether the entire thickness of pavement is removed or simply the top surface of pavement is removed to provide a transition for resurfacing.

**ITEM 203.30XX0063 - EXCAVATION AND DISPOSAL OF ROCK, EMERGENCY  
STANDBY**

**DESCRIPTION:**

This work shall consist of excavation and disposal of rock required pursuant to the implementation of an Emergency Stand-by Contract. This item of work will be used only in the instance where work of an emergency nature is needed and will include only that portion of the excavation deemed by the Geotechnical Engineering Bureau to be firm rock, in its natural position, that in the opinion of the State, can not be practically excavated by mechanical methods, and will require pre-splitting under the provisions of Section 203-3.05.

**MATERIALS:**

Not applicable.

**CONSTRUCTION DETAILS:**

Sections 203-3.01 and 203-3.05 shall apply.

**METHOD OF MEASUREMENT:**

The provisions of Section 203-4.01 and 203-4.03 shall apply. In addition, only that portion of excavation consisting of rock shall be included in the computation for this work. Excavation of soil, boulders, previously fallen ledge, boulders or ledge that have been pulled off a slope, loose rock, overburden, concrete, hardpan, or rock that could be mechanically excavated (ripped) in the opinion of the State (as determined by the Geotechnical Engineering Bureau) shall not be included in the computation of this work. No portion of a slope excavated to a slope flatter than one vertical on one horizontal shall be included in this work. Work done pursuant to Section 206 shall not be included in the computation of this work.

The State may, at its option, compute the quantity to be paid by weighing the rock (as defined in the above paragraph) and converting the weight to equivalent volume in cubic meters based on the specific gravity of the rock excavated. In such case suitable truck scales shall be provided by the contractor.

**BASIS OF PAYMENT:**

All provisions of Section 203-5.01 shall apply. In addition, the unit price bid shall include the cost of furnishing and maintaining truck scales.

Payment will be made under:

<b><u>ITEM NO.</u></b>	<b><u>ITEM DESCRIPTION</u></b>	<b><u>PAY UNIT</u></b>
203.30010063	Excavation and Disposal of Rock, Emergency Standby Contract Work, Quantity Range 1 (0 to 130)	Cubic Yard
203.30020063	Excavation and Disposal of Rock, Emergency Standby Contract Work, Quantity Range 2 (131 to 650)	Cubic Yard
203.30030063	Excavation and Disposal of Rock, Emergency Standby Contract Work, Quantity Range 3 (651 to 1300)	Cubic Yard

10/24/96

**ITEM 206.04010011 PNEUMATIC EXCAVATION AND BACKFILL OF TRENCHES****ITEM 206.04020011 PNEUMATIC EXCAVATION AND BACKFILL OF TEST PITS****DESCRIPTION**

This work shall consist of performing Pneumatic Excavation and Backfill of Trenches or Test Pits in accordance with the contract documents and as directed by the Engineer. This work shall include the protection of tree roots for purposes of installing conduits, direct burial cables and other subsurface utilities.

**MATERIALS**

Materials shall meet the following requirements, as modified by any supplemental landscape specifications or special notes included in the contract documents:

**Pneumatic Excavating Tool.** Excavation shall be performed through the use of a pneumatic excavation tool with the following requirements:

The high air velocity excavation tool shall be specifically designed to fracture, pulverize, and displace porous and semi-porous soils without harming or causing damage to tree roots, existing subsurface utilities, or other non-porous objects. The Contractor shall submit catalog cuts from the manufacturer verifying that the pneumatic excavation tool meets the following criteria:

Rated Operating Pressure:	90 – 101.5 psi
Air Stream Velocity at Cutting Head:	2,005 – 2,278 fps
Air Displacement:	1,050 – 1,320 gal/min

**Air Compressor.** The air compressor may be either a portable or truck-mounted unit and shall be adequately sized as required to power the pneumatic excavation tool in accordance with the manufacturer's recommendations for the pneumatic excavating tool.

**Vacuum Truck.** A vacuum truck should be used to collect excavated spoil directly from the trench or pit.

**Containment Structure.** To prevent the spread of excavated soil onto adjacent roadways and areas beyond the designated work zone limits, the Contractor shall provide a mobile structure or barrier to contain the material dislodged by the pneumatic excavation tool from the trench or pit. Timber or corrugated metal shields, tents supported on tubular frames or other structures as approved by the engineer may be used.

**Root Protection**

Cotton Mats	711-02
Burlap	711-06

**Backfill**

Topsoil	713-01
Limestone	713-02
Fertilizer	713-03
Organic Material	713-13

**ITEM 206.04010011 PNEUMATIC EXCAVATION AND BACKFILL OF TRENCHES**

**ITEM 206.04020011 PNEUMATIC EXCAVATION AND BACKFILL OF TEST PITS**

**CONSTRUCTION DETAILS**

The work shall be in accordance with SECTION 206-3 TRENCH, CULVERT and STRUCTURE EXCAVATION with modifications as follows:

The following is to be executed **PRIOR TO PNEUMATIC EXCAVATION**.

**Work Site Safety.** Pneumatic excavation shall be performed in compliance with all applicable OSHA regulations and the manufacturer's operating instructions. Adequate eye and ear protective equipment shall be worn by all crew members present at the work site.

The Contractor shall be responsible to provide adequate equipment and perform pneumatic excavation techniques properly to preclude movement of any air-borne soils onto adjacent roadways or other areas beyond the designated work zone limits. Failure to contain and/or collect the excavated soil will result in the immediate termination of pneumatic excavation until soil containment and/or collection procedures are determined adequate by the Engineer.

The Contractor shall keep the public at a safe distance from the work zone at all times by means approved by the Engineer.

**Operator Qualifications.** The excavating tool shall be utilized only by personnel having at least one year of experience operating the pneumatic excavation tool. The Contractor shall submit to the Engineer written certification from the equipment manufacturer or supplier of the operator's training and experience in the use of the pneumatic excavation tool.

**Arborist:** Unless otherwise directed by the EIC, all pneumatic excavation work shall be performed under the direction of an International Society of Arboriculture (ISA) Certified Arborist provided by the NYSDOT.

**Pre-Pneumatic Excavation Meeting.** Prior to the start of such excavation, the Contractor and its approved Operator for pneumatic excavation shall attend a meeting arranged by the Engineer with the Regional Landscape Architect, certified Arborist and other parties as appropriate, to review the requirements of this item including the schedule of operations, the mandatory presence of the Arborist, safety measures, reporting, etc.

The contractor is required to submit a schedule of his anticipated pneumatic excavations at this meeting.

**PNEUMATIC EXCAVATION PROCEDURES**

**Dust Control.** The work area shall be watered thoroughly at least 24 hours in advance of but no more than 48 hours prior to the start of any pneumatic excavation to reduce the incidence of airborne dust resulting from the pneumatic excavation operation.



**ITEM 206.04010011 PNEUMATIC EXCAVATION AND BACKFILL OF TRENCHES**

**ITEM 206.04020011 PNEUMATIC EXCAVATION AND BACKFILL OF TEST PITS**

**Excavation - General.** Trench and test pit excavation using the pneumatic excavation tool shall be performed in accordance with the manufacturer's recommendations to remove soil without damage to the roots of trees and/or utilities either in or adjacent to the excavation.

**Test Pit Excavation.** Test pits indicated in the drawings or as directed by the Engineer to be dug within limits designated for pneumatic excavation shall be excavated prior to other trenching using the pneumatic excavating tool.

The limits of the excavation shall be those sufficient to determine existing utility type, size and/or condition. This work shall not relieve the Contractor of the responsibility to locate underground facilities as required under 16 NYCRR Part 753.

**Trench Excavation.** Pneumatic excavation shall be performed at locations as indicated in the drawings or as directed by the Engineer where trench excavation for conduit installation will occur within or in close proximity to the drip-lines of trees.

Trenches shall be excavated to a depth of 3 feet, as indicated in the drawings or as directed by the Engineer.

**Root Protection.** The Contractor shall place wet burlap or cotton mats upon both the fibrous and structural roots immediately after they have been exposed by the pneumatic excavating tool. The burlap or cotton covering may be removed to perform inspection or utility installation operations, but the Contractor shall be required to keep the burlap or cotton towels wet and the roots moist until backfilling is complete.

The Engineer shall be immediately informed of any damaged tree roots. No tree roots may be pruned except as specifically authorized by the Arborist. In the case that the concentration of roots obstructs the placement of the conduit to the required line and grade, limited pruning may be necessary as directed by the Arborist. Tree roots in excess of 1 inch in diameter, measured at the edge of the excavation, shall be cut cleanly at the edge of excavation using a sharp cutting tool. All root pruning shall be performed under the direction of the ISA Certified Arborist.

**Conduit Installation.** Conduit and direct burial cables shall be installed in accordance with the applicable conduit specifications and details shown on the drawings, including bedding materials.

In order to facilitate trench backfilling on an expedited basis, the Contractor shall install conduit and direct burial cables in a continuous operation along with the pneumatic excavation operations to allow for backfilling of the trench within the same work shift.

The exposed root system will make "rolling" multiple sections of assembled conduit from the adjacent surface into the trench impossible. Therefore, workers shall pass each individual conduit section carefully through the root system for placement and assembly within the excavated trench.

**ITEM 206.04010011 PNEUMATIC EXCAVATION AND BACKFILL OF TRENCHES**

**ITEM 206.04020011 PNEUMATIC EXCAVATION AND BACKFILL OF TEST PITS**

**Trench and Test Pit Backfill.** Excavated trenches and test pits containing exposed tree roots shall be backfilled immediately after the Engineer approves the conduit and cable installations within the trench and/or the inspection of the test pit. The Contractor shall provide adequate work crews to backfill trenches and test pits within 24 hours of excavation.

Upon completion of inspection or installation work, the Contractor shall remove the burlap or cotton matting and begin backfilling operations.

Suitable excavated material may be used as backfill up to a depth of 12 inches below finish grade. The existing soil shall be amended with humus, peat, peat moss, or source-separated compost in the ratio of one part organic to seven parts excavated soil. If required, provide additional clean backfill material.

Backfilling of the trench and test pit excavations shall be performed with care not to damage the exposed roots. The Contractor shall compact the backfill material under the direction of the ISA Certified Arborist. The Contractor shall compact the backfill material to be commensurate with the density of the undisturbed adjacent soils unless otherwise directed by the ISA Certified Arborist.

Surface restoration including backfilling the top 12 inches of the excavation with approved topsoil, shall be performed separately under the appropriate items.

The Contractor shall properly dispose of excess and unsuitable excavated materials.

**Tree Condition Report.** The Contractor shall supply the ISA Certified Arborist with information as needed for the Arborist to prepare periodic reports to the Engineer and Regional Landscape Architect summarizing the number, type and condition of trees adjacent to each pneumatic trench excavation, duration of open trenches, and identify any root damage and actions taken.

**METHOD OF MEASUREMENT**

**Pneumatic Excavation and Backfill of Trenches** will be measured as the number of linear feet along the centerline of the excavated trench, including backfill, regardless of the number of conduits or direct burial cables installed within the trench.

**Pneumatic Excavation and Backfill of Test Pits** will be measured as the number of test pits excavated and backfilled in accordance with the contract documents or where directed by the Engineer.

**BASIS OF PAYMENT**

The unit price per bid shall include the cost of furnishing all labor, materials and equipment necessary to satisfactorily complete the work.

**ITEM 207.96000017 GEOSYNTHETIC REINFORCEMENT**

**DESCRIPTION**

This work shall consist of providing and installing Geosynthetic Reinforcement (GR) as indicated on the plans or as directed in writing by the Engineer.

**MATERIALS**

Provide certified tested GR meeting the minimum wide width tensile strength in two perpendicular directions at 5% strain shown on the plans.

**CONSTRUCTION DETAILS**

Protect the GR from exposure to sunlight during transport and storage. After placement, the GR shall not be left uncovered for more than two weeks.

Place the GR at the proper elevation and alignment as shown on the plans or as directed by the Engineer. The surface upon which the GR is to be placed shall be within reasonable conformity to the proposed grade.

GR sections shall be overlapped a minimum of 1 foot or as directed by the Engineer. Care shall be taken to ensure that GR sections do not separate at overlaps during construction. Place the GR without folds.

The placement of the GR around corners may require cutting the material and diagonal overlapping of the GR to ensure that excessive buckling or folding of the GR material does not occur.

Place the overlying course(s) and compact as shown on the plans or as approved by the Engineer. Traffic or construction equipment will not be permitted directly on the GR.

**METHOD OF MEASUREMENT**

This work will be measured as the number of square feet of GR computed from the payment lines shown on the plans or from payment lines established in writing by the Engineer. Measurement will not be made for GR used for repairs or overlaps.

**BASIS OF PAYMENT**

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work.

**ITEM 208.01001139 RAIN GARDEN SOIL MIX (NYCDPR)****DESCRIPTION**

This work shall consist of furnishing, screening, storing, stockpiling and placing rain garden soil mix in accordance with the contract documents and as directed by the Engineer.

**MATERIALS**

The following sections of the standard specifications shall apply:

Topsoil	713-01
Compost	713-15

with the following exceptions:

1. Rain garden soil mix shall meet the requirements listed below.
2. If the source soil requires modification to meet the organic content requirement, leaf compost (§713-15, Type D) will be the only approved amendment.
3. No soil mixing will be permitted during or after placement.
4. Rain garden soil mix shall be tested for compliance with specifications and submitted for approval prior to delivery to the site.

The rain garden soil mix shall meet the following requirements:

- pH shall be between 5 and 6.5.
- organic content shall be not less than 2 percent or more than 5 percent.

<b>Gradation</b>	
Sieve Size	Percent Passing by Weight
1/4 inch	100
No. 4	70 - 80
No. 10	45 - 60
No. 40	10 - 20
No. 200	0 - 2

### **CONSTRUCTION DETAILS**

The following sections of the standard specifications shall apply:

Ground Vegetation – Preparation, Establishment, and Management

610-3.01

Immediately after the rain garden soil mix has been placed, the surface shall be protected from contamination by fines and large debris using geotextile fabric or other erosion control measure.

### **METHOD OF MEASUREMENT**

This work will be measured as the number of cubic yards of rain garden soil mix measured to the nearest whole cubic yard of rain garden soil mix placed, from payment lines shown in the contract documents.

Cross sectioning for the purpose of determining quantities for payment, will be employed only where payment lines are not shown in the contract documents and cannot be reasonably established by the Engineer.

### **BASIS OF PAYMENT**

The unit price bid per cubic yard of rain garden soil mix shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work.

Geotextile fabric or other erosion control measures utilized will be paid for under their appropriate payment items.

**ITEM 209.11XX0011 TEMPORARY CATCH BASIN INSERTS FOR DRAINAGE  
STRUCTURES**

**DESCRIPTION:**

The work shall consist of furnishing, installing, maintaining, removing and disposing of catch basin inserts for drainage structures at the locations indicated in and in accordance with the contract documents and as directed by the Engineer.

**MATERIALS:**

The following sections of the standard specification shall apply:

Geotextiles

737-01

With the following qualifications:

- the geotextile used shall meet the requirements of Table 737-01G.

The temporary catch basin insert shall be a commercially manufactured system that fits inside a drainage structure and traps sediment transported by runoff.

Flexstorm™  
as manufactured by  
Advanced Drainage Systems  
24137 W. 111<sup>th</sup> Street – Unit A  
Napierville, IL 60564  
1.866.287.8655  
www.inletfilters.com

Inlet Pro™  
as manufactured by  
Hanes Geo Components  
815 Buxton Street  
Winston Salem, NC 27101  
1.888.239.4539  
www.hanesgeo.com

Dandy Sack®  
as manufactured by  
Dandy Products, Inc.  
P.O. Box 1980  
Westerville, OH 43086  
1.800.591.2284  
www.dandyproducts.com

Ultra-Drain Guard®, Reusable Model  
as manufactured by  
Ultra Tech International, Inc.  
11542 Davis Creek Court  
Jacksonville, FL 32256  
1.800.764.9563  
www.spillcontainment.com

or equal as approved by the Engineer.

To be approved for use, each temporary catch basin insert for drainage shall have the following features:

- total suspended solids (TSS) removal rate of at least eighty percent (80%) based on visual inspection,
- allow for stormwater event overflow bypass. No product shall be approved unless it includes an overflow mechanism.
- inserts must be capable of being re-used (after first maintenance activity) a minimum of one time.
- easy to clean and replace geotextile inserts.

**ITEM 209.11XX0011 TEMPORARY CATCH BASIN INSERTS FOR DRAINAGE STRUCTURES**

- include handles and fasteners to keep the insert from falling into the inlet during maintenance and removal, and
- Not interfere with all traffic modes.

**Submittals:**

Submit product information to the Engineer thirty (30) days prior to the planned date of installation for review and approval of the system.

**CONSTRUCTION DETAILS**

The following section of the standard specifications shall apply:

Soil Erosion and Sediment Control

209-3.01

with the following exceptions:

- Torn or punctured silt fence fabric must be replaced
- Sediment deposition removed from the catch basin insert shall be disposed of in accordance with §107-10 E.

**Installation:** Install the temporary catch basin inserts according to manufacturer's instructions.

**Inspection:** Using the most restrictive inspection criteria listed below, the Contractor shall inspect catch basins:

- weekly,
- after a rainfall event of 0.5" or more per twenty four (24) hour period,
- as per manufacturer's instructions, and/or
- as per the conditions of the Stormwater Pollution Prevention Plan (SWPPP) (if any exists).

**Maintenance:** Maintenance shall include the following:

- Remove all accumulated sediment and debris from the vicinity of the catch basin after each rainfall event of 0.5" or more per twenty four (24) hour period and prior to removal of the insert for maintenance.
- Remove insert according to manufacturer's instructions.
- Empty the unit when the catch basin insert's containment area is more than one third
- (1/3) full or before the sediment/trash/debris reaches the overflow openings.
- Refer to the manufacturer's instructions for emptying and re-installing the catch basin insert. Removal of trash, sediment and debris from the insert shall be done in a manner that ensures no trash, sediment or debris will enter an unprotected catch basin.
- Disposal of the removed sediment shall occur at an upland location away from all stormwater conveyances.
- Trash shall be disposed of according to §107-10 E. of the standard specifications.
- If a catch basin insert's fabric or strap is torn, dispose of the sediment and debris contained within the unit according to this specification and replace the entire unit.
- When the servicing of a catch basin insert results in a non-functioning or poorly- functioning unit, the unit shall be replaced.

**ITEM 209.11XX0011 TEMPORARY CATCH BASIN INSERTS FOR DRAINAGE STRUCTURES**

- Catch basin inserts shall be removed prior to winter shut down. Re-installation of the unit(s) shall occur prior to ground disturbance or first thaw in the following spring, whichever occurs first, and according to manufacturer's instructions.

Catch basin inserts shall be removed according to §209-3.01 and disposed of according to §107- 10 E. after all soil disturbance areas have been fully stabilized with an established, permanent and approved vegetative cover at a uniform density of eighty percent (80%).

**METHOD OF MEASUREMENT**

The work will be measured as the number of each catch basin insert for drainage structures furnished, installed, maintained, removed and disposed of.

**BASIS OF PAYMENT**

The unit price bid for each catch basin insert for drainage structures furnished, installed, maintained, removed and disposed of shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work.

Payment will be made under:

<b>Item Number</b>	<b>Description</b>	<b>Unit</b>
209.11010011	Temporary Catch Basin Inserts for Drainage Structures – Trash, Sediment and Debris Removal	EA
209.11020011	Temporary Catch Basin Inserts for Drainage Structures – Oil, Hydrocarbons, Trash, Sediment and Debris Removal	EA
209.11030011	Temporary Catch Basin Inserts for Drainage Structures – Oil and Hydrocarbon Absorbent Pouches	EA



**ITEM 209.20120010 BIO-FIBER ROLLS, 12 inch**  
**ITEM 209.20160010 BIO-FIBER ROLLS, 16 inch**  
**ITEM 209.20200010 BIO-FIBER ROLLS, 20 inch**

**DESCRIPTION**

This work shall consist of furnishing and installing the Bio-Fiber Rolls for the protection and enhancement of existing shore, stream or river banks. The installation of these Bio-Fiber Rolls shall be done in accordance with these specifications and in a reasonably close conformity with the details shown on the plans or established by the Engineer.

**MATERIALS**

The rolls shall have a density of 9 lb/ft<sup>3</sup>. The exterior 2 inch knotted mesh netting of the Bio- Fiber Roll shall be 100% coir fiber mesh or a woven polyethylene material. The interior material shall be 100% coconut fiber.

The stone material installed shall conform to §620-2.02. Stakes shall be Oak or Southern Yellow Pine untreated wood.

**CONSTRUCTION DETAILS**

Bio-Fiber Rolls with a diameter as indicated on the contract drawings shall be installed where and as shown on the contract plans, tables, or as directed by the Engineer.

The Contractor shall install wood stakes as detailed in the plans, to support the Bio-Fiber Rolls. After driving, the top of the stakes shall extend above the center line of the Bio-Fiber Roll. The stone shall be placed around the wood stakes and shaped to accommodate the Bio-Fiber Rolls.

The lengths of Bio-Fiber Roll shall be placed in position adjacent to the row of stakes, between the bank and stakes. The upper surface of the roll shall be parallel to the water surface as shown in the plans, protruding above mean water level (to be determined on site; not necessarily the current water level). Adjustments shall be made as needed, using hand tools to seat the roll such that it lies smoothly at the correct elevation. The upstream and downstream ends of the rolls shall be buried 3 to 5 ft into the bank.

The rolls shall be laced together end-to-end with nylon rope to create a continuous length. End- to-end lacing may be completed before or after placement to facilitate handling.

When erosion control blanket material is used in conjunction with the Bio-Fiber Rolls to cover the slopes of disturbed banks, the fabric shall be stapled to the back of the Bio-Fiber Roll as shown in the details.

The Contractor shall be responsible to maintain the Bio-Fiber Rolls installation for the duration of the contract and thru the period of establishment of those plantings put into the roll as specified under §611-3.06, Period of Establishment. Any material that has to be replaced or repaired shall be replaced or repaired by the Contractor at no additional cost to the State.

**ITEM 209.20120010 BIO-FIBER ROLLS, 12 inch**  
**ITEM 209.20160010 BIO-FIBER ROLLS, 16 inch**  
**ITEM 209.20200010 BIO-FIBER ROLLS, 20 inch**

### **METHOD OF MEASUREMENT**

This work will be measured as the number of linear foot of Bio-Fiber Rolls installed in accordance with the specification and as directed by the Engineer.

### **BASIS OF PAYMENT**

The unit price bid per linear foot shall include the cost of furnishing all labor, material, and equipment necessary to complete the work including installing Bio-Fiber Rolls and stone filling as shown in the contract plans. The Contractor will be paid 80% of the bid price upon the installation of the Bio-Fiber Rolls and the remaining 20% upon the completion of the project and or Period of Establishment.

Payment for furnishing and installing erosion control blanket material, where used, will be made under the item for "Furnishing and Placing Jute Mesh or Other Approved Erosion Control Materials.

**ITEM 555.72940001 ARCHITECTURAL TREATMENT - VERTICAL CONCRETE SURFACES**

**DESCRIPTION:**

This work shall consist of architecturally treating the vertical surface(s) of concrete retaining walls, structures, wing walls, or other similar vertical surfaces with a designated pattern(s) and texture(s). All work shall be in accordance with these specifications in and reasonably close conformity to the lines, grades and patterns shown on the plans.

**MATERIALS:**

Any commercially produced formliner meeting the requirements of this subsection will be acceptable. Polystyrene formliners are for one-time usage only and shall be allowed only if the formwork will not be reused. The formliners shall:

1. Produce the pattern required by the plans.
2. Be composed of a material(s) that will not bond to concrete.
3. Be attachable to standard plywood, or steel, concrete forms, such that no distortion, or stray markings, occur within the concrete surfaces.

Formliners will be acceptable at the work site upon written certification that the requirements of this subsection have been met.

Cast-in-place concrete - Class A or as shown in the contract documents shall meet the requirements of Section 501, Portland Cement Concrete - General.

Releasing Agents. If the formliner manufacturer requires the use of an agent to facilitate the release of the formliner panel from the concrete, or when its use is specified on the plans, such agent shall be non-staining and evenly spread over the entire linear surface. Formwork shall also be treated as needed.

Caulking Compound. When a caulking compound is required to seal any necessary concrete joints in the imprinted surface, such caulking compounds shall meet the material requirements of Subsection 705-06 of the Standard Specifications, Caulking Compound for Structures.

**CONSTRUCTION DETAILS:**

Special care shall be taken after installation to ensure that all formliner surfaces are thoroughly clean of all stray material of any nature. No concrete shall be placed prior to the Engineer's inspection and approval of formliner surfaces.

Approximately 5/64" of the formliner panel shall overlap on either side of the formwork panel so that when the formwork sections are forced together, the formliners compress at the edges to form a tight joint. Joints between panels shall be sealed, taped or fused to form a watertight seam, according to the manufacturer's instructions. Unless specified on the plans, texturing is not required on surfaces which will be below finished grade. Plastic snap tie cones are to be of the non-leaking type. Metal form ties are not to be placed closer than 1 1/2" to the interior surface.

**ITEM 555.72940001 ARCHITECTURAL TREATMENT - VERTICAL CONCRETE SURFACES**

Concrete shall be placed in accordance with Section 555, Structural Concrete

Construction joints shall extend to the full depth of the concrete at the locations shown on the plans. When construction joints are needed but are not shown on the plans, the Contractor and the Engineer shall agree on the proper locations of such joints so as to not distract from the appearance of the imprinted pattern and to minimize the possibilities of cracking.

After formwork removal the Engineer will inspect architecturally patterned concrete surfaces. All such surfaces which do not exhibit the required architectural pattern shall be repaired in a manner satisfactory to the Engineer at no cost to the State. The repair shall match the concrete surface. Concrete repair material, if used, shall meet the requirements of Subsection 701-04, Concrete Repair Material of the Standard Specifications.

**METHOD OF MEASUREMENT:**

Architecturally treated vertical concrete surfaces shall be measured by the number of square feet of concrete treated to the satisfaction of the Engineer. The quantity shall be as computed from payment lines shown on the plans or as established by the Engineer in writing. Measurement will be taken as the vertical plane projection of the treated location. No measurement will be taken of actual concrete surfaces.

**BASIS OF PAYMENT:**

The unit price bid per square foot shall include the cost of the formliners, the concrete needed to fill the formliner, releasing agents, caulking compounds, patch mix, and all other materials, equipment and labor necessary to complete the work as specified.

**ITEM 559.16960118 PROTECTIVE SEALING OF STRUCTURAL CONCRETE**

**ITEM 559.17960118 PROTECTIVE SEALING OF STRUCTURAL CONCRETE FOR  
EXISTING BRIDGE DECKS**

**DESCRIPTION.** Under this work the Contractor shall furnish and apply, in accordance with this specification, a protective sealer to concrete surfaces, at locations indicated on the plans or where directed by the Engineer.

**MATERIALS.** The protective sealer used on concrete surfaces shall be one appearing on the Department's Approved List and shall meet the requirements of one of the following subsections:

717-03 - Penetrating Type Protective Sealers

717-04 - Coating Type Protective Sealers

**CONSTRUCTION DETAILS.**

A. **General.** Only penetrating type sealers shall be applied to walking or riding surfaces. The Contractor shall provide the Engineer with the sealer Manufacturer's written instructions for application and use, at least five (5) working days before the start of work. Only one (1) brand and specific type of sealer will be allowed for use on each individual element of a project (i.e. each pier, deck, abutment, etc.).

B. **Surface Preparation.**

1. **New Concrete.** All required surface texturing, and saw cut grooving, shall be completed before the surface is prepared. All concrete that is to be sealed shall air dry for fourteen (14) days after curing has been removed, or for the length of time specified in the manufacturer's written instructions, whichever is longer. If the concrete is subjected to rain or moisture from other project operations, the drying period shall be extended twenty-four (24) hours for every day the concrete is subjected to water. After the drying period has ended, the concrete surface shall be lightly sand or shot blasted, followed by vacuum cleaning, to remove loose particles.

2. **Existing Concrete.** Concrete surfaces to be sealed shall be thoroughly cleaned by light sand or shot blasting, followed by vacuum cleaning, to remove loose particles. If the concrete is subjected to rain or moisture from other project operations, the surface will be allowed to air dry for a minimum of forty-eight (48) hours before the sealer is applied.

Care shall be taken while blast cleaning that all dirt is removed with minimal exposure of coarse aggregate. After cleaning, no blasting residue, laitance, curing compounds, standing water, oil, dirt or other foreign particles shall be present, which may prevent penetration or adhesion of the sealer. All surface preparation work shall be completed and approved by the Engineer, before sealer application can commence.

C. **Weather Limitations.** Sealer materials shall not be applied during wet weather conditions or, if in the opinion of the Engineer, adverse weather conditions are anticipated within twelve (12) hours of the completion of sealer application. Ambient and surface temperatures shall be a minimum of 40oF- during application and until the sealed concrete is dry to the touch. Application by spray methods will not be permitted during windy conditions, if in the opinion of the Engineer unsatisfactory results will be obtained.

**ITEM 559.16960118 PROTECTIVE SEALING OF STRUCTURAL CONCRETE**  
**ITEM 559.17960118 PROTECTIVE SEALING OF STRUCTURAL CONCRETE FOR**  
**EXISTING BRIDGE DECKS**

- D. **Sealer Application.** The sealer shall be used as supplied by the Manufacturer without thinning or alteration, unless specifically required in the Manufacturer's instructions. Thorough mixing of the sealer before and during its use shall be accomplished as recommended by the Manufacturer. Equipment for sealer application shall be clean of foreign materials and approved by the Engineer before use.

If a penetrating sealer is used, a minimum of two (2) coats of the sealer shall be applied to achieve uniform coverage. The total quantity of sealer applied by all coats shall be equal to the quantity required at the application rate specified in the Approved List. The second and each additional coat shall be applied perpendicular to the previous coat. Care shall be taken when applying each coat, such that running or puddling does not occur. Each coat shall be allowed to dry for a minimum of two (2) hours before the next coat is applied. The final coat shall be allowed to dry according to the manufacturer's instructions, before the removal of maintenance and protection of traffic.

On sloping and vertical concrete surfaces, sealer application shall progress from bottom to top. Care shall be taken to ensure that the entire surface of the concrete is covered and all pores filled.

**METHOD OF MEASUREMENT.** The work will be measured as the number of square feet of structural concrete sealed.

**BASIS OF PAYMENT.** The unit price bid per square feet shall include the cost of furnishing all labor, materials and equipment necessary to satisfactorily complete the work.

***Payment will be made under:***

Item No.	Item	Pay Unit
559.16960118	Protective Sealing of Structural Concrete	Square Foot
559.17960118	Protective Sealing of Structural Concrete for Existing Bridge Decks	Square Foot

**ITEM 559.18960118 PROTECTIVE SEALING OF STRUCTURAL CONCRETE ON NEW  
BRIDGE DECKS AND BRIDGE DECK OVERLAYS**

**DESCRIPTION.** Under this work the Contractor shall furnish and apply, in accordance with this specification, a protective sealer to concrete surfaces, at locations indicated on the plans or where directed by the Engineer.

**MATERIALS.** The protective sealer used on new concrete bridge decks shall be one appearing on the Department's Approved List, which does not contain an aqueous solvent/carrier and shall meet the requirements of the following subsection:

717-03 - Penetrating Type Protective Sealers

**CONSTRUCTION DETAILS.**

- A. **General.** The Contractor shall provide the Engineer with the sealer manufacturer's written instructions for application and use, at least five (5) working days before the start of work. Only one (1) brand and specific type of sealer will be allowed for use on each deck.
- B. **Surface Preparation.** All concrete bridge decks shall air dry for twenty-four (24) hours after the time of completion of saw cut grooving. If the concrete is subjected to rain or moisture from other project operations, the drying period shall be extended twenty-four (24) hours from the time that the concrete has stopped being wetted. All required surface texturing, saw cut grooving, barriers, parapets, sidewalks and safety walks shall be completed, before the surface is cleaned. After the drying period has ended, the concrete surface shall be cleaned by vacuum methods, to remove loose particles.
- After cleaning, no laitance, standing water, oil, dirt or other foreign particles shall be present, which may prevent penetration of the sealer. All surface preparation work shall be completed and approved by the Engineer before sealer application can commence.
- C. **Weather Limitations.** Sealer materials shall not be applied during wet weather conditions or when adverse weather conditions are anticipated within twelve (12) hours of the completion of sealer application. Ambient and surface temperatures, during application, and until the sealed concrete is dry to the touch, shall be a minimum of 40°F. Application by spray methods will not be permitted during windy conditions, if in the opinion of the Engineer, unsatisfactory results will be obtained.
- D. **Sealer Application.** The protective sealer shall be used as supplied by the Manufacturer without thinning or alteration. Equipment for sealer application shall be clean of foreign materials and approved by the Engineer before use. The sealer shall be applied by brushing, spraying or rolling, as recommended by the Manufacturer.

A minimum of two (2) coats of the sealer shall be applied to achieve uniform coverage. The total quantity of sealer applied by all coats shall be equal to the quantity required at the application rate specified in the Approved List. The second and each additional coat shall be applied perpendicular to the previous coat. Care shall be taken when applying each coat, such that running or puddling does

**ITEM 559.18960118 PROTECTIVE SEALING OF STRUCTURAL CONCRETE ON NEW  
BRIDGE DECKS AND BRIDGE DECK OVERLAYS**

not occur. Each coat shall be allowed to dry for a minimum of two (2) hours before the next coat is applied. The final coat shall be allowed to dry according to the Manufacturer's instructions, before the removal of maintenance and protection of traffic.

**METHOD OF MEASUREMENT.** The work will be measured as the number of square feet of concrete sealed.

**BASIS OF PAYMENT.** The unit price bid per square feet shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work.



**ITEM 559.19010011 PAINTING EXISTING CONCRETE SURFACES****Description**

The work shall consist of preparing existing concrete surfaces and furnishing and applying paint at the locations indicated by the contract documents, or where ordered by the Engineer.

**Materials**

Materials shall conform to the following requirements:

Concrete Repair Material: Subsection 701-04

Paint: Exterior Acrylic Emulsion  
Paint conforming to Federal Specification TT-P-19C, self-priming.

Color: A.O.B.E.

Basis of Acceptance: Acceptance of paint will be based on the manufacturer's certification that the material meets the specification requirements. Submit color chart, with proposed color clearly identified for the Engineer's approval.

**Construction Details**

Preparation of Surface: Concrete surfaces shall be thoroughly cleaned before painting. All laitance, paint, oil, grease, dust, dirt, and other substances which might prevent bond between the paint and the concrete shall be removed. The surface preparation shall be accomplished by a light sandblasting, followed by high pressure, oil free, air blasting. Care shall be exercised to prevent exposure of underlying aggregate. Unsound or deteriorated concrete shall be removed by light chipping, mechanical scarification, or other mechanical abrading means acceptable to the Engineer, prior to sandblasting. Removed concrete shall be repaired with concrete repair material prior to application of paint. Concrete repair material shall be cured a minimum of 28 days before painting.

Paint shall be applied as soon as practicable after cleaning is completed. If in the opinion of the Engineer, the concrete surface has become soiled or otherwise contaminated, prior to paint application, the surface shall be recleaned in accordance with the requirements specified herein at no additional cost to the State.

Application: A minimum of 2 coats shall be applied according to the manufacturer's recommendations at a minimum thickness of 0.004 inches. Paint shall be rolled on unless otherwise recommended by the manufacturer.

**Method of Measurement**

The quantity to be paid for will be the number of square feet painted.

**Basis of Payment**

The unit price bid shall include the cost of furnishing all labor, materials and equipment necessary to complete the work.

**ITEM 560.01010011 GRANITE COPING (STRAIGHT)**  
**ITEM 560.01020011 GRANITE COPING (RADIAL)**  
**ITEM 560.01030011 GRANITE ENTRY PIERS**  
**ITEM 560.01040011 GRANITE WALL**

**DESCRIPTION**

This work shall consist of furnishing and installing Granite Copings, Piers and Walls in accordance with the contract documents and as directed by the Engineer.

**MATERIALS**

- A. Granite: Granite shall be of type finish and color as indicated on the plans and approved by the Engineer. Each stone type shall be obtained from a single quarry with resources to provide materials of consistent appearance and physical properties, and the capacity to cut, finish and supply granite without delaying the work. Granite shall be of uniform color and tone. Sizes shall be as specified or as shown on the drawings.

- B. Mortar: Type M (ASTM C-270) as specified in § masonry mortar 705-21.

Color shall be approved by the Engineer and be a color chosen from one of the following mortar color products meeting the requirements of ASTM C979:

Tru Tone Mortar Colors	Sonobrite	Lambco Colors
As manufactured by	As manufactured by	As manufactured by
Davis Colors	Sonneborn B.P. Div.,	Lambert Corporation
3700 East Olympic Blvd. Los Angeles, CA 90023	Rexnord Chemical Products, Inc. 2270 NW. 23rd Street	20 North Coburn Avenue Orlando FL. 32805

or equal as approved by the Engineer.

- C. Portland Cement: Type II as specified in § 705-21. Cement shall be gray unless otherwise indicated in the plans. Hydrated Lime: ASTM C207, Type SA as specified in § 712-04. Water: As specified in § 712-01 Mortar Sand: As specified in § 703-03 Grout: Use Fine grout as per ASTM C 476-07. Fine sand used in the grout shall meet all requirements of § 703-04.
- D. Grout shall only be used in specific areas of granite masonry as indicated on the plans.

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- E. Stainless Steel Pins: Dimensions as indicated on the plans and as specified in § 709-13 Stainless Steel Bar reinforcement.
- F. Anchor stainless steel pins in granite using § 701-07 Anchoring Materials – Chemically Curing.

**CONSTRUCTION DETAILS**

All provisions of Section 560 pertaining to Dimension Stone Construction Details apply along with the following additional requirements:

- A. Stone Fabrication: Contractor shall arrange a visit to the quarry to inspect the stone to be used for this job prior to the commencement of any quarrying or fabrication. The cost of this visit shall be borne by the Contractor and shall be included in the bid price for this item.
- B. Beds and Joints: Pieces shall be bedded and jointed as shown in the approved shop drawings, and bed and joint surfaces shall be cut as follows: Bed and joint surfaces shall be sawn through the full thickness of the granite piece. Bed and joint surfaces shall be within +/- 3% of the 90degrees to the face of the piece.
- Radial Profiles: Shall be constant throughout their length, in strict conformity with details shown on approved shop drawings.

Where called for, granite shall be drilled to receive stainless steel pins anchored with §701-07 Anchoring Materials - Chemically Curing installed according to the manufacturers printed installation instructions and paid for under this item.

- D. Shipping and Handling: Granite material must be delivered to the site in an undamaged condition. All granite and related materials must be stored to prevent their deterioration or damage due to moisture, temperature changes, contaminants, corrosion, breakage, chipping or other causes. Granite shall be stored on wood skids or pallets at least 100mm off the ground, and covered with a non-staining waterproof membrane. Skids and granite must be placed and stacked to distribute weight evenly and to prevent breakage or cracking of granite and allow air circulation around stones. Contractor shall place polyethylene or other suitable plastic film as approved by the Engineer between any wood and finished surfaces and use polyethylene as an overall protective covering. Lifting holes must be plugged to prevent the accumulation of water. Salt shall not be used for melting ice formed in holes or on pieces, or for any purpose that could lead to contact with stone elements.

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Pinch or wreking bars shall not be used. Granite shall be lifted with wide belt-type slings where possible. Wire rope or ropes containing tar or other substances that may cause staining shall not be used. Wood rollers with cushions at the end of the wood slides must be used to move stone.

- E. Installation: The Contractor is responsible for ensuring that all sub grades, bases and surfaces to receive granite masonry are clean, level and adequately prepared. The Contractor shall verify finished elevations and field dimensions taken at the job site affecting the work. Where called for, sub base material and granite component shall be core drilled to receive steel pins. Field dimensions, which are at variance with the drawings or specifications, shall be brought to the attention of the Engineer.

Surfaces of granite that have become dirty or stained are to be cleaned, removing all soil, stains and foreign materials, prior to setting. Granite is to be cleaned by thoroughly scrubbing stones with fiber brushes followed by a thorough drenching with clean water. Ferrous or other metallic brushes shall not be used. Only mild cleaning compounds that contain no caustic materials or abrasives are to be used.

Patched, chipped, cracked, broken or otherwise defective pieces shall not be set, and the Engineer shall be notified of any damaged stone.

Contractor shall install mortar and attach granite components as shown on the plans or as directed by the Engineer. Stainless steel pins are to be used to secure granite components where indicated on the plan.

- F. Construction Tolerances: The contractor will ensure that the Adjacent Stones will be flush
- G. Pointing Joints: No pointing shall take place until all stone has been set and approved by the Engineer. All pointing shall be done with the approved pointing mortar mix. To reduce suction of moisture and control rate of stiffening, stone and bedding mortar shall be dampened before beginning to fill the joint. Free water or excessive dampness in the joint shall be avoided. Mortar must be forced into joints with sufficient pressure to insure joint is well packed, and a tool narrower than the joint width shall be used to pack mortar solidly into the back of joint. When the joint is more than 19mm (3/4") in depth, new mortar shall be placed in several layers. Each preceding layer shall be thumbprint hard before allowing another layer to be placed. Excess mortar must be struck off and mortar droppings must be removed from adjacent surfaces. When the final layer of mortar is thumbprint hard, the joint shall be tooled to a concave finish, to the satisfaction of the Engineer.

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- H. Protection: The top of the granite masonry must be covered with non-staining waterproof sheeting at end of day's work. Partially completed portions shall also be covered when work is not in progress. Contractor must prevent staining of stone from mortar, or other sources.

- I. Adjusting and Cleaning: Contractor is required to remove and replace granite if broken, chipped, stained, or otherwise damaged. The Contractor may repair stone if Engineer approves the methods

and results. Granite masonry with defective joints and joints not matching approved samples and mockups shall be removed and replaced in a manner that results in granite matching approved samples and mockups, complying with other requirements and showing no evidence of replacement.

- J. Final Cleaning: The granite shall be thoroughly cleaned after completion of the setting and other work. The granite shall be gone over and any mortar splashes or smears and any other encrusted matter carefully removed from the surface. The cleaning shall be done with non- ionic detergent and clean water applied vigorously with natural fiber bristle brushes. After cleaning, stone must be drenched with fresh water to remove all residue materials.

- K. Submittals: Contractor shall submit two (2) cured mortar cakes, one lightly acid etched to replicate accelerated aging and the other untouched, labeled with the formula and pigment used, to be reviewed for color, texture and pattern. Stone samples of each type and for each granite element shall be no less than 12" x 12" x 1" thick, and show complete range of color variation. Samples of granite with color variations shall be submitted with proportion of variation expected for use on the Project.

Submit shop drawings for each granite element indicating location and size of each fabricated item to the Engineer for approval. All shop drawings shall include detailed dimensioned plans, sections and elevations, large-scale details, profiles, methods of attachment, carved patterns and other components necessary to complete the work.

**METHOD OF MEASUREMENT**

This work will be measured as the number of cubic yards of Granite Copings, Piers and Walls satisfactorily furnished and installed.

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**BASIS OF PAYMENT**

The unit price bid shall include the cost of furnishing all labor, materials and equipment necessary to satisfactorily complete the work.

***Payment will be made under:***

<b>Item No.</b>	<b>Description</b>	<b>Pay Unit</b>
560.01010011	Granite Coping (Straight)	C.Y
560.01020011	Granite Coping (Radial)	C.Y
560.01030011	Granite Entry Piers	C.Y
560.01040011	Granite Wall	C.Y

**ITEM 568.11010011 STEEL ROD SAFETY RAILING**  
**ITEM 568.12010011 HANDRAIL**

**DESCRIPTION**

This work shall consist of furnishing and installing steel rod safety railing and/or handrail as described in and at the location(s) shown in the contract documents and as directed by the Engineer.

**MATERIALS**

The following sections of the standard specifications shall apply:

Stainless Steel Connecting Products	715-16
Galvanized Coatings and Repair Methods	719-01
Epoxy Polysulfide Grout	721-03

The following ASTM specifications shall apply:

Standard Specification for Chromium and Chromium-Nickel	A240
Stainless Steel Plate, Sheet and Strip for Pressure Vessels and General Applications	
Standard Specification for Steel Bars, Carbon, Merchant Quality, M-Grades	A575
Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate and Flat Bar	A666
Standard Specification for Stainless Steel Nuts	F594

The materials for this work shall meet the requirements of the New York State Steel Construction Manual.

- A. Steel Top Rail, Posts, Rod Panels & Components: The rails, posts, rod panels and connection sleeves shall be steel ASTM A575, grade M 1020 galvanized to meet the requirements of §719-01, Type I and have dimensions as specified in the contract drawings. All galvanized fence and handrail components will be fabricated and assembled as much as possible and all surfaces hot dipped galvanized (per §719-01) in the shop before installation at site.

Embedded posts shall be stainless steel bars and meet the requirements of ASTM A666, Type 316.

- B. Hardware: Type and dimensions of all bolts, nuts, and washers shall be as indicated in the contract documents and conform to §723-60. All bolts and nuts shall be tamper-proof, unless noted otherwise. All tools and registrations for tamper-proof hardware shall be provided to the owner. Nuts shall meet the requirements of ASTM F594. Washers shall meet the requirements of ASTM A240.

Anchor bolts shall meet the requirement of §723-60 and shall be stainless steel 300 series alloy. Anchor bolts shall meet the requirements of ASTM F 593.

- C. Grout: Epoxy Polysulfide Grout to conform to §721-03. Grout color shall match surrounding pavement, curb, or wall.

**ITEM 568.11010011 – STEEL ROD SAFETY RAILING**  
**ITEM 568.12010011 – HANDRAIL**

**D. Fabrication:**

- The railing and handrail shall be fabricated to the dimensions and configurations shown in the contract documents.
- All mounting surfaces and rail alignments shall be measured and verified in the field before fabrication begins.
- Assemble railings in the shop to greatest extent possible to minimize field splicing and assembly.
- Fabrication and welding shall comply with NYSDOT Steel Construction Manual.
- At exposed connections, finish exposed surfaces smooth and blended so no roughness shows after finishing and welded surface matches contours of adjoining surfaces.
- Fabricate anchorage devices capable of withstanding loads imposed by railings.
- Shear and punch metals cleanly and accurately.
- Remove burrs from exposed cut edges. Ease exposed edges to a radius of approximately 1mm, unless otherwise indicated.

E. Finishing: All rail post components, (except stainless steel anchors and embedded posts), shall be assembled as much as possible in the shop and hot dipped galvanized (per §719-01) as one component before being transported to the site for installation.

**CONSTRUCTION DETAILS**

The following sections of the standard specifications shall apply:

**Bridge Railing**

568-3

**Anchoring:**

Embedded post or anchor bolts shall be anchored to surface(s) indicated in the contract drawings.

- Unless otherwise specified, holes for the embedded posts shall be core drilled to the size and depth to accept posts and as indicated on the contract drawings.
- Holes for the embedded posts shall be surface dry and shall have had all foreign and loose material removed immediately prior to grout placement.
- Epoxy Grout shall be mixed and placed in strict accordance with the manufacturer's instructions. No grout shall be placed at a temperature below that recommended by the grout manufacturer.



**ITEM 568.11010011 – STEEL ROD SAFETY RAILING**  
**ITEM 568.12010011 – HANDRAIL**

- Prior to embedded post placement in the grouted hole, all material which might interfere with bond between embedded post and the grout shall have been removed. This includes, but is not limited to: moisture, grease, dirt, mill scale and rust.
- The embedded post shall be inserted full depth into the hole and shall be manipulated to ensure complete coverage by the grout.
- After insertion of the post, all excess grout shall be struck-off flush with the coping face. Should the grout fail to fill the hole after embedded post insertion, additional grout shall be added to the hole to allow a flush strike-off.

**Installation:**

All railing shall be erected in accordance with approved shop drawings. Posts shall be set perpendicular or plumb, according to the contract drawings within a tolerance of 0.08inch (2mm) in 1 yard.

Do not weld, cut or abrade surfaces of railing components that have been coated or finished after fabrication and that are intended for field connection by mechanical or other means without further cutting or fitting. Align rails so variations from level for horizontal or from parallel with wall slope do not exceed  $\frac{1}{4}$ " in 10'-0". Adjust railings before anchoring to ensure matching alignment at abutting joints. Space posts at intervals indicated, but not less than that required by structural loads. Railing posts shall be bolted to embed posts for securing railing and for properly transferring loads to in-place construction.

Touch-up & Repair will be required for minor damage at bolted connections, and at abrasions sustained during transportation and installation. The Contractor shall apply organic zinc repair paint to damaged galvanized surfaces. Thickness of repair paint shall be not less than that required by ASTM A123. The Contractor shall repair damaged surfaces in accordance with the manufacturer's recommendations. The repair shall not visible from a distance of 6'-0".

**Submittals:**

Material Certifications: For each component, submit product data indicating they meet ASTM standards referred under "materials" above.

Shop Drawings: Shop drawings shall be submitted for review and approval. Prepare shop drawings in accordance with NYS Steel Construction Manual §203. Show fabrication and installation of steel rod safety railing and handrails. Include plans, elevations, sections, component details, and attachments to other work.

Samples: Submit assembled sample of railing system, made from full-size components, including top rail, post, and cables. Show method of finishing members at intersections. Sample need not be full height.

**METHOD OF MEASUREMENT**

This work will be measured as the number of linear feet, measured along the centerline of the top rail, of steel rod railing or handrails furnished and installed.

**BASIS OF PAYMENT**

**ITEM 568.11010011 – STEEL ROD SAFETY RAILING**  
**ITEM 568.12010011 – HANDRAIL**

The unit price bid per linear foot, measured along the centerline of the top rail, of steel rod safety railing and/or handrail furnished and installed shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work.

**Payment will be made under the following payment items:**

<b>Item</b>	<b>Description</b>	<b>Unit</b>
568.11010011	Steel Rod Safety Railing	LF
568.12010011	Handrail	LF

**ITEM 607.0AXXYY39 CHAIN LINK FENCE AND GATE -NYCDPR****DESCRIPTION**

This work shall consist of furnishing and installing chain link fences and gates in accordance with and at the heights and sizes shown in the contract documents, and as directed by the Engineer.

**MATERIALS**

The following sections of the standard specification shall apply:

Zinc Chromate Primer	708-04
Galvanized Steel Fence Fabric	710-02
Vinyl Coated Steel Fence Fabric	710-03
Steel and Iron Posts, Rails, Braces, and Fittings for Chain Link Fence	710-10
Galvanized Coatings and Repair Methods	719-01

The following ASTM specification shall apply:

Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire	A641
Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings	A780
Standard Specification for Steel, Sheet and Strip, Hot-Rolled Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability and Ultra-High Strength	A1011
Standard Test Method for Measuring Adhesion by Tape Test	D3359
Standard Specification for Standard Colors for Polymer-Coated Chain Link Fence Materials	F934

All fittings, hardware and equipment shall be designed to carry one hundred percent (100%) overload. Malleable iron castings shall be powder coated after being hot-dipped galvanized in accordance with §719-01. Pressed steel fittings and appurtenances shall be powder coated after being hot-dipped galvanized in accordance with §719-01.

All fittings, hardware and equipment shall be powder coated black to match the framework and shall be of the materials listed in the following schedule:

**ITEM 607.0AXXYY39 CHAIN LINK FENCE AND GATE -NYCDPR**

FENCE/GATE PART	MATERIAL
Boulevards, Corner (Split) Fittings and End Fittings	Malleable Iron or Pressed Steel-3/16" thick
Post Caps and Post Line Tops	Malleable Iron or Pressed Steel -3/16" thick
Couplings	Galv. Steel Pipe -1/8" thick with 1/4" Dia. Full Depth Rivet
Gate Hinges	Malleable Iron or Pressed Steel-1/4" thick with 1" Dia. Stainless Steel Pin Welded to 1/2" thick Pin Support
Bolts and Nuts	Galv. Steel or Stainless Steel as indicated in the contract documents
Tension Bars	1/4" x 3/4" Galv. Steel for 2" and 1-3/4" Mesh, 3/16" x 3/8" Galv. Flat Steel for 1" Mesh
Tension Bands	1/8" x 1" Pressed Steel
Truss Rods	1/2" Dia. Galv. Steel
Truss Tightener	3/8" x 1" Galv. Steel
Truss Clamp	1/4" Pressed Steel
Gate Locking System	Rotating Locking Mechanism- Galv. Steel pipe. All other components shall be mild steel.
Gate Stop	7/16" thick malleable iron
Drive Pins and Set Screws	Stainless Steel, 18-8

**A. POSTS AND RAILS:**

1. TYPE I - Posts and rails shall be standard weight galvanized steel pipe of the sizes shown on the plans and shall conform to ASTM F1083 Schedule 40, except for chain link fence posts 20'-0" height, which shall be Schedule 80. Posts and rails shall be hot dip galvanized inside and outside in accordance with ASTM F1083 or,
2. TYPE II - For fence up to and including ten (10) feet height, posts and rails may be TYPE II, SS-40 steel tubing and must conform to ASTM A1011, cold rolled steel pipe and coated with a minimum of 0.9 ounces of zinc per square foot, a minimum of 15 micrograms of zinc chromate per square inch. Steel pipe supplied under this option shall be of the same outside diameter as Schedule 40 pipe and achieve minimum yield strength of 50,000 p.s.i.

**ITEM 607.0AXXYY39 CHAIN LINK FENCE AND GATE -NYCDPR**

- B. FABRIC:** Chain link fence fabric shall meet the material requirements of §710-03, except as modified herein.

Wire used for the manufacture of fabric shall meet the requirements of ASTM F668 and shall be capable of being woven into fabric without the PVC coating cracking or peeling. PVC coating shall be a dense, impervious covering free of voids. Excessive roughness, bubbles, blisters, bruises and flaking will be a basis for rejection. PVC shall be thermally fused. Bonded or extruded and glued surface coating will not be permitted. Fabric shall be stretched to provide a smooth, taut, uniform appearance free from sag.

Thickness of Fabric:

1. One (1) Inch Mesh: Uncoated wire dimension shall be 0.120 inches in diameter (11 gauge). Zinc coating shall be 0.30 ounces per square foot of wire surface.
2. One and Three Quarter (1-3/4) Inch and Two (2) Inch Mesh: Uncoated wire dimension shall be 0.148 inches in diameter (9 gauge). Zinc coating shall be 0.3 ounces per square foot of wire surface.

Selvages: Fabric shall be barbed at the top and knuckled at the bottom on fences over 6'-0" high. Fabric on fences 4'-0" and 6'-0" shall be knuckled top and bottom. Loops of knuckled fabric shall be closed or nearly closed. The wire ends of barbed selvages shall be twisted in a closed helix of 1-matching turns and cut at an acute angle. The length of the ends beyond the twist shall be at least 1/4 inch long. One (1) inch mesh shall be knuckled both top and bottom.

Fabric shall be hot-dipped galvanized steel wire mesh as per ASTM A641, with a thermally fused polyvinyl chloride powder coating of 7 to 12 mils thick as per ASTM F668 class 2b. Color to be black per ASTM F934. Fabric shall be produced by methods recognized as good commercial practices. Core wire tensile strength shall be 75,000 psi (517 MPa).

- C. TIES:** Tie-wire core thickness shall be 9 gauge (0.148") wrought aluminum alloy 1100-H16 wire with an extruded vinyl coating in accordance with ASTM A641 Class 3. PVC shall be applied to a film thickness of 20 to 22 mils. Ties shall be spaced fifteen (15) inches apart on rails and twelve (12) inches apart on posts. The ends of ties shall be wound in a telegraph twist two and one half turns. Color to match mesh. Contractor shall touch-up PVC coating on ties damaged as result of installation.
- D. HARDWARE AND FASTENERS:** Nuts and bolts shall be galvanized but not powder coated. Cans of TGIC-Polyester or PVC touch-up powder coating shall be used to paint the nuts and bolts per manufacturer's recommendations.
- E. GATES:** Gates shall be furnished and installed on reinforced concrete slabs where indicated in the contract documents. All gates shall be galvanized steel and shall be TGIC-Polyester powder coated after fabrication per requirements for fence framework outlined elsewhere in this specification. Welded joints shall have a suitable rust preventive coating applied to the welds prior to powder coating. Gate fabric shall match line fabric adjacent to gate opening. Gates shall be installed plumb,

**ITEM 607.0AXXYY39 CHAIN LINK FENCE AND GATE -NYCDPR**

level and secure for full opening without interference. The hinges shall be so designed to permit the gate to swing a full 180 degrees.

F. (NO TEXT)

**G. SURFACE COATINGS:**

Galvanizing: Galvanizing of all components shall be per §719-01 and applied in a manner that provides an acceptable substrate for applied powder coatings (e.g. no lacquer, urethane or other coatings which would prevent proper adhesion of powder coating shall be applied to the pipe). Prior to powder coating, all galvanized parts shall first receive phosphating and chromating treatments to improve the adhesion of the surface coating.

Powder Coating: The entire fence installation, including posts, rails and fittings, shall be powder coated with either polyvinyl chloride (PVC) or TGIC-Polyester (with the exception of the turnbuckles and threaded ends of the truss rods, both of which shall be sprayed with powder coat touch-up after installation). All fence components shall be coated on all surfaces, of a color to match the framework.

Ensure surfaces to be powder-coated are clean and dry and free of grease, dust, rust, etc. The powder coating shall be applied to the galvanized surfaces in such a manner that the coating will not peel off. All coated surfaces shall comply with the adhesion specifications listed in ASTM F1043.

1. TYPE A - Polyvinyl Chloride Powder Coating: PVC Powder coating shall be applied to the galvanized steel or iron by the fluid bed method to a preheated base which has been cleaned and primed prior to submersion in vinyl, resulting in a firm bond between the PVC and the metal. PVC shall be applied to a film thickness of 10 to 15 mils on framework and fittings, and 7 to 12 mils on fabric without voids, tears or cuts that reveal the substrate and shall thoroughly adhere to the metal without peeling when scratched with a pick device or knife blade point.
2. TYPE B - TGIC-Polyester Powder Coating: TGIC-Polyester Powder shall be applied to the galvanized steel or iron in such a manner that the coating will not peel off. The TGIC-Polyester shall be applied at a film thickness of 3 to 6 mils by electrostatic spray process and bake finished per manufacturer's directions. The TGIC-Polyester shall be applied without voids, tears or cuts that reveal the substrate and shall thoroughly adhere to the metal without peeling when scratched with a pick device or knife blade point.

Color to be black unless otherwise indicated in the contract documents.

3. Field Test for PVC Powder Coating: Refer to CONSTRUCTION DETAILS E. Tests.

**H. GATE LOCKING SYSTEM:** Gate locking system shall be fabricated in accordance with the contract documents. All necessary fittings and gate holders to lock gates in both open and closed positions shall be furnished. The gate locking system shall be installed to face the fenced in area, unless otherwise directed. All welds shall be ground smooth to a neat finish and shall conform to the requirements of the New York State Steel Construction Manual.

**ITEM 607.0AXXYY39 CHAIN LINK FENCE AND GATE -NYCDPR**

- I. **PADLOCK:** The Contractor shall furnish one (1) padlock for each single gate and for each leaf of the double gates. All padlocks for the same park facility shall be keyed alike, with two (2) inch width by three-quarter (3/4) inch thick brass body, maximum security, five (5) pin tumblers with hardened alloy steel chrome plated shackle no less than three-eighths (3/8) inch diameter and two (2) inch clearance (elongated shackle). The Contractor shall furnish two (2) keys for each padlock.
- J. **TOUCH-UP & REPAIR:** For minor damage caused by installation, transportation, field welding and cutting of metal powder coated surfaces, the following touch-up and repair materials shall be applied:
1. Organic zinc repair paint complying with ASTM A780. Galvanizing repair paint shall have 65 percent zinc by weight. Thickness of repair paint shall be not less than that required by ASTM A123.
  2. Powder coating repair and touch-up finish in conformance with manufacturer's recommendations.
- K. **SHIPPING LISTS:** The shipping list for the materials furnished shall be endorsed with the manufacturer's voucher certifying that the materials used comply with these specifications.

**CONSTRUCTION DETAILS**

- A. **POSTS:** The posts shall be set in holes which shall have been formed in the concrete curb as shown in the contract documents. Core drilling is not permitted. After the posts have been set in place and properly supported to hold them in line and grade, the resulting space shall be neatly filled with a grout. All gates and all end, corner and gateposts, regardless of height of fence shall have a 1/2" diameter truss rod and turnbuckle. Rod shall be tied to the mesh every 12 inches on center with tie-wires. Bolts on the turnbuckle shall be tack welded to prevent loosening. The only exception to the above is that truss rods are not required for end, corner and gateposts for fences 4'-0" ht. and under.
- B. **FABRIC:** Chain link fabric shall be attached to line and corner posts and top, intermediate and bottom rails. Maintain a min. 1" (inch) clearance between finished grade and fence fabric. Posts shall be set plumb and true to line and grade. Any post not set true to line and grade shall be removed and replaced at the Contractor's expense. Bending posts to make them plumb will not be permitted.
- C. **BOLT AND HARDWARE INSTALLATION:** The ends of all bolts shall be peened after tightening.

Bolts which are installed six feet (6') or less above grade shall not protrude more than 1/4" beyond the nut after tightening. All rough edges resulting from the cutting of bolts to achieve this requirement shall be filed smooth. All post caps, corner and end fittings, and gate hinges on all fence elevations are to be secured in place with #14 SS drive screws.

**ITEM 607.0AXXYY39 CHAIN LINK FENCE AND GATE -NYCDPR**

**D. PROTECTION:** The Contractor shall maintain the chain link fences and gates during the life of the contract and shall repair and replace all members that are disturbed, damaged, or destroyed from any cause at no cost to the State.

**E. TESTS:**

1. Field Test for PVC Powder Coating: As per ASTM F668, three sample sections of the PVC powder coated fence shall be tested for bonding of the powder coat to the metal. Each test will consist of making two cuts parallel to the axis of the pipe or fitting, through the coating, appx. 1/16 inch (1.6 mm) apart, at least 1/2 inch (12.7 mm) long. With a knife peel back a section of the coating between 1/8 inch (3.2 mm) and 1/4 inch (6.4 mm) long to produce a tab. Attempt to remove the 1/16 inch strip of coating by pulling the tab. The fence shall be deemed acceptable if the coating breaks rather than separates from the metal on all three samples.
2. Laboratory Test for TGIC-Polyester Powder Coat: At the discretion of the Engineer, a sample of the TGIC-Polyester powder coated fence shall be laboratory tested for bonding of the powder coating to the metal. Test shall be the Cross Hatch test per ASTM D3359, Method B. Failure to satisfactorily pass this test shall be a basis for rejection.

**F. TOUCH-UP & REPAIR:** For minor damage caused by installation, transportation, field welding and cutting of metal powder coated surfaces: clean welds, bolted connections, abraded or sawcut areas, then:

1. On welded and cut surfaces, apply organic zinc repair paint complying with ASTM A780, then repair powder coating per number 2 below. Galvanizing repair paint shall have 65 percent zinc by weight. Thickness of repair paint shall be not less than that required by ASTM A123.
2. On damaged powder coated surfaces, touch-up finish in conformance with manufacturer's recommendations. Provide touch-up such that repair is not visible from a distance of six feet (6').

**G. SUBMITTALS:**

1. Certification: The Contractor shall submit, at his own expense, a certification from the supplier for the following:
  - a. All castings are made from malleable iron.
  - b. All hot-dipped galvanized items have met the ASTM serial designations as indicated in this specification.
  - c. All powder coating meets the ASTM serial designations as indicated in these specifications.
2. Shop Drawings: Before the work in the shop is started, the Contractor shall submit shop drawings for approval. Include complete details of fence and gate construction, fence height, post spacing, dimensions and unit weights of framework and concrete footing detail. A shop drawing shall be submitted for the gate locking system showing all three elements, a steel drop bolt, a rotating locking mechanism and gate stops.



**ITEM 607.0AXXY39 CHAIN LINK FENCE AND GATE -NYCDPR**

3. Samples: Prior to erection of the fence the following shall be submitted:
- a. Fence framework: One piece of each pipe size, twelve (12") inches long.
  - b. Fence Fabric: One piece twelve (12") inches square.

**METHOD OF MEASUREMENT**

The work will be measured as the number of linear feet of chain link fence furnished and installed.

The work will be measured as the number of each gate for chain link fence furnished and installed.

**BASIS OF PAYMENT**

The unit price bid per linear foot of chain link fence furnished and installed shall include the cost of all labor, material and equipment necessary to satisfactorily complete the work.

The unit price bid for each chain link fence gate furnished and installed shall include the cost of all labor, material and equipment necessary to satisfactorily complete the work.

***Payment will be made under:***

<b>Item</b>	<b>Description</b>	<b>Unit</b>
607.05040439	Chain Link Fence - NYCDPR	LF
607.03040439	Chain Link Fence Single Gate - NYCDPR	EA
607.04XXYY39	Chain Link Fence Double Gate – NYCDPR	EA

Where XXYY is the height of the chain link fence and chain link fence gate in feet and inches.

**ITEM 607.06400016 PEDESTRIAN FENCING FOR BRIDGES****ITEM 607.06410016 SNOW FENCING FOR BRIDGES****DESCRIPTION**

The work shall consist of furnishing and installing fencing including all hardware and construction systems necessary to complete the work. Fencing shall be installed according to the details and at the locations indicated on the Contract Plans.

**MATERIALS**

Materials used for this work shall conform to the following requirements:

<u>PART</u>	<u>REQUIREMENTS</u>
Vinyl Coated Steel Fence Fabric	710-03
Steel Fence Fabric (Aluminum Coated)	710-04
Posts, Rails, Braces, and Fittings	710-10.3
Plastic Coated Posts, Rails, Braces, and Fittings	710-12
Angles and Plates	ASTM A36
Steel "T" and Wide Flange Sections	ASTM A36
U-Bolts	ASTM A307
Nuts and Bolts	ASTM A307 and ASTM A325
Pipe Supports	ASTM A53
Anchor Bolts	ASTM A449

All uncoated steel shall be galvanized unless otherwise indicated on the Contract Plans or in the Proposal. Unless otherwise specified, galvanizing shall be in accordance with the requirements of Subsection 719-01, type as applicable. The type and size of fence fabric, posts, rails, braces, and fittings will be designated on the Contract Plans or in the Proposal.

Top and bottom edges of the fence fabric shall be "knuckled" (wire ends bent back upon themselves to eliminate sharp wire ends).

Unless otherwise noted on the Plans:

1. Posts shall be a nominal 2½" dia. (2⅞" O.D.). Minimum weight per linear foot shall be 5.75 lbs for Schedule 40 Pipe and 4.63 lbs for Class B Steel Tubing.
2. Top and Bottom rails shall be a nominal 1¼" dia. (1⅝" O.D.). Minimum weight per linear foot shall be 2.27 lbs for Schedule 40 Pipe and 1.3 lbs for Class B Steel Tubing.
3. Pipe supports shall be 1½" nominal dia. Schedule 80 Pipe.

**CONSTRUCTION DETAILS**

Fence fabric shall be firmly attached to the posts, rails, and braces. All fencing shall be stretched taut.

**ITEM 607.06400016 PEDESTRIAN FENCING FOR BRIDGES**

**ITEM 607.06410016 SNOW FENCING FOR BRIDGES**

The posts shall be fastened to the structure in accordance with the details indicated on the Contract Plans. Posts shall be set so that straight sections are truly vertical.

All the top rails shall pass through the base of the post caps. Both the top and bottom rails shall provide continuous support for the fencing from end-to end of the fence fabric. Sections of both rails shall be joined with sleeve couplings. At expansion joints in the structure, expansion sleeves shall be used. Top rails shall be securely fastened to terminal posts by means of rail end connectors approved by the Engineer.

Horizontal braces shall be provided at all terminal posts, midway between the top and bottom rails, and shall extend from the terminal post to the first adjacent intermediate post. Braces shall be securely fastened to the intermediate posts by brace ends and brace bands. Braces shall be securely fastened to the terminal posts by rail end connectors, approved by the Engineer. Braces shall be made from the same material as the top and bottom rails.

All welding shall meet the requirements of the New York State Steel Construction Manual.

Field welding shall be allowed only where indicated on the Contract Plans, or where ordered by the Engineer. Remove galvanizing in the area of the weld, prior to welding.

All finished surfaces of welds, and surfaces from which the galvanizing has been removed, shall be repaired in accordance with the requirements of Subsection 719-01. All galvanizing repair shall be done at no additional cost.

Unless otherwise noted on the plans:

1. The fabric shall be securely fastened to all terminal posts by 1" x 3/4" tension bars with 11 gauge pressed steel bands spaced approximately 12" apart.
2. Fabric shall be attached to top and bottom rails with 6 gauge tie wires at 24" centers.
3. The fabric shall be securely fastened to all vertical posts by 6 gauge aluminum ties at 12" centers.
4. Whenever fencing is cut to fit, the exposed ends, shall be coated as dictated by galvanizing repair procedures in subsection 719-01 of the standard specifications.

**METHOD OF MEASUREMENT**

Measurement will be taken as the number of linear feet of fencing installed.

Measurement will be taken along the bottom of the bottom rail, center-to-center of terminal posts.

**BASIS OF PAYMENT**

The unit price bid per linear foot shall include the cost of furnishing all labor, materials, and equipment necessary to complete the work.

- ITEM 607.30010010 - STEEL CHAIN LINK FENCE WITH TOP RAIL, 4 ft HIGH**  
**ITEM 607.30020010 - STEEL CHAIN LINK FENCE WITH TOP RAIL, 6 ft HIGH**  
**ITEM 607.30030010 - STEEL CHAIN LINK FENCE WITH TOP RAIL, 8 ft HIGH**  
**ITEM 607.30040010 - STEEL CHAIN LINK FENCE WITH TOP RAIL, 10 ft HIGH**  
**ITEM 607.30050010 - STEEL CHAIN LINK FENCE WITH TOP RAIL, 12 ft HIGH**

All the provisions of Section 607 pertaining to Optional Chain Link Fence, Type I, with Top Rail shall apply except for the following:

The fence fabric and frame options shall be listed below:

- |    | Fabric                | Frame  |
|----|-----------------------|--|
| 1. | Galvanized Steel      | Galvanized Steel                                   |
| 2. | Aluminum Coated Steel | Aluminum Coated Steel or Combined Coating on Steel |

End, corner, pull and line posts, top rail and braces shall be either Class A, Schedule 40 Pipe or Class B, Steel Tubing, at the Contractor's option. The alternative Roll-formed and H Section posts, top rail and braces shall not be used. The size of the posts, top rail and braces shall be as indicated on the Standard Sheets.

Fittings shall conform to the requirements of Subsection 710-10 except that aluminum alloy fittings shall not be used.

Gate posts shall be steel of the type and size indicated on Standard Sheets except that the optional Roll-formed posts shall not be used.

The fence fabric shall be attached to the line posts with matching tie wires; either galvanized steel or aluminum coated steel. The tie wires shall be 9 gage (5/32 Inch Nominal Coated Wire Diameter) and shall be spaced at a maximum of 14 inches. The tie wires shall be installed in accordance with the special note "Fence Fabric Tie Wires" which is included elsewhere in the proposal. Minor damage to the coating on the tie wires, caused by cutting and twisting operations, will be acceptable as determined by the Engineer.

The fabric shall be secured to all end, corner, pull and gate posts with stretcher bars fastened to the posts with stretcher bands spaced at a maximum of 14 inches. When the installation of the fencing is completed, the threads of the bolts in the stretcher bands shall be damaged, as directed by the Engineer, to prevent removal of bolts.

## **ITEM 607.41010010 TEMPORARY PLASTIC BARRIER FENCE**

### **DESCRIPTION**

This work shall consist of furnishing, installing, and maintaining Temporary Plastic Barrier Fences of the type and at the locations shown in the plans or where directed by the Engineer.

### **MATERIALS**

Materials for Temporary Plastic Barrier Fences shall meet the following requirements:

- **Fence:** High-density polyethylene mesh, ultraviolet-stabilized min. 2 years; minimum height 4.0 feet. Color: high-visibility orange or green. When used to protect trees or other vegetation, color shall be high-visibility orange.
- **Posts:** Rigid metal or wood posts, minimum length 6.0 feet.
- **Ties:** Steel wire, #14 gauge or nylon cable ties.
- **Warning signs:** Sheet metal, plastic or other rigid, waterproof material, 1.5 feet by 2.0 feet with 4 inch black letters on a white background. Text shall be: "Protected Site - Keep Out" unless otherwise specified.

### **CONSTRUCTION DETAILS**

Fences shall be erected prior to moving construction equipment onto any area designated for protection.

The line of fences as indicated on the plans shall be staked or marked out on the ground by the Contractor and approved by the Engineer before any fence is installed. Where used for protection of individual trees, fence shall be placed at the drip line (extent of canopy). If not possible, placement shall be as close to the drip line as possible and in no case less than 5.0 feet away from the tree trunk.

On approval of the stakeout, posts shall be securely driven on 6.0 foot-maximum centers, normal to the ground, to a depth 1/3 of the total post length. Plastic barrier fence shall be placed along the side of all posts. Ends of fencing segments shall overlap a distance of at least one half the fence height.

Fencing shall be secured to posts with wire or cable ties at top, middle and bottom of post. Fastener shall be tight enough to prevent the fencing from slipping down. Overlaps shall also be securely fastened.

Barrier fence which is not orange in color shall be flagged at 6.0 foot intervals with red or orange florescent tape. Warning signs shall be mounted on the fence at no more than 100 foot intervals.

Maintenance shall commence immediately after erection of the fence and continue until one week prior to acceptance of the contract, and shall consist of: replacing damaged post(s) and fencing; re-fastening and tightening fencing; and restoring fence to its intended height.

Fencing used for tree or other vegetation protection shall not be temporarily removed to allow equipment access over a protected area, except as required for items of work specifically shown on the plans and approved by the Engineer in writing.

**ITEM 607.41010010 TEMPORARY PLASTIC BARRIER FENCE**

**METHOD OF MEASUREMENT**

The quantity to be measured for payment will be the number of feet of Temporary Plastic Barrier Fence erected, measured along the top, to the nearest whole foot.

**BASIS OF PAYMENT**

The unit price bid shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work. Relocation of a fence from one location to another as directed by the Engineer shall be considered as a new location and will be separately paid.

Seventy percent (70%) of the price bid will be paid after satisfactory installation of the fence. The remaining Thirty percent (30%) will be paid after complete removal of the fence.

**ITEM 607.45XX0011 ORNAMENTAL STEEL MESH FENCE**  
**ITEM 607.46XXYY11 ORNAMENTAL STEEL MESH GATE**  
**ITEM 607.47000011 PRIVACY SLATS**

**DESCRIPTION**

This work consists of furnishing and installing steel mesh fence and gates and privacy slats as shown in the contract documents or as directed by the Engineer.

**MATERIALS**

**A. MANUFACTURERS:**

Omega Architectural Fence  
 Omega II Fence Systems  
 1735 St-Elzear West  
 Laval, QC, Canada H7L 3N6  
 Tel: 800-836-6342  
 Fax: 450-681-5318  
[www.omegafence.com](http://www.omegafence.com)

Metalco Amego  
 Steel Fence System  
 Atlantis Products, Inc.  
 8185 S. Cass Ave  
 Darien, IL 60561  
 Tel: 630-971-9680  
 Fax: 630-971-9860  
[www.fence-system.com](http://www.fence-system.com)

Prism 3-D Fence System  
 Payne Fence Products  
 3309 SW Interstate 45  
 Ennis, TX 75119  
 Tel: 972-878-7000  
 Fax: 972-878-4703  
[www.paynefence.com](http://www.paynefence.com)

or equal as approved by the Regional Landscape Architect.

All materials shall be delivered to the site along with sufficient documentation indicating compliance with the requirements of the Department of Transportation, Federal Highway Administration Rules and Regulations, Section 165, Domestic Origin, (Buy America). Acceptable documentation may include mill certificates that verify the US origin of all steel products. The Engineer may reject all material, at no cost to the State, if it is not clear that all materials are in compliance with Buy America.

**B. FENCE AND GATE:**

a. Product: Model "Omega Architectural" Fence and Accessories

b. Steel Mesh Fence Panels:

- i. The wire mesh fence panels shall be welded by resistance welding per ASTM A185 using 0.19 inch pre-galvanized steel wire, welded at each crossing to form rectangles of 2 inch by 6 inch. The cold rolled wire shall have a tensile strength of at least 75 ksi and a 2,170 lb breaking strength.
- ii. Galvanized Before Welding: Applied on wire, 0.03 lb/ sqft zinc coating conforming to the ASTM A641.
- iii. One end of the vertical wires of the panel shall exceed 1 inch from the last or first horizontal wire thereby creating a spiked top or bottom depending of its position when installed. The other end is cut flush. A 4 mil polyester powder coating is applied on the mesh panel after fabrication.
- iv. A 4 mil polyester powder coating shall be applied on the mesh

**ITEM 607.45XX0011 ORNAMENTAL STEEL MESH FENCE**  
**ITEM 607.46XXYY11 ORNAMENTAL STEEL MESH GATE**  
**ITEM 607.47000011 PRIVACY SLATS**

- c. Gate Frames for swing gates shall be made in accordance with ASTM F900 using galvanized square steel tube 2 inch by 2 inch vertical and horizontal parts shall be welded at intersections to create a rigid frame.
- d. Fence posts shall be square posts, cold rolled from 1008 grade steel and meet ASTM 513 and ASTM A787-01, G90 zinc coating (galvalume process). Provide post wall thickness and size as specified in the contract plans.
- e. Gate Posts shall be produced per ASTM A787, G90 with a zinc coating (galvalume process) of 5.5 lb/sqft on steel square sections in conformity to ASTM B-6. The steel shall meet the requirements of structural quality steel with a 45 ksi tensile strength.
- f. Universal Post Bracket attachment kit for standard fence shall include 0.1 inch steel collar and wire retaining plate 0.25 inch by 1 inch, nut, washer and carriage bolt 0.31 inch by 1.25 inch - all galvanized steel. For 90 degree turn, use the same bracket. For different angles, use the "Universal angle brackets"
- g. Post Caps shall be aluminum for the 2 inch by 2 inch square post and galvanized steel for other square posts. Polyester coating shall match post where specified.
- h. The Special Panel Fitting, enabling a panel to be fastened to any vertical or horizontal surface, such as a steel, concrete beam or a wood post, shall be hot dip galvanized and provided as required.
- i. Gate Hardware shall be in conformity with ASTM F900 for hinges, latch, drop rods, shall be hot-dip galvanized steel, and sized to assure proper gate operation. Non moving parts shall be powder coated.
  - i. Hinge shall be structurally designed to support all gates without deformation during opening and closing.
  - ii. Latch shall be clamp-on gravity system that is self latching.
  - iii. Gate Keeper for Double Leafed Models shall consist of mechanical device with gravity-lock system that fasten each gate leaf when in full open position.
  - iv. Double Gates Hardware shall consist of one drop bar to secure in closed position one of the gate leaves complete, with stop pipe to engage the center drop rod. And one self-locking device with padlock eyes as an integral part of latch.

**C. FINISHES:**

- a. Zinc Coating:
  - i. Galvanized After Welding (GAW): The wire meshes shall be coated with 0.075 lb/sqft zinc in conformity with "ASTM A123/A123M Standard Specification for Zinc (Hot Dip Galvanized) Coating on Iron and Steel Products".



**ITEM 607.45XX0011 ORNAMENTAL STEEL MESH FENCE**

**ITEM 607.46XXYY11 ORNAMENTAL STEEL MESH GATE**

**ITEM 607.47000011 PRIVACY SLATS**

- ii. Galvanized Before Welding (GBW): The wire mesh shall be coated with 0.03 lb/sqft zinc in conformity with "ASTM A641 Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire".
  - iii. The fence posts, the swing gate frame and posts shall be zinc coated (galvalume process) with 0.055 lb/sqft per "ASTM A787-01 Standard Specification for Electric-Resistance-Welded Metallic-Coated Carbon Steel Mechanical Tubing".
- b. Polyester coating shall be minimum 4 mils applied by an electrostatic method. Coating shall cover all surfaces of the wire and post sections. Coating shall be capable of withstanding the following tests:
- i. Mechanical adhesion test per ASTM D 3359 - Method B.
  - ii. Shock resistance tests per ASTM D 2794.
  - iii. Salt spray testing with a minimum of 1,000 hrs without red rust appearance, per ASTM B 117.
  - iv. Humidity resistance in a weather meter chamber per ASTM D 2247.
  - v. Color: As selected by Architect from manufacturer's available finishes and colors.

**D. HARDWARE AND ACCESSORIES:**

- a. Anchor bolts embedded or grouted in concrete for securing fence post base plates shall meet the requirements of NYSDOT Standard Specification Section 723-60. Nuts and washers shall meet the requirements of ASTM A325M. Anchor bolts, nuts, and washers shall be galvanized in accordance with NYSDOT Standard Specification Section 719-01, Galvanized Coatings and Repair Methods, Type II.
- b. Grout for anchor bolts shall conform to the requirements of NYSDOT Standard Specification Section 701-05 or 701-07.
- c. Drilling and grouting shall be performed in accordance with NYSDOT Standard Specification Section 586.
- d. Base plates shall be A36M steel minimum and hot-dip galvanized according to NYSDOT Standard Specifications Section 719-01, Type I.
- e. Precast inserts shall meet the material requirements given in NYSDOT Standard Specification Section 704-03, Precast Concrete – General, and shall be coordinated with the precast concrete manufacturer.
- f. All other connecting pieces and other accessories shall be hot-dip galvanized and conform to NYSDOT Standard Specifications Section 719-01, Galvanized Coatings and Repair Methods, Type I.

**ITEM 607.45XX0011 ORNAMENTAL STEEL MESH FENCE**

**ITEM 607.46XXYY11 ORNAMENTAL STEEL MESH GATE**

**ITEM 607.47000011 PRIVACY SLATS**

**E. PRIVACY SLATS:**

Privacy slats shall be composed of extruded high density polyethylene (HDPE) containing color pigment and ultra violet inhibitors. Color shall be as specified in the contract plans.

**CONSTRUCTION DETAILS**

All work, including, but not limited to fabrications, inspection, and transportation of steel mesh fence shall be done in accordance with provisions of the New York State Steel Construction Manual.

**A. SUBMITTALS:**

- a. Product Data: Material descriptions, construction details, dimensions of individual components and profiles, and finishes for the following:
  - i. Fence and gate posts, rails, and fittings.
  - ii. Gates and hardware.
- b. Shop Drawings:
  - i. Show locations of fence, each gate, posts, rails, and details of gate swing, or other operation, hardware, and accessories.
  - ii. Indicate materials, dimensions, sizes, weights, and finishes of components.
  - iii. Include plans, elevations, sections, gate swing and other required installation and operational clearances, and details of post anchorage, attachment and bracing.
  - iv. Installation procedures and instructions describing details for a typical fence and gates.
- c. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- d. Verification Samples: For each finish product specified, two samples, minimum size 6 inches square, representing actual product, color, and patterns.
- e. Qualification Data: For firms and persons specified in "Quality Assurance" article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.

**B. QUALITY ASSURANCE**

Installer Qualifications: An experienced installer who has completed fences and gates similar in material, design, and extent to those indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

**C. DELIVERY, STORAGE, AND HANDLING.**

Store products in manufacturer's tagged and unopened packaging until ready for installation.

**D. INSTALLATION**

- a. Work shall proceed in accordance with the manufacturer's instructions and in accordance with the contract plans.
- b. Privacy Slats shall be installed at locations shown in the contract plans. Installation of slats shall be coordinated with fence manufacturer.

**ITEM 607.45XX0011 ORNAMENTAL STEEL MESH FENCE**  
**ITEM 607.46XXYY11 ORNAMENTAL STEEL MESH GATE**  
**ITEM 607.47000011 PRIVACY SLATS**

**METHOD OF MEASUREMENT**

**ORNAMENTAL STEEL MESH FENCE**

This work will be measured as the number of feet of ORNAMENTAL STEEL MESH FENCE satisfactorily furnished and installed, measured along the top of the fence from center to center of the end posts.

**ORNAMENTAL STEEL MESH GATE**

This work will be measured as the number of ORNAMENTAL STEEL MESH GATE satisfactorily furnished and installed.

**PRIVACY SLATS**

This work will be measured as the number of Square Feet of PRIVACY SLATS satisfactorily furnished and installed.

**BASIS OF PAYMENT**

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work.

Concrete, reinforcement, excavation, and fill for post foundations shall be paid for under separate items.

***Payment will be made under:***

<b>Item No.</b>	<b>Item Pay</b>	<b>Unit</b>
607.45120011	Ornamental Steel Mesh Fence, 4 ft high	Ft
607.45150011	Ornamental Steel Mesh Fence, 5 ft high	Ft
607.45240011	Ornamental Steel Mesh Fence, 8 ft high	Ft
607.46121211	Single Ornamental Steel Mesh Gate, 4 ft high, 4 ft opening	EA
607.46151211	Single Ornamental Steel Mesh Gate, 5ft high, 4ft opening	EA
607.46153111	Double Ornamental Steel Mesh Gate, 5 ft high, 10 ft opening	EA
607.46242411	Single Ornamental Steel Mesh Gate, 8 ft high, 8 ft opening	EA
607.46244911	Double Ornamental Steel Mesh Gate, 8 ft high, 16 ft opening	EA
607.46245511	Double Ornamental Steel Mesh Gate, 8 foot high, 18 ft opening	EA
607.47000011	Privacy Slats	Sq Ft

**ITEM 607.96000008 REMOVE AND DISPOSE OF EXISTING FENCE**

**DESCRIPTION:**

The contractor shall remove existing fence in accordance with the plans, specifications and directions of the Engineer. All references to "fencing" shall include existing gates, if any to be removed.

**MATERIALS:**

Materials needed for modifying end sections shall conform to the requirements of Section 710 of the Standard Specifications or shall conform to the material requirements of the existing fence, as directed by the Engineer.

Concrete for footings shall conform to Section 607-2.01 of the Standard Specifications.

**CONSTRUCTION DETAILS:**

The contractor shall remove and dispose of the existing fence to a point shown on the plans or where directed by the Engineer. If a portion of the existing fence is to remain, the remaining end section shall be modified to adequately secure the fencing. This modified section shall include all hardware necessary to secure the fencing in a manner similar to the existing end section or as directed by the Engineer. Parts salvaged from the removed portion, acceptable to the Engineer, may be reused in the end section.

All work shall be done in a workmanlike manner with care taken not to disturb the surrounding area or existing fence to remain. Any damage to the area or existing fence to remain caused by the contractor's operations shall be repaired to the original condition at no expense to the state. Any concrete post footings shall be either broken up and removed or removed in one piece as determined by the contractor and approved by the Engineer. All post holes shall be filled to meet existing grade. All excavation and backfill shall conform to Section 203 "Excavation and Embankment".

**METHOD OF MEASUREMENT:**

This work will be measured as the number of feet of fence removed in accordance with the plans or as directed by the Engineer. An additional 10 foot allowance will be paid for each end section modified to secure the remaining fence.

**BASIS OF PAYMENT:**

The unit price bid shall include the cost of all labor, equipment and materials necessary to complete the work, including the cost of any fill required to fill the post holes.

**ITEM 607.98010111 TEMPORARY CHAIN-LINK FENCE****DESCRIPTION:**

This work shall consist of furnishing, erecting, moving and removing chain link fencing and metal gates of the size and type shown on top of the temporary concrete barriers, and in sidewalk and roadway areas at the locations as shown on the plans and where directed by the Engineer.

Fence Types: The types of the fences to be used may be one of the following:

Galvanized Steel Chain-Link Fencing on Steel Frame  
 Vinyl Coated Steel Chain-Link Fencing on Steel Frame  
 Vinyl Coated Steel Chain-Link Fencing on Plastic Coated Frame Fence Gates

**MATERIALS:**

Materials shall conform to the requirements specified in the following subsections of Section 700-Materials:

Galvanized Steel Fence Fabric	710-02
Vinyl Coated Steel Fence Fabric	710-03
Steel and Iron Posts, Rails, Braces and Fittings for Chain- Link Fence	710-10
Plastic Coated Posts, Rails, Braces and Fittings for Chain-Link Fence	710-12

**Fence Gates:**

Gate frames shall be composed of tubing braced with rods, bars or angles and filled with wire mesh, meeting the requirements of the Specifications for the type of fencing with which the gate is to be used, all as detailed on the Plans or Standard Sheets.

**Portland Cement Concrete for Basis:**

Portland cement concrete used for basis shall be Class A or C, conforming to the requirements of Section 501, Portland Concrete-General, except that requirements for automated batching shall not apply.

**ITEM 607.98010111 TEMPORARY CHAIN-LINK FENCE**

**CONSTRUCTION DETAILS:**

General:

The Contractor shall install fence posts on the concrete barrier in 1 ½ inch diameter, 12 inch deep drilled or formed holes near each end of each section of barrier. In addition, if the concrete barrier is furnished in lengths exceeding 10 feet, it will be necessary for the Contractor to provide an additional hole at the center of the section to permit the installation of an intermediate post.

Line posts and corner and end posts on grade shall be installed in accordance with Standard Sheet 607-10 and 607-11 and gate posts shall be installed in accordance with Standard Sheet 607-12.

Heights of the posts and fencing shall conform to the dimensions shown on the Plans.

The Contractor shall perform such clearing and grubbing as may be necessary to construct the fence to the required grade and alignment.

At locations where breaks in a run of fencing are required, or at interactions with existing fences, appropriate adjustments in post spacing shall be made to conform to the requirement for the type of closure indicated.

When the Plans require that the posts, braces, or anchors be embedded in concrete, the Contractor shall install temporary guys or braces, as may be required to hold the posts in proper position until such time as the concrete has set sufficiently to hold the posts. Unless otherwise permitted, no materials shall be installed on posts or strain placed on guys or bracing set in concrete until seven days elapsed from time of placing the concrete.

All posts shall be set vertically and to the required grade and alignment. Cutting of the tops of the posts will be allowed only with the approval of the Engineer and under conditions specified by the Engineer.

Fence fabric of the size and type required shall be firmly attached to the posts and braces in the manner indicated. All fence fabric shall be stretched taut and installed to the required elevations.

At each location where an electric transmission, distribution or secondary line crosses any of the types of fences covered by these Specifications, the Contractor shall furnish and install a ground conforming to the requirements of Subsection 9 of the National Electric Safety Code.

Fence shall generally follow the contour of the ground, with the bottom of fence fabric no less than 2 inch nor

**ITEM 607.98010111 TEMPORARY CHAIN-LINK FENCE**

more than 6 inch from the ground surface. Grading shall be performed where necessary to provide a neat appearance. Line posts shall be spaced equidistant in the fence line at the spacing shown on the Plans, Standard Sheets or as directed by the Engineer. End, corner, and intermediate posts shall be placed at the locations indicated on the Plans, Standard Sheets or where directed by the Engineer, and shall be braced as shown on the Plans and Standard Sheets. When chain-link fence is on a long curve, intermediate posts shall be evenly spaced so that the strain of the fence will not bend the line posts.

All end, corner, and intermediate posts shall be set plumb in concrete bases of the depth and diameter shown on the Plans or Standard Sheets. The Contractor shall have the option of setting the line posts in concrete bases or using methods of driving and anchoring specified by the fence manufacturer and approved by the Engineer.

The concrete bases shall be rough cast in the ground around the posts. The top surface shall be domed to shed water and provide a neat appearance when completed. Extensions of up to 45 minutes for the allowed time for pouring the concrete will be permitted.

**Chain Link Fencing With Top Rail:**

Posts shall be set so they are equidistant with a maximum of 10 foot centers.

All top rails shall pass through the base of the post caps and shall form a continuous brace from end to end of each stretch of fence. Top rail lengths shall be joined with sleeve couplings with expansion sleeves provided at 100 foot intervals. Top rails shall be securely fastened to end posts by means of approved rail end connectors. Horizontal braces shall be provided at all intermediate posts, midway between the top rail and ground as shown on the Plans or Standard Sheets.

Diagonal truss rods shall be installed with the horizontal braces as indicated in the Plans or Standard Sheets.

Fence fabric shall be installed approximately 2 inch above the ground level and securely fastened along the bottom and to all braces, top rails, line and pull posts, at the intervals indicated on the Standard Sheets by approved methods. The fabric shall be secured to all end, corner, and gate posts with stretcher bars fastened to the posts, with stretcher bands spaced at a maximum of 14 inch and in a manner permitting adjustment of the fabric tension.

If the Contractor elects the option of using pieces, roll-formed sections, the fence fabric shall be integrally woven into the fabric loops on the end, corner, pull and gate posts. The fabric shall be attached to the end, corner and line posts as shown on the Standard Sheets.

**ITEM 607.98010111 TEMPORARY CHAIN-LINK FENCE**

**Chain Link Fencing With Top Tension Wire:**

The construction details specified in Chain-Link Fencing with top Rail shall apply with the following modifications:

- A. Top tension wire shall be installed as shown on the Plans Standard Sheets, or as directed, by the Engineer.
- B. All posts shall be spaced equidistant in the fence line on a maximum of 8 foot centers, except that a 10 foot spacing will be permitted on concrete barriers.
- C. Additional pull posts shall be placed at locations indicated on the Plans or Standard Sheets. Brace assemblies shall be installed at each intermediate post as indicated on the Plans or Standard Sheets.

**Vinyl Coated Chain-link Fencing on Plastic Coated Frame:**

The construction details specified on Chain-Link Fencing with Top Rail or Chain-Link Fencing with Top Tension Wire shall apply with the following addition:

If any of the resin clad material specified under item has the protective resin coating is damaged so its effectiveness to prevent corrosion of the base material is impaired, the Contractor shall repair such parts by applying one coat of an approved compound of color to match original material.

**Fence Gates:**

The Contractor shall construct metal fence gates of the type and size as indicated on the Plans or Standard Sheets, and in the location shown on ordered by the Engineer.

Upon removal, fence gates shall become the property of the Contractor and shall be removed by it from the project site.

**METHOD OF MEASUREMENT:**

This work will be measured as the number of linear feet of the chain-link fencing installed as measured along the top of fencing, including gates, center to center of end posts.



**ITEM 607.98010111 TEMPORARY CHAIN-LINK FENCE**

**BASIS OF PAYMENT:**

The unit price bid per linear feet for temporary chain-link fencing shall include the cost of all labor, materials, tools and equipment necessary to satisfactorily install the fencing , and gates and to subsequently remove them, and shall include all necessary clearing, grubbing, excavation and disposal, fill, concrete, anchoring, posts, hardware, fencing, gates, gate posts, locks, bracing, drilling or forming holes in concrete barriers as necessary, repair of material damaged by the Contractor's operations and all other materials.

Upon completion of construction, all materials installed under this item shall become the property of the Contractor and shall be removed by the Contractor from the site of work.

After placement, payment will be made for ninety (90) percent of the quantity of chain-link fencing and gates furnished and erected in accordance with contract requirements. The remaining will be paid upon removal.

**ITEM 608.0X000039 ASPHALT BLOCK PAVEMENT - NYCDPR****DESCRIPTION**

This work shall consist of furnishing and installing asphalt block pavement in accordance with the contract documents and as directed by the Engineer.

**MATERIALS**

The following sections of the standard specifications shall apply:

Hot Mix Asphalt Pavements	402-2
Portland Cement Concrete Pavement	502
Sidewalks, Driveways, Bicycle Paths and Vegetation Control Strips	608-2
Weed Control Barriers	713-18

The following ASTM specifications shall apply:

Standard Specification for Concrete Aggregates	C33
Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate	C88
Standard Specification for Asphalt Used in Roofing	D312

A. Setting Bed:

- a. **Sand** shall be per §703-06
- b. **Non-woven filter fabric** weed barrier shall be per §713-18, Type A.
- c. **Bituminous setting bed** shall be per §608-2.03 C.
- d. **Tack coat** shall conform to §608-2 03 C of the Standard Specifications. Tack coat shall be an asbestos free, cold applied, rubberized asphalt cement, and shall consist of two percent (2%) neoprene rubberized asphalt with 150 degrees softening point and 6.5 percent (6.5%) inorganic material
- e. **Stone Screenings** shall be either limestone or taprock and shall consist of hard, durable, sharp-edged fragments, free from dirt or other deleterious matter, graded to meet the following requirements:

Passing Sieve (dry measure)	Percent by Weight
½ inch	100
No. 20	20 – 45
No. 200	5 - 15

- f. **Asphalt concrete binder** course shall be in accordance with §402 19 F9 Binder Course HMA, 80 Series.
  - g. **Concrete base** shall be §501-2 Type II, Class C. Forms, equipment and sealants shall be §502-2.04.
  - h. **Foundation material or subbase** shall be per §703-02 Coarse Aggregate and meet the material requirements of crushed stone or crushed gravel. Size designation shall be 2.
  - i. **Joint filler**, if specified, shall be §703-06
- B. **Asphalt Block**: Unless otherwise noted in the contract documents, all pavers shall be:
- hexagonally shaped asphaltic concrete blocks,

**ITEM 608.0X000039 ASPHALT BLOCK PAVEMENT - NYCDPR**

- 8" between parallel sides and
- 2" in thickness, with a permissible plus or minus tolerance of 1/16" in any dimension.
- Composed of approximately 6.5%  $\pm$  (plus or minus) 0.5% high melting point oxidized asphalt conforming to ASTM D312 for Type 3 asphalt and 94% graded crushed rock aggregate and mineral filler; at the temperature of 300 degrees F the mix is compressed 4,000 lbs. per square inch by high speed hydraulic presses.
- Top exposed surface of blocks shall have a ground finish, exposing a small aggregate, similar in appearance to Hanover's Matrix #10, unless otherwise noted in contract documents.
- Blocks shall be the color(s) noted in the contract documents.
- Shall be from the following manufacturer:

Asphalt Block  
 as manufactured by  
 Hanover Architectural Products, Inc.  
 500 Hanover Road  
 Hanover, PA 17331  
 717.637.0500  
 www.hanoverpavers.com

or equal as approved by the Engineer.

- C. Tests: Unless otherwise specifically provided, test of materials shall be made in accordance with the appropriate specification.

**CONSTRUCTION DETAILS**

The following sections of the standard specifications shall apply:

Portland Cement Concrete – General	501-3
Portland Cement Concrete Pavement	502-3
Sidewalks, Driveways, Bicycle Paths and Vegetation Control Strips	608-3

- A. Subgrade Preparation: the subgrade shall be compacted with equipment that will yield the following density:

- Cohesive Subgrade – Minimum of 95% of AASHTO T180, Method D density
- Cohesionless Subgrade – Minimum of 100% of AASHTO T180, Method D density

The Contractor shall remove from the subgrade all debris, foreign and other undesirable material which interferes with satisfactory construction. The fine grade shall not be muddy or otherwise unsatisfactory when the base course material is placed. If the fine grade becomes rutted or displaced, the Contractor shall regrade at no additional cost to the state.

**ITEM 608.0X000039 ASPHALT BLOCK PAVEMENT - NYCDPR**

B. **Foundation or Subbase Preparation:** The material for foundation shall be evenly spread on a prepared sub-grade in the position shown in the contract documents in four inch (4") lifts, each lift to be rolled while wet with a seven (7) to twelve (12) ton tandem roller (or other approved method) to the thickness indicated in the contract documents.

C. **Setting Bed Preparation:**

a. **Sand Setting Bed:** Refer to §608-3.03 A, except the depth of the cushion sand shall be as specified in the contract documents.

b. **Bituminous Setting Bed and Tack Coat:** Refer to §608-3.03 C, with the following additions:

- Carefully fill in all depressions that remain after placement.
- After setting bed has cooled, roll by hand with a 100-lb roller to eliminate sponginess and prepare the surface for the installation of the tack coat.
- Setting bed shall be protected against pedestrian traffic and construction equipment to ensure a level surface for setting pavers.

c. **Stone Screenings:** The spreading of the stone screening base material shall be accomplished using suitable equipment from piles deposited along the proposed site.

Base material shall be evenly spread over the compacted subgrade so that the course will have, after rolling, the required thickness. No segregation of large or fine materials will be allowed, but the screenings, as spread, shall be well graded with no pockets of fine material.

After spreading, compact the stone screenings by rolling with an approved roller weighting no less than ten (10) tons. The stone screenings shall be sprinkled and saturated immediately before the material becomes set. If pavement becomes unstable and waves under the roller, the roller shall be taken off and this portions shall be left to dry out before rolling is resumed.

More screenings shall be added as necessary, and the sprinkling and rolling shall continue until the base has been properly compacted. If necessary, the sprinkling and rolling shall continue until the base is properly compacted. Upon request, the base may be sprinkled and backrolled in succeeding days.

d. **Asphaltic Base (Binder) Course:** Refer to §608-3.02. Refer to the contract documents for thickness of base (binder) course.

e. **Concrete Base:**

- Refer to §501-3 and §608-3.01. Welded wire fabric shall only be installed if specified.
- For forms, refer to §502-3.05.
- For expansion joints, refer to §502-3.06.
- For curing, refer to §502-3.11.
- For sealing refer to §502-3.12.

D. **Setting Pavers:**

**General:** Carefully place the pavers by hand, ground finish side up, unless otherwise specified, in straight course, with hand-tight joints and uniform top surfaces, keeping full alignment according to

**ITEM 608.0X000039 ASPHALT BLOCK PAVEMENT - NYCDPR**

the patterns shown on the plans. Pavers may vary slightly in shade and tonality. Installer shall work from at least four (4) pallets at a time in order to create a uniform blend of paver shades.

The layout pattern and paver design is as indicated in the contract documents and shall be subject to approval. All edges, borders and corners of the paved area shall be finished to true and neat lines. Special cutting, soldier courses, color patterns, various shapes, and variations in size and finish are all to be included in the work for this item.

Joints between blocks shall have a maximum width of 1/8". All blocks shall be cleaned prior to placement on the pavement.

**Sand Base:** When pavers are set on sand base, refer to §608-3.03 A.

**Bituminous Setting Bed:** When pavers are set on bituminous setting bed, place pavers when modified asphalt adhesive is dry to touch. In no case shall the bituminous setting bed be disturbed or walked on during the laying of blocks.

- E. **Joint Filler:** Upon the completion of the work of laying the blocks in each section, the surface of the blocks shall be swept clean and the joints filled with fine sand.

All joints shall be filled the same day as the blocks are laid. Filler shall not be applied if the blocks are wet or if the air conditions are such that the filler does not readily enter the joints. Filler shall be well worked into the joints by means of squeegees or other approved devices operating slowly backward and forward. Squeegeeing shall continue until the joints are flush with the top surface. Immediately after the joints are filled, the pavement shall be lightly sprayed and cleaned.

- F. **Submittals:**

**Samples:** The Contractor shall submit samples of each type and color of paver that is proposed for use. The samples shall be clearly labeled with the contract number, manufacturer, color and finish. All pavers used on the work shall conform to the approved samples.

**Sample Pavement Layout (Mock-up):** Prior to installing the asphalt block pavement, the Contractor shall construct a 10 feet x 10 feet sample pavement that demonstrates the paving patterns, finishes and colors in accordance with the contract documents, in order to verify the aesthetic effect and quality of materials. The Contractor shall provide seven days advanced notification prior to constructing the sample pavement. The sample shall be located as directed and may be part of the final work. It shall contain mortar joints and expansion joints as included in the final work. The Contractor shall obtain written approval of the sample prior to commencing with the final work. If the sample is disapproved, it shall be removed and re-installed. The Contractor shall maintain the approved sample pavement in an undisturbed condition as a standard for judging the completed work. After completion and approval of the finished work, the sample pavement shall be demolished and removed by the Contractor, or included as part of the work.

**ITEM 608.0X000039 ASPHALT BLOCK PAVEMENT - NYCDPR****METHOD OF MEASUREMENT**

This work will be measured as the number of square yards, measured to the nearest square yard, of asphalt block pavement furnished and installed.

**BASIS OF PAYMENT**

The unit price bid per square yard of asphalt block pavement furnished and installed shall include the cost of furnishing all labor, materials and equipment necessary to satisfactorily complete the work.

Excavation shall be paid for separately.

*The work will be paid under the following payment items:*

<b>Item</b>	<b>Description</b>	<b>Unit</b>
608.05000039	Asphalt Block Pavement on Asphalt Concrete Base - NYCDPR	SY
608.06000039	Asphalt Block Pavement on Stone Screenings - NYCDPR	SY
608.07000039	Asphalt Block Pavement on Concrete Base – NYCDPR	SY
608.08000039	Asphalt Block Pavement on Sand – NYCDPR	SY
608.09000039	Asphalt Block Pavement on Existing Foundation – NYCDPR	SY
608.01000039	Asphalt Block Pavement – Placement as specified – NYCDPR	SY

**ITEM 608.7ABXYN08 BOLLARD**

**DESCRIPTION**

This work shall consist of furnishing and installing bollards in accordance with the contract documents and as directed by the Engineer.

The bollard(s) furnished and installed under this pay item is identified in a special note entitled "Bollards" in the contract documents. Bollard anchoring types include the following:

Fixed – Surface Mounted

Fixed – In-Ground

Removable – with embedment sleeve

Retractable – manual (with embedment sleeve)

Retractable – automatic or semiautomatic (with pneumatic embedment sleeve)

Collapsible/Flexible – mounting as indicated in the contract documents

As specified

**MATERIALS**

Where appropriate, the following sections of the standards specifications shall apply:

Excavation and Embankment	203-2
Portland Cement Concrete	501-2
Wood Preservative – Waterborne	708-31
Epoxy Coated Bar Reinforcement	709-04
Timber and Lumber	713-13
Galvanized Coating and Repair Methods	719-01
Acrylic Plastic Reflectors	730-10

**General**

The materials required to satisfactorily furnish a bollard under this pay item shall be in accordance with the requirements found in the special note entitled, "Bollards". This special note will include information on the bollard material, finishes, mounting/embedment hardware and concrete (if required), including reinforcement. When Collapsible/Flexible bollards are specified, the special note will indicate the mounting/embedment method.

**Galvanization:**

Bolts, nuts and washers shall be galvanized in accordance with the provisions of §719-01 Galvanized Coatings and Repair Methods, Type II.

**ITEM 608.7ABXYN08 BOLLARD**

Sleeves for removable bollards shall be galvanized in accordance with the provisions of §719-01 Galvanized Coatings and Repair Methods, Type I, unless otherwise specified.

Any other galvanization types shall be as specified in the special note.

**Submittals:**

The Contractor shall submit shop drawings and/or manufacturer's cut sheets/specifications for each unique bollard to be installed using this specification. The following information shall be included:

- Manufacturer's name and address
- Bollard type, name and/or catalog/reference number
- Bollard material and finish,
- Bollard dimensions (including height and outside diameter (OD) or largest width dimension), and
- Bollard anchor details including mounting/embedment type with hardware.

**CONSTRUCTION DETAILS**

The bollard shall be installed according to the installation instructions provided by the manufacturer and/or in accordance with the contract documents.

The construction methods required to satisfactorily install a bollard under this pay item shall be in accordance with the requirements found in the special note entitled, "Bollards".

**Submittals:**

The Contractor shall supply shop, installation and detail drawings that describe the construction methods necessary to install the bollard(s). At a minimum, the information shall include:

- drawings of the proposed bollard(s) and hardware
- dimensions,
- materials and finishes
- connection and anchor details, and
- installation details.

**METHOD OF MEASUREMENT**

This work will be measured as the number of each bollard(s) satisfactorily furnished and installed.



**ITEM 608.7ABXYN08 BOLLARD****BASIS OF PAYMENT**

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work.

Where:

A= Embedment Type	B = Lighting	X = largest width dimension	Y = Height
1 = Fixed, surface mounted	1 = without light	1 = up to 3"	1 = up to 12"
2 = Fixed, in ground	2 = with light	2 = over 3" – 5"	2 = over 12" to 18"
3 = Removable		3 = over 5" – 7"	3 = over 18" to 24"
4 = Retractable – Manual		4 = over 7" to 9"	4 = over 24" to 30"
5 = Retractable – (Semi) Automatic		5 = over 9 - 11"	5 = over 30" to 36"
6 = Collapsible/Flexible		6 = over 11"	6 = over 36"
7 = As Specified			

And N = a serialization pay item number for each unique bollard type

*Payment will be made under:*

Item No.	Item	Pay Unit
608.73166108	Bollard – Removable, Without lighting, width over 11 inches, Height over 36 inches.	Each

**ITEM 609.02110011 TALL GRANITE CURB**  
**ITEM 609.02120011 RAISED GRANITE CURB**  
**ITEM 609.02130011 FLUSH GRANITE CURB**

**Description:**

The work shall consist of furnishing and installing granite curbs in conformance with the details shown on the Contract Drawings, and where directed by the Engineer.

**Materials:**

- A. Mortar shall be Type S conforming to the requirements of §705-21 of the Standard Specifications. Submit samples of mortar in color selected by the Engineer from mortar manufacturer's standard color chart.
- B. Granite Curb shall conform the requirements for granite of §714-01. Species and finishes of granite shall be as indicated on the Contract Drawings.

All stone shall be as specified on Contract Drawings, sound, durable, properly quarried, free from reeds, rifts, seams, laminations and minerals which, by weathering, would cause discolorations or deterioration. They shall be of a size, quality and color acceptable to the Engineer. Duplicate samples of stone at least 1 foot square which show complete color range shall be submitted to the Engineer for approval.

- C. Stainless steel attachment: Provide anchors embedded within stone in sizes, configurations and profiles as indicated or as required to sustain imposed loads and provide anchorages and supports free from rattle or displacement.

Stainless steel dowels shall meet the requirements of ASTM A276, AISI Type 302/304. Non-expansive, non-metallic, non-staining grout for setting dowels.

- D. Material samples of each type of granite curb, showing full range of color and finish shall be submitted to the Engineer for approval.
- E. Shop Drawings indicating location and size of each fabricated item shall be submitted to the Engineer for approval. All shop drawings shall include detailed dimensioned plans, sections and elevations, large scale details, profiles, methods of attachment and other components necessary to complete the work.

**Construction Details:**

Mortar shall be mixed in a batch type machine mixer. The size of the batch shall be as directed by the Engineer. The consistency shall be such that:

- A. It shall be as stiff as practicable.
- B. The mortar shall show no free water when removed from the mixer.

**ITEM 609.02110011 TALL GRANITE CURB**  
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**ITEM 609.02130011 FLUSH GRANITE CURB**

The time of mixing shall be not less than two minutes for each batch. Mortar shall be used within thirty minutes after mixing. No re-tempering will be permitted.

Mortar used for filling vertical or inclined joints shall be of such consistency that it will require rodding. The mortar shall be rodded until it rises to the top and completely fills the joints.

Granite curb shall not be constructed in freezing weather or when the stone contains frost, except by written permission of the Engineer and subject to such conditions as he may require.

Stone shall not be dropped upon or slid over the previously placed or existing curb or other stone pieces, nor will hammering or turning of stone on the previously placed or existing curb be allowed. Stone shall be carefully set without jarring the stone already laid, and they shall be handled with a lewis or other appliance which not cause disfigurement.

Stone shall be cleaned and thoroughly saturated with water before being set, and the bed which is to receive it shall be cleaned and well moistened. All stone shall be well bedded in mortar and settled in place with a suitable wooden maul before the setting of the mortar. Variation (lipping) shall not exceed 1/16" difference between surface planes of adjacent units. Whenever possible, the face joints shall be properly pointed before the mortar sets. Joints shall be prepared for pointing by raking them out to a depth of one and one-half times the average width of joint. The face surfaces of stone shall not be smeared with the mortar forced out of the joints or that used in pointing. No pinning up of stones with spalls will be permitted, and no spalls will be permitted in beds.

Set stone on a mortar setting bed as indicated, to the grades shown on the plans, with all joints pointed.

In case any stone is moved or the joint broken, the stone shall be taken up, the mortar thoroughly cleaned from bed and joints, and the stone reset in fresh mortar.

Joints shall not be filled by pouring in a thin or liquid mortar. Pointing shall not be done in freezing weather nor when the stone contains frost.

Mortar for pointing shall be composed of one part cement and one part mortar sand mixed in the manner specified above and in compliance with §705-21, Type S.

Joints not pointed at the time the stone is laid shall be thoroughly wet with clean water and filled with mortar. The mortar shall be well driven into the joints, and finished with an approved pointing tool. The curb shall be kept wet while pointing is being done, and in hot or dry weather the pointed masonry shall be protected from the sun and kept wet for a period of at least three days after completion.

After pointing is completed and the mortar set, all showing surfaces shall be cleaned of loose mortar, dirt, mortar spots and cement stains by using clean water and stiff fiber brushes.

**ITEM 609.02110011 TALL GRANITE CURB**  
**ITEM 609.02120011 RAISED GRANITE CURB**  
**ITEM 609.02130011 FLUSH GRANITE CURB**

**Method of Measurement:**

Granite curbs will be measured by the actual number of feet to the nearest tenth of a foot of each type of granite curb installed.

**Basis of Payment:**

The unit price bid per foot of each type of granite curb shall include all labor, material, equipment, stainless steel attachments and all incidentals and appurtenances necessary to satisfactorily complete the work.

Payment will not be made for repairs to damaged areas caused by the Contractor's operations. No payment will be made for installing granite curbs or work related thereto that has not been accepted by the Engineer or that has degraded due to the Contractor's negligence, material failure, or improper storage of the material.

**ITEM 609.04120011 CONCRETE CURB – NYCDPR****DESCRIPTION**

This work shall consist of constructing concrete curb and footings of the types shown on the plans or to match existing curbs, in accordance with the plans, specifications, and directions of the Engineer.

**MATERIALS**

Unless otherwise herein specified, materials for this work shall meet the requirements of NYSDOT Standard Specification Section 609, "Cast-In-Place Concrete Curb".

- A. Concrete: The material requirements, mix preparation and manufacturing of the concrete shall conform to the requirements for Class A Concrete as specified in the NYSDOT Standard Specifications, Section 501, Portland Cement Concrete - General.
- B. Steel Bar Reinforcement: Reinforcement shall meet the requirements of Section 709-04, "Epoxy-Coated Bar Reinforcement" of the NYSDOT Standard Specifications, Section BC 1907 of the N.Y.C. Building Code and the latest ASTM specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement", Designation A-615 and in accordance with the item "Steel Bar Reinforcement". Reinforcement shall be of the sizes and dimensions shown on the plans.
- C. Bond Breaker: If bituminous fiber material is used, a bond breaker such as one-half inch (1/2") wide polyethylene tape or five-eighths inch (5/8") diameter expanded polyethylene foam backer rod shall be installed as recommended by the manufacturer. A bond breaker will not be required for a pre-molded foam joint, but sealant is always required.
- D. Sealant: Prepared expansion joints shall be coated with a primer followed by installation of a bond breaker and a self-leveling two-component polyurethane-based elastomeric sealant. The Contractor shall apply the following sealant:

Sikaflex 429 primer with  
Sikaflex - 2C, SL sealant  
Manufactured by  
Sika Corp., Lyndhurst, NJ.

Sonneborn 733 primer with  
Sonolastic SL 2 sealant  
Manufactured by  
Sonneborn and Chem Rex,  
Inc., Shakopee, MN.

Or equal as approved by the Engineer. Color of sealant shall be concrete gray. Asphalt cement will not be approved as a sealant.

- E. Expansion Joint: The expansion joint material shall be a premoulded resilient joint filler and shall meet the requirements of Section 705-07, "Premoulded Resilient Joint Filler" of the NYSDOT Standard Specifications.

**CONSTRUCTION DETAILS**

- A. Curb: Curb shall be constructed in independent sections and shall have smooth plane ends separated by expansion joints of the size shown on the standard details. Steel bar reinforcement between expansion joints shall be secured to chairs of the proper height to hold them in position while concrete

**ITEM 609.04120011 CONCRETE CURB – NYCDPR**

is poured. Distance between supporting chairs shall not greater than five (5') feet apart. Reinforcing bars at expansion joints shall be bent to the horizontal and the ends wrapped with tar paper held by duct tape.

- B. Fencing: When fence posts are to be erected in concrete curb, sleeves shall be installed in the correct location, where shown on the plans. Sleeves shall be structurally rigid, cut to the required lengths and firmly set in the form in a vertical position.
- C. Tree Roots: Where tree roots of one (1") inch or greater are encountered, or if directed by the Director of Landscape Construction or his designated representative, the DPR Standard Detail for Root Bridging shall be used.
- D. Forms: All forms shall be set true to line and grade and held rigidly in position. They shall be either of metal or of acceptable planed and matched lumber, and of such construction that a smooth surface shall be provided. After the forms are erected and reinforcing steel is set in place, all contact surfaces within forms shall be moistened. Concrete shall be placed in horizontal layers of uniform thickness, with each layer thoroughly consolidated before placement of the next layer. Thickness of each layer shall not exceed eighteen (18") inches with reinforced members. Stiff concrete mixes (low slump) shall be consolidated either by hand tools or by mechanical vibrators. The concrete shall be worked thoroughly around the reinforcement and around the pipe sleeves. In the use of internal vibrators, care shall be taken to avoid separation of aggregate and to avoid hitting the forms sufficiently to cause damage. Exposed concrete surfaces shall have a float finish. Surfaces shall be finished smooth and true by means of wooden or steel floats and have edges, including those of joints, rounded or chamfered.

Forms shall be left in place for a minimum of three (3) days or until the concrete has set sufficiently so that, in the opinion of the Engineer, they can be removed without damage to the curbing. The curbing shall immediately upon removal of the forms be wetted and rubbed down to a smooth and uniform surface by means of carborundum or other abrasive blocks. For this work, a competent and skilled finisher shall be employed. The Contractor shall do all the necessary work to join new curb to existing in a neat and workmanlike manner to the satisfaction of the Engineer.

- E. Curb Footings: Curb footings shall be of the same concrete as the curbs and shall be constructed as shown on the details. Concrete footings shall be installed on all curb ends and corners with concrete forming tubes of the proper diameter and cut to the required lengths.
- F. Material Testing: The Contractor shall at the direction and discretion of the Engineer, or when quantities exceed thirty (30) cubic yards, furnish necessary concrete test cylinders to the Engineer at no cost to the City.
- G. Protection: The Contractor shall protect the curbing and keep it in first class condition until the completion of his operation at the site. Any curbing which is damaged at any time previous to the final acceptance of the work shall be removed and replaced with satisfactory curbing at the Contractor's expense. This work shall meet the requirements of NYSDOT Standard Specification Requirements §502-3.11 Curing.

**ITEM 609.04120011 CONCRETE CURB – NYCDPR**

**METHOD OF MEASUREMENT**

This work will be measured as the number of feet of concrete curb satisfactorily furnished and installed.

**BASIS OF PAYMENT**

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work, including expansion material, sealant, tar paper, and steel bar reinforcement, all in accordance with the plans and specifications, to the satisfaction of the Engineer.

Excavation shall be paid for separately under its own item.

**ITEM 609.15100011 STEEL EDGING**

**DESCRIPTION:**

This work shall consist of furnishing and installing steel edging in accordance with the contract documents and as directed by the Engineer.

**MATERIALS:**

Steel edging shall be 1/4 inch thick by 4 inch wide hot-rolled milled steel to conform with ASTM A-36, and shall have 12 inch tapered steel stakes placed through punch slots at 30 inch on center intervals along its length. Steel edging and stakes shall be shop painted with weather resistant paint. The color of paint shall be Green 14036 as per Federal Color Chart 595B.

**CONSTRUCTION DETAILS:**

Steel edging shall be installed where shown on the contract documents and set with the top of edging flush with the surrounding grade. All bends and curves shall be smooth and uniform. Where the radii of bends or curves are such that field bending is not practical, they may be formed in the shop. Joints between lengths of steel edging shall be overlapped 12 inches and welded at both ends of the lap with a 3/16 inch weld. All welds shall be ground smooth before painting to match the steel edging.

**METHOD OF MEASUREMENT:**

This work will be measured for payment as the number of linear feet of Steel Edging supplied and installed including overlapping lengths.

**BASIS OF PAYMENT:**

The unit price bid for Steel Edging shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work.



**ITEM 609.26020111 CONCRETE CURB, STEEL FACED (NYC), TYPE D**

**DESCRIPTION:**

Under this item the Contractor shall construct concrete curb with steel facing as illustrated on the plans, in accordance with these specifications, at the locations shown on the plans or as ordered by the Engineer.

**MATERIALS**

1. The material requirements of Section 609 "Curb and Curb & Gutter" of the Standard Specifications shall apply. The material requirements, mix preparations and manufacturing of concrete shall comply with the Standard Specification for Class A concrete in Section 501, "Portland Cement Concrete - General".
2. Structural steel shall conform to the requirements of ASTM Designation A283, Grade A, and shall meet the requirement of the "New York Steel Construction Manual".
3. Epoxy Primer, Epoxy Intermediate Coat and Polyurethane Topcoat shall meet the requirements of Item 572.01nnnn Structural Steel Painting, Shop Applied. The Polyurethane Topcoat shall be light gray in color such that a prepared chip shall be a reasonable visual match to Munsell Book Notation 10B 6/1. Viewing shall be done North Standard Daylight.

**CONSTRUCTION DETAILS:**

Fabrication and construction details comply with the detail and notes on the New York City Department of Highways standard drawing H-1010 "Steel Faced Curb . . . Type D", as applicable with these specifications, and in accordance with the following:

**A. Concrete Curb**

1. Sub-section 609-3.04 "A. Conventionally Formed Curb and Curb & Gutter" of the Standard Specifications for construction of concrete curb shall apply except as modified by this specification.
2. Expansion joints for curb section shall be 9/32 inch wide and filled with Premoulded Bituminous Joint Filler. An expansion joint of 3/4 inch thick Premoulded Bituminous Joint filler shall be provided in the curb on each side of drainage structures.
3. All the provisions of Section 609 pertaining to "Curb and Curb & Gutter" shall apply.

**B. Steel Facing**

1. Fabrication of the steel facing shall conform to the requirements of Subsections 564-3 "Construction Details" of the Standard Specifications.
2. All surfaces of completed steel facing including anchors, fastening, etc., shall be thoroughly cleaned of all rust, oil, grease or foreign matter in accordance with Item 572.01nnnn Structural Steel Paint,

**ITEM 609.26020111 CONCRETE CURB, STEEL FACED (NYC), TYPE D**

Shop Applied. All surfaces of steel facing to be exposed after installation shall be painted in accordance with and meet the requirements of items 574.02nnnn and 574.03nnnn.

3. Curved steel facing shall be bent to radii designated on the plans, with tangent 36 inch lengths provided in the end sections that will incorporate the point of curvature and point of tangency of the curb radius.
4. Special steel facing for drop curbs, splays, etc., shall be constructed as indicated on the New York City Highway Drawing H-1015 "Steel Faced Drop Curb (Driveways)".

**METHOD OF MEASUREMENT**

Measurement will be taken as the number of linear feet of steel faced concrete curb furnished and installed where shown on the plans as ordered by the Engineer.

**BASIS OF PAYMENT**

The unit price bid per linear feet shall include the cost of furnishing all labor, materials, equipment, excavation to bed the curb, and backfill, except where select backfill is called for, necessary to satisfactorily complete the work. Cleaning and painting of steel facing shall be included in the unit price bid.

**ITEM 610.1104XX09 DECORATIVE STONE MULCH**

**DESCRIPTION**

This work shall consist of furnishing and placing decorative stone mulch as per and at the locations shown in the contract documents and as directed by the Engineer.

Material requirements for decorative stone mulch, including stone type, size range, color and other design criteria shall be as indicated in a special note in the contract documents titled, "*Decorative Stone Mulch*".

**MATERIALS**

Decorative stone mulch shall consist of well-graded, tumbled or naturally rounded stone in the stone type, size range and color specified in the contract documents. Stone shall not include thin or elongated particles. Unless otherwise specified, stone type shall not include limestone.

Decorative stone mulch may be stockpiled or bagged. All decorative stone mulch shall be free of material other than stone.

**Submittals**

Prior to placement, the Contractor shall submit a material sample for approval. The decorative stone mulch will be accepted based on a visual inspection that the material meets the stone type, size range, color and other criteria listed in the contract documents.

**CONSTRUCTION DETAILS**

The work shall be done in conformity with the lines, grades, thicknesses, and typical sections shown.

Prior to placement, the areas receiving the decorative stone mulch shall be prepared to a smooth surface and free of unsuitable, non-edaphic material, including, but not limited to, rubble, plastic, construction debris, and plant (vegetable) debris.

Decorative stone mulch may be placed on geotextile fabric or permeable weed control fabric; refer to the contract documents for additional information on the use of additional materials with this payment item. Surface preparation, geotextile fabrics, permeable weed control fabrics and any other materials used with this payment item shall be paid for separately.

Decorative stone mulch shall be placed so that the stone mass is well-graded and evenly distributed throughout the specified range (as indicated in the table of payment items). Any material underlying the decorative stone mulch shall not be displaced or worked into the layer of stone mulch.

**METHOD OF MEASUREMENT**

This work will be measured as the number of cubic yards, measured to the nearest whole cubic yard, of decorative stone mulch furnished and placed, computed from the payment lines shown in the contract documents.

**ITEM 610.1104XX09 DECORATIVE STONE MULCH****BASIS OF PAYMENT**

The unit price bid per cubic yard of decorative stone mulch shall include the costs of furnishing all labor, material, and equipment necessary to complete the work.

Any excavation, backfill and/or geotextile materials specified as ground surface preparation for the placement of Decorative Stone Mulch shall be paid for separately.

Where XX denotes the stone sizes shown in the table below:

Inclusive Size Range (inches)	XX
$\frac{1}{4}$ - $\frac{1}{2}$	01
$\frac{1}{2}$ - 1	02
$\frac{1}{2}$ - $1\frac{1}{2}$	03
1 - 2	04
$1\frac{1}{2}$ - $2\frac{1}{2}$	05
2 - 3	06
2 - 4	07
3 - 4	08
2 - 5	09
3 - 5	10
2 - 6	11
3 - 6	12
4 - 6	13

*Payment will be made under:*

<b>Item No.</b>	<b>Item</b>	<b>Pay Unit</b>
610.11041309	Decorative Stone Mulch 4"-6" Stone Size	Each

<b><u>ITEM 611.19010024</u></b>	<b><u>POST-PLANTING CARE WITH REPLACEMENT - MAJORDECIDUOUS TREES</u></b>
<b><u>ITEM 611.19020024</u></b>	<b><u>POST-PLANTING CARE WITH REPLACEMENT - MINOR DECIDUOUS TREES</u></b>
<b><u>ITEM 611.19030024</u></b>	<b><u>POST-PLANTING CARE WITH REPLACEMENT - CONIFEROUS TREES</u></b>
<b><u>ITEM 611.19040024</u></b>	<b><u>POST-PLANTING CARE WITH REPLACEMENT - DECIDUOUS SHRUBS</u></b>
<b><u>ITEM 611.19050024</u></b>	<b><u>POST-PLANTING CARE WITH REPLACEMENT - EVERGREEN SHRUBS</u></b>
<b><u>ITEM 611.19060024</u></b>	<b><u>POST-PLANTING CARE WITH REPLACEMENT- VINES, GROUNDCOVERS</u></b>
<b><u>ITEM 611.19070024</u></b>	<b><u>POST-PLANTING CARE WITH REPLACEMENT - HERBACEOUS PLANTS</u></b>

## **DESCRIPTION**

This work consists of the care of newly planted and transplanted trees, shrubs, vines, groundcovers and other plants and replacement of plants in kind and as necessary, in accordance with the contract documents and as directed by the Engineer.

## **MATERIALS**

Materials shall meet the requirements of the following subsections of Section 700 *Materials and Manufacturing*.

Water	712-01
Topsoil	713-01
Mulch for Landscape Bedding	713-05
Trees, Shrubs and Vines	713-06
Materials for the Protection of Plants	713-08
Pesticides	713-13

## **CONSTRUCTION**

**Post-Planting Care.** The Contractor shall perform all work as specified under Standard Specification section 611-3.05 **Post-Planting Care**.

**Replacement Planting.** Plants that die, become diseased or badly impaired during Post- Planting Care shall be removed and replaced in kind once with new, healthy plant material, in the same location as the initial planting. Replacement planting shall occur within the planting seasons shown in Standard Specification **Table 611-1**. For any plants replaced during the Post- Planting Care period, Post-Planting Care shall continue to the end of the period.

Replacement plants shall be planted, maintained and accepted per Standard Specification **Section 611-3.01**. Planting soil used in the initial planting shall be reused for replacement plants and shall be supplemented with topsoil at no additional cost if additional material is needed to meet grade and surface finish. Watering shall accompany backfilling, at no additional cost. No replacement tree shall be staked, guyed or anchored.

## **METHOD OF MEASUREMENT.**

The quantity to be measured for payment will be the number of plants of each type cared for and, if necessary, replaced in kind.

<b><u>ITEM 611.19010024</u></b>	<b><u>POST-PLANTING CARE WITH REPLACEMENT - MAJORDECIDUOUS TREES</u></b>
<b><u>ITEM 611.19020024</u></b>	<b><u>POST-PLANTING CARE WITH REPLACEMENT - MINOR DECIDUOUS TREES</u></b>
<b><u>ITEM 611.19030024</u></b>	<b><u>POST-PLANTING CARE WITH REPLACEMENT - CONIFEROUS TREES</u></b>
<b><u>ITEM 611.19040024</u></b>	<b><u>POST-PLANTING CARE WITH REPLACEMENT - DECIDUOUS SHRUBS</u></b>
<b><u>ITEM 611.19050024</u></b>	<b><u>POST-PLANTING CARE WITH REPLACEMENT - EVERGREEN SHRUBS</u></b>
<b><u>ITEM 611.19060024</u></b>	<b><u>POST-PLANTING CARE WITH REPLACEMENT- VINES, GROUNDCOVERS</u></b>
<b><u>ITEM 611.19070024</u></b>	<b><u>POST-PLANTING CARE WITH REPLACEMENT - HERBACEOUS PLANTS</u></b>

**BASIS OF PAYMENT.**

The unit price bid shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work.

Payment will be made under:

<b>Item No.</b>	<b>Item</b>	<b>Pay Unit</b>
611.19010024	Post Planting Care with Replacement - Major Deciduous Trees	Each
611.19020024	Post Planting Care with Replacement - Minor Deciduous Trees	Each
611.19030024	Post Planting Care with Replacement - Coniferous Trees	Each
611.19040024	Post Planting Care with Replacement - Deciduous Shrubs	Each
611.19050024	Post Planting Care with Replacement - Evergreen Shrubs	Each
611.19060024	Post Planting Care with Replacement- Vines, Groundcovers	Each
611.19070024	Post Planting Care with Replacement - Herbaceous Plants	Each

**ITEM 614.09010039 TREE ROOT PINNING – NYCDPR**

**DESCRIPTION:**

This work shall consist of furnishing and installing tree root pins in conformance with the contract documents and as directed by the Engineer.

A. **Definition:**

**Tree root pins** are epoxy-coated bar reinforcements (rebar) sheathed in foam pipe insulation. The terms “rebar” and “tree root pins” are used interchangeably throughout this specification.

**Tree root pinning** is the lowering and redirection of tree roots growing in an undesirable location (e.g. under sidewalks) toward an open landscape. During tree root pinning, rebar is formed (bent) to fit around exposed tree roots, sheathed in foam pipe insulation, placed around the tree root and driven into the ground.

- B. The work is done in conjunction with hand and/or pneumatic excavation. Hand and/or pneumatic excavation is paid for under a separate payment item.
- C. The Contractor shall not commence with the work required under this payment item until receiving written approval.

**MATERIAL:**

The following sections of the standard specification shall apply:

Epoxy-Coated Bar Reinforcement

709-04

**Epoxy Coated Bar Reinforcement (Rebar)** shall meet the requirements of §709-04, be size No. 3, and a minimum of four (4) feet in length, adequate for effective driving depth.

If the Contractor requests the substitution of larger rebars (tree root pins) than those specified, payment will only be made for the specified size of rebar (tree root pin).

**Foam Pipe Insulation** shall be foam pipe insulation a minimum of ½ inch thick and fits snugly around 3/8 inch rebar (root pins). Foam pipe insulation shall be:

K-FLEX® Insul-Lock® DS  
as manufactured by  
K-FLEX USA  
100 Nomaco Drive  
Youngsville, NC 27596  
800.765.6475  
www.kflex.com

AP Armaflex® Black LapSeal™  
as manufactured by  
ArmaCell®  
7600 Oakwood Street Extension  
Mebane, NC 27302  
800.866.5638  
www.armacell.us

or equal as approved by the Engineer

**ITEM 614.09010039 TREE ROOT PINNING – NYCDPR**

Foam pipe insulation shall be CFC-free, flexible elastomeric insulation, pre-slit with a factory- applied pressure sensitive adhesive, and shall be black in color.

**CONSTRUCTION DETAILS:**

The following sections of special specification shall apply:

Reinforcing Steel for Concrete Structures

556-3.03

with the qualifications as noted under BENDING below.

No roots shall be pinned except as directed. Tree root pinning may not be performed when the ground is frozen. Prior to beginning work, the area to be excavated shall be thoroughly wetted, 24 hours in advance, to minimize dust to the greatest extent possible.

All tree roots to be pinned shall be exposed by pneumatic or hand excavation (paid for separately). Refer to the contract documents for details on pneumatic or hand excavation.

BENDING: All rebar (tree root pins) shall be bent cold and to the shapes shown in the contract documents. The rebar (tree root pin) shall be formed to the approximate diameter of the root.

FOAM PIPE INSULATION: The foam pipe insulation shall be wrapped around each rebar (tree root pin) and positioned to prevent the rebar (tree root pin) from directly contacting the root.

SPACING, ORIENTATION AND DEPTH: Rebar (tree root pin) wrapped in pipe insulation shall be spaced no more than two (2) feet apart, perpendicular to the orientation of the root, and driven into the sub grade to a depth that is adequate in permanently pinning the root to the altered elevation.

**METHOD OF MEASUREMENT:**

The work will be measured as the number of each of tree root pin installed.

**BASIS OF PAYMENT**

The unit price bid per each tree root pin furnished and installed shall include the cost of all labor, material and equipment necessary to satisfactorily complete the work.

“Hand and/or Pneumatic Excavation” shall be paid separately.



**ITEM 615.01000139 SKATEBOARD DETERRENT**

**DESCRIPTION**

This work shall consist of furnishing and installing Skateboard Deterrents in accordance with the contract documents and as directed by the Engineer.

**MATERIALS**

- A. Skateboard Deterrent: Shall be machined stainless steel pins with domed heads unless shown otherwise in contract drawings. The pin or stem of the deterrent shall include at least one ridge to improve grip in epoxy grout. Skateboard deterrent shall be manufactured by:

Hemisphere GrinderMinder  
Manufactured by  
Grind to a Halt Inc.  
P.O. Box 221  
Elburn, IL 60109

Domed Custom Deterrent  
Manufactured by  
Brucher Machining  
1030 Atlantic Dr  
West Chicago, IL 60185

Or equal as approved by the Engineer.

- B. Epoxy Grout: Materials for this work shall meet the requirements of the following subsections of the NYSDOT Standard Specifications except as modified herein:

§701-05 - Concrete Grouting and Anchoring Material

Cycles Freeze Thaw Resistance, ASTM C 666A: Epoxy Grout shall have less than 2% weight loss after 300 Cycles.

- C. Manufacturer's Data: The Contractor shall submit the following manufacturers data for the Engineer's review and approval prior to installation:
1. Skateboard Deterrent
  2. Epoxy Grout

**CONSTRUCTION DETAILS**

Skateboard Deterrent shall be installed on granite masonry per manufacturer's instructions and as shown on the contract documents. Stone shall be drilled and grouted as specified under subsection 586-3.01 except as modified herein. Drilling methods shall not cause spalling, cracks or other damage to Granite masonry. Granite spalled, cracked or otherwise damaged shall be repaired or replaced at no cost to the city.

**METHOD OF MEASUREMENT**

The quantity of Skateboard Deterrents to be measured for payment shall be the actual number installed to the satisfaction of the Engineer.

**BASIS OF PAYMENT**

**ITEM 615.01000139 SKATEBOARD DETERRENT**

The unit price bid shall include the cost of all labor, materials, equipment, insurance and incidentals to furnishing and installing Skateboard Deterrent, drilling for dowel pins and epoxy grout, all in accordance with the contract drawings, specifications and the direction of the engineer.

***Payment will be made under:***

<b>Item:</b>	<b>Description:</b>	<b>Pay Unit:</b>
Item 615.01000139	Skateboard Deterrent	Each

**ITEM 615.0101NN10 LITTER (TRASH) RECEPTACLE****DESCRIPTION**

The work shall consist of furnishing and installing litter (trash) receptacles in accordance with the contract documents and as directed by the Engineer.

**MATERIALS**

The materials for this work shall conform to the requirements listed here and in the contract documents, unless otherwise approved.

Litter (trash) receptacles shall be as manufactured by the Manufacturers listed in the contract documents or approved equals. Litter (trash) receptacles that are received chipped, scratched, bent, dented or damaged in any way will not be accepted and shall be removed and replaced with new containers or parts which are free from all defects.

**CONSTRUCTION DETAILS**

Prior to ordering litter (trash) receptacles, the Contractor shall submit catalog cuts and/or shop drawings along with color samples for approval and shall verify the quantity and location of each type of litter receptacle with the Engineer.

Litter (trash) receptacles shall be installed in the positions and manner shown on the plans, according to the Manufacturer's instructions, and as approved by the Engineer.

**METHOD OF MEASUREMENT**

This work will be measured as the number of litter (trash) receptacles installed in accordance with the contract documents and as directed by the Engineer.

**BASIS OF PAYMENT**

The unit bid price for each litter (trash) receptacle shall include the cost of furnishing all equipment, hardware, materials and labor necessary to complete the work.

Payment will be made under

<b><u>Item</u></b>	<b><u>Description</u></b>	<b><u>Pay Unit</u></b>
615.01010110	Litter (Trash) Receptacle Type 1	Each
615.01010210	Litter (Trash) Receptacle Type 2	Each
615.01010310	Litter (Trash) Receptacle Type 3	Each
615.01010410	Litter (Trash) Receptacle Type 4	Each
615.01010510	Litter (Trash) Receptacle Type 5	Each

**ITEM 615.0108NN39 DRINKING FOUNTAIN – TYPE “E” – NYCDPR****DESCRIPTION:**

The work will include furnishing and installing a Type “E” drinking fountain in accordance with the contract documents, and as directed by the Engineer.

All drinking fountain equipment and installation must comply with all Americans with Disability Act Standards for Accessible Design (ADASAD).

For the purposes of this specification the installation of the ‘Type E’ Drinking Fountain includes the following components:

1. Drinking Fountain Type “E”, Type “E” with Child Bowl, Type “E” Hi-Low, or ‘Type “E” with Dog Bowl,
2. All external plumbing work, such as connection to the water service and drainage lines within five feet (5’) of the edge of the fountain walls,
3. Precast concrete foundation (concrete plumbing pit),
4. “Park’s Leaf” manhole frame and cover, and
5. Crushed stone base

**MATERIALS:**

The following sections of the Standard Specifications shall apply:

Portland Cement Concrete- General	501-2.02
Coarse Aggregate	703-02; Designation #3
Bar Reinforcement, Grade 60	709-01
Wire Fabric for Concrete Reinforcement	709-02
Galvanized Coatings and Repair Methods	719-01
Water Service Pipe, Service Valve and Fittings	722-06

The following ASTM specifications shall apply:

Standard Practice for Cleaning, Descaling and Passivation of Stainless Steel Parts, Equipment and Systems	A380
Standard Specification for Ductile Iron Castings	A536
Standard Specification for Chemical Passivation Treatments for Stainless Steel Parts	A967
Standard Specification for Seamless Copper Water Tube	B88
Standard Specification for Concrete Aggregates	C33
Standard Specification for Portland Cement	C150
Standard Specification for Stainless Steel Bolts, Hex Cap Screws and Studs	F593

The following other specifications shall apply:

Americans with Disabilities Act Standards for	ADA 2010
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**ITEM 615.0108NN39 DRINKING FOUNTAIN – TYPE “E” – NYCDPR**

Accessible Design (ADASAD)  
Drinking Water System Components – Health Effects

NSF/ANSI 61

**DRINKING FOUNTAIN TYPE “E”**

The drinking fountain shall be a preassembled cast iron body with brass bubbler(s), two stainless steel bowl(s) with strainer(s), two push button(s), and all internal plumbing as per the contract documents.

The drinking fountain Type “E”, Type “E” Hi-Lo, Type “E” Hi-Lo with Dog Bowl, and Type “E” with Child Bowl shall be manufactured by:

Canterbury International  
5632 West Washington  
Boulevard  
Los Angeles, California 90016  
1.800.935.7111  
www.canterburyintl.com.

Kenneth Lynch & Sons  
114 Willenbrock Rd.  
Oxford CT 06478  
203.264.2831  
www.klynchandsons.com

or equal as approved by Engineer

“Or equal” manufacturers shall obtain the fountain patterns from the NYCDPR, who retains exclusive right to the use of the patterns (copyright 2001, New York City Department of Parks and Recreation).

**FOUNTAIN PLUMBING COMPONENTS:**

Fountain plumbing components including brass bubblers, stainless steel bowls, strainers, push- buttons and all internal plumbing shall be preassembled by the drinking fountain manufacturer and shall meet the requirements of this specification and the contract documents. The fountain manufacturer shall have all factory installed plumbing components pre-tested prior to delivery. All factory connections shall be made by a licensed plumber. Plumbing components shall be as provided by the manufacturer, including, but not be limited to, the following: bubbler head, push button, valve body, and waste strainer.

Fountain plumbing components shall comply with §602 of the Americans with Disabilities Act Standards for Accessible Design (ADASAD), including the following requirements:

1. The fountain shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist (ADASAD, §309).
2. The force required to activate the fountain shall be no more than five pounds (5 lbs.) of force applied to the bubbler control valve push button (ADASAD, §309) without the use of a pressure regulating valve to reduce the maximum inlet pressure of 65 psi.

**ITEM 615.0108NN39 DRINKING FOUNTAIN – TYPE “E” – NYCDPR**

3. The spout shall provide a flow of water four inches (4”) high minimum and shall be located five inches (5”) maximum from the front of the unit. The angle of the water stream shall be measured horizontally relative to the front face of the unit. Where spouts are located less than three inches (3”) from the front of the unit, the angle of the water stream shall be thirty degrees (30°) maximum. Where the spouts are located between three inches and five inches maximum from the front of the unit, the angle of the water stream shall be fifteen degrees maximum (ADASAD, §602).
4. The spout outlets of wheelchair accessible drinking fountain shall be 36 inches maximum above the floor (ADASAD, §602).

**STAINLESS STEEL BOWL:**

Shall be cast stainless steel, 316 alloy, mirror finish with Class 3 electropolish to comply with ASTM-A380 and ASTM-A967 standards, with custom coded #CE-1 tamper proof screws.

**CAST IRON BODY:**

The fountain’s cast iron body, including access panel and base cover, shall be constructed of ductile iron with a minimum tensile strength of 65,000 psi, in accordance with ASTM A536-84, Grade 65-45-12.

**Galvanization:**

The ductile iron shall be hot-dipped galvanized, in accordance with §719-01 prior to painting. Galvanizing shall withstand a minimum of five (5) one-minute dips by the Preece test.

**Paint:**

A written request for any paint substitution must be submitted. The Contractor shall submit paint manufacturer’s data sheets for approval of any equal product two (2) weeks prior to the application of paint.

**Epoxy Primer:**

7063 Epoxy Primer  
as manufactured by  
Cardinal Paint Company  
1329 Potrero Avenue  
So. El Monte, CA 91733  
323.283.9335  
www.cardinalpaint.com

**B67A5 Recoatable Epoxy Primer**

as manufactured by  
Sherwin Williams  
101 Prospect Avenue  
Cleveland, OH 44115  
1.800.474.3794  
www.sherwin-willams.com

or equal as approved by the Engineer

The primer shall be a two-component high build modified polyamide cured epoxy coating having a dry film thickness of 6 mils. The color shall be gray.

**Top Coat:**

Cardinal 6400 Polyurethane Top Coat  
(for exterior applications)  
as manufactured by

**Imron Polyurethane Top Coat**

as manufactured by

**ITEM 615.0108NN39 DRINKING FOUNTAIN – TYPE “E” – NYCDPR**

Cardinal Paint Company  
1329 Potrero Avenue  
So. El Monte, CA 91733  
323.283.9335  
www.cardinalpaint.com

Axalta Coating Systems  
2001 Market Street, Suite 3600  
Philadelphia, PA 19103  
1.855.629.2582  
www.axaltacoatingsystems.com

or equal as approved by the Engineer.

The topcoat is a two-component high solids polyurethane coating having a dry film thickness of 4 mils. Color shall be high gloss black.

**General:** The fountain components shall be painted after galvanization and prior to assembly.

Immediately prior to painting, all surfaces shall be thoroughly cleaned. All galvanized surfaces shall be sanded with 100-grit aluminum oxide sandpaper or treated with a single component aqueous metal conditioner/cleaner.

After the final solvent cleaning and drying, paint shall be applied. Cleaning shall be performed with a solvent such as mineral spirits, xylol, or turpentine to remove all dust, grease and other contaminants.

All paints shall be shop applied and apportioned, mixed, and applied in strict accordance with manufacturer's instructions. All paint shall be shop applied with three coats of paint. The precast ductile iron fountain body, access panels and base covers shall receive three (3) coats of paint as follows:

- First and Second Coat: Use Acid-etching pretreatment primer. Paint requires twelve (12) hours drying time before recoating.
- Third Coat: Use polyurethane top coat.

**HARDWARE:**

The fountain hardware shall be 18-8 stainless steel, type 304 in accordance with ASTM F593. All heads shall be vandal resistant.

**EXTERNAL PLUMBING:**

The Contractor shall furnish all pipes, fittings, valves and other foundries necessary to complete the plumbing for the drinking fountain connections on-site and within the concrete plumbing pit.

**Silicone Sealant:**

Pipes through foundation wall shall be protected with a sleeve caulked watertight with a silicone sealant.

**Water Piping:**

Water piping shall:

- be 1-1/4" rigid hard temper type "K" copper tubing (§722-06) as shown in the contract documents.

**ITEM 615.0108NN39 DRINKING FOUNTAIN – TYPE “E” – NYCDPR**

- include wrought copper and bronze solder-joint pressure fittings that meet ASTM B88.
- include pressure regulator piping that is 3/8” soft temper copper tubing with cast brass compression fittings.

Pressure Regulator Piping: Pressure regulator piping to be 3/8" soft temper copper tubing with cast brass compression fittings.

**Pressure Regulator:**

Water pressure regulator shall be all bronze with wing nut setting screw and shall be 3/8”, two-way Pressure Regulator Valve with one female inlet and opposite female outlet. Pressure shall be from sixty pounds per square inch (60psi) to three pounds per square inch (3psi). Pressure regulator valve shall be from the following manufacturers:

Type A-31, 3/8” Pressure Regulating Valve	LF26A
as manufactured by	As manufactured by
Pentair Valves and Controls (Cash Valve)	Watts
953 Old US 70	815 Chestnut Street
Black Mountain, NC 28805	North Andover, MA 01845
1.800.879.2042	978.689.6066
www.cashvalve.com	www.watts.com

or equal as approved by the Engineer.

Pressure shall be from sixty pounds per square inch (60 psi) to three pounds per square inch (3psi).

**Gate Valve:**

The Gate valve shall be a 1-1/4” all bronze, screwed gate valve and shall be:

Gate Valve B-103	105 1/4” – 4” Bronze Gate Valve
as manufactured by	as manufactured by
Stockham	Milwaukee Valve Green
2129 3rd Avenue SE	16550 West Stratton Drive
Cullman, Alabama 35055	New Berlin, Wisconsin 53151
1.800.786.2542	262.432.2700
www.cranecpe.com	www.milwaukeevalve.com

or equal as approved by Engineer.

**Pipe Supports:**

Pipe clamps shall be made of 1” X 3/8” strap iron, galvanized per §719-01 and shall be constructed to rigidly hold the pipes firmly in place.



**ITEM 615.0108NN39 DRINKING FOUNTAIN – TYPE “E” – NYCDPR**

**PRECAST CONCRETE FOUNDATION (AKA CONCRETE PLUMBING PIT):** The precast concrete foundation shall be the following:

Concrete Plumbing Pit (Foundation)  
as manufactured by  
Key Cast Stone Company, Inc.  
113 Albany Avenue  
Amityville, NY 11701  
631.789.2145 718.657.9131  
www.keycastconcrete.com

Concrete Plumbing Pit (Foundation)  
as manufactured by  
Pro Concrete Precast  
95-11 147th Place  
Jamaica, NY 11435

or equal as approved by the Engineer.

**Cement:**

Air entrained Portland cement shall comply with the requirements of the ASTM C150, Type IIA, moderate sulfate resistant.

Precast concrete shall have a compressive strength of not less than forty-five hundred pounds per square inch (4,500 psi) when tested as 2” X 2” X 2” cubes at an age of not more than twenty- eight (28) days and shall have an absorption rate not to exceed seven percent (7%) of the dry weight after being dried to constant weight at 150 degrees Fahrenheit. No chipped, broken or checked stone showing fine hair cracks or checks on the surface will be accepted.

Natural sand and gravel shall conform to the requirements of ASTM C33. Calcium chloride shall not be used.

**Reinforcing Bars:**

Reinforcing bars shall be per §709-01. Bars are to be used to handle transportation and handling stresses.

**Welded Wire Fabric:**

Welded wire fabric shall be per §709-02.

Supports for Reinforcement: Provide supports for reinforcement including bolster, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing.

Pipes through the foundation wall shall be protected with a sleeve caulked watertight with a silicone sealant.

No clipped, cracked, or otherwise defective foundations will be acceptable.

**MANHOLE FRAME AND COVER:**

The “Park’s Leaf Frame and Cover” shall be a two foot (2’) diameter ductile cast iron frame and “Parks Leaf” cover with two (2) locking bolts and two (2) keys as shown in the contract documents. The manhole frame and cover shall be from the following:

**ITEM 615.0108NN39 DRINKING FOUNTAIN – TYPE “E” – NYCDPR**

Pattern # 41290018 – Manhole Cover  
as manufactured by:  
Campbell Foundry Company  
800 Bergen Street  
Harrison, New Jersey 07029  
973.483.5480  
www.campbellfoundry.com

as manufactured by  
EJ USA  
301 Spring Street  
East Jordan, MI 49727  
800.874.4100  
www.ejco.com

**CRUSHED STONE BASE:**

The crushed stone base shall consist solely of ledge rock. Stone shall be no. 3 size.

**CONSTRUCTION DETAILS**

**DRINKING FOUNTAIN:**

The fountain is to be handled by lifting points designated by the manufacturer. All other plumbing work required to complete the installation, including making waste and water supply connections within the fountain, shall be done in the field.

The drinking fountain drain pipe shall be extended five (5') feet beyond the foundation and be connected to the drain lines, as shown in the contract documents. Connecting to drain shall be made with ferrule and neat cement grout. The one inch (1") cold water line shall be extended five (5') feet beyond the foundation and connected to the water supply pipe with screwed fittings, as shown on the contract documents.

Pedestal mounting to allow one quarter of an inch ( $\frac{1}{4}$ ") between the bottom of the pedestal and the ground to reduce the potential for corrosion. Four internal integral bolt holes with anchor bolts furnished. Refer to manufacturer's instructions for installation.

**EXTERNAL PLUMBING:**

All field connections shall be made by a Licensed Plumber. The Contractor shall connect the water and drain lines to pipes provided under other pay item(s).

Connection to the water supply shall be made with a threaded, extra heavy fitting. The Contractor shall provide dielectric fitting at the appropriate locations, as per the contract documents.

**PRECAST CONCRETE FOUNDATION (AKA CONCRETE PLUMBING PIT)**

The fountain shall be designed to allow internal water to drain by gravity.

The precast concrete foundation shall be set on a bed of compacted crushed stone installed to the dimensions indicated in the contract documents. The foundation is to be handled at lifting locations designated by the manufacturer.

Field connections required to complete the installation include the gate valve, pressure regulating valve, and waste and supply connections within the plumbing pit. All appurtenances, such as 1- $\frac{1}{4}$ " gate valve,  $\frac{3}{4}$ " drain cock, reducer coupling and  $\frac{3}{8}$ " pressure regulator valve shall be installed as per the contract documents. Drain cock shall be oriented on the pipe at an angle which will allow easier access.

**ITEM 615.0108NN39 DRINKING FOUNTAIN – TYPE “E” – NYCDPR**

All parts shall be installed in such a manner as to facilitate removal for purposes of replacement. Water and drain lines shall be pitched away from the drinking fountain. Pockets in rigid piping that cannot be drained by gravity will not be allowed.

The factory installed portions of the cold water supply and the waste water lines shall be extended from the fountain base at the lengths indicated in the contract documents.

**SUBMITTALS:**

The Contractor shall submit for approval, twelve (12) weeks prior to the proposed manufacturer's installation for the:

- fountain, including all hardware, brass bubblers, stainless steel bowls, strainer push buttons and all other plumbing parts,
- concrete plumbing pit, and
- manhole frame and cover.

**Catalog Cuts:** The Contractor shall submit catalog cuts of the hardware, manhole frame, and cover, brass bubblers, bronze bowls, strainer push buttons, and all other plumbing parts for approval twelve (12) weeks prior to proposed installation.

**Shop Drawings:** The Contractor shall submit a complete dimensional shop drawing, for approval twelve (12) weeks prior to proposed installation, showing details of construction, reinforcement, plumbing, etc., including gauges of metal and thickness of wall construction. Shop drawing shall be approved as per §105-16.

**CERTIFICATIONS:**

**NSF/ANSI Standard 61 Drinking Water System Components:** The Contractor shall submit a NSF/ANSI Standard 61 Drinking Water System Components, Section 9 certificate for the drinking fountain.

**Foundry Certificates:** A foundry certificate verifying authenticity of ductile iron supplied on this item shall be submitted. The certificate shall be on foundry letterhead, dated and signed by an officer of the company with the contract name and number, Contractor name, and class of ductile iron provided.

**Galvanizing Certificate:** A certificate and paid receipts certifying galvanizing by the hot-dip process must be submitted.

**METHOD OF MEASUREMENT:**

The work will be measured as the number of each Type “E” drinking fountain satisfactorily furnished and installed.

**ITEM 615.0108NN39 DRINKING FOUNTAIN – TYPE “E” – NYCDPR****BASIS OF PAYMENT:**

The unit price bid for each Type “E” drinking fountain shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work.

Excavation work and all connecting plumbing and drain pipes beyond five (5) feet from the edges of the foundation wall shall be paid for under separate pay items.

The work will be paid under the following payment items:

<b>Item Number</b>	<b>Description</b>	<b>Unit</b>
615.01080139	Drinking Fountain Type “E” – NYCDPR	EA
615.01080239	Drinking Fountain Type “E” Hi-Lo – NYCDPR	EA
615.01080339	Drinking Fountain Type “E” Hi-Lo with Dog Bowl – NYCDPR	EA
615.01080439	Drinking Fountain Type “E” with Child Bowl - NYCDPR	EA

**ITEM 615.08XXNN39 WORLD'S FAIR BENCH – RPL SLATS – NYCDPR****DESCRIPTION**

This work includes furnishing and installing World's Fair Bench – RPL Slats in accordance with the contract documents and as directed by the Engineer.

**MATERIALS**

The following sections of the standard specifications shall apply:

High Strength Bolts, Nuts And Washers	715-14
Galvanized Coatings and Repair Methods	719-01

The following ASTM Specifications shall apply:

Standard Specifications for Ductile Iron Castings	ASTM A536
Standard Specifications for Polyethylene Plastics Extrusion	ASTM D1248
Materials for Wire and Cable	
Standard Test Methods for Measuring Adhesion by Tape Test	ASTM D3359
Standard Test Method for Compressive Properties of Plastic	ASTM D6108
Lumber and Shapes	
Standard Test Methods for Flexural Properties of Unreinforced	ASTM D6109
and Reinforced Plastic Lumber and Related Products	
Standard Test Method for Bulk Density and Specific Gravity	ASTM D6111
of Plastic Lumber and Shapes by Displacement	
Standard Test Methods for Compressive and Flexural Creep	ASTM D6112
and Creep Rupture of Plastic Lumber and Shapes	
Standard Test Methods for Mechanical Fasteners in Plastic	ASTM D6117
Lumber and Shapes	
Standard Test Method for Determination of the Linear	ASTM D6341
Coefficient of Thermal Expansion of Plastic Lumber and	
Plastic Lumber Shapes Between -30 and 140 °F (-34.4 and 60°C)	
Standard Test Method for Surface Burning Characteristics	ASTM E84
of Building Materials	

1964 World Fair Benches shall be from one of the following manufacturers:

No. 6733A, 6733, 6731A or 6731	"1964 World's Fair Bench"
Manufactured by	Manufactured by
Kenneth Lynch & Sons,	Kevin G. Lindelow Quality Site Furnishings

**ITEM 615.08XXNN39 WORLD'S FAIR BENCH – RPL SLATS – NYCDPR**

114 Willenbrock Road  
Oxford, CT 06478  
203-264-2831

1352 NJ-12  
Frenchtown, NJ 08825  
908-996-7575 [www.klynchandsons.com](http://www.klynchandsons.com)

#64-WF-RPL Manufactured by  
All City Play Equipment, Inc.  
135 58th Street  
Brooklyn, NY 11220  
888-258-9600 [www.allcityproducts.com](http://www.allcityproducts.com)

or equal as approved by Engineer.

Type "A" Worlds Fair Bench shall be from one of the following manufacturers:

No. 6737 or 6736  
as manufactured by  
Kenneth Lynch & Sons,  
114 Willenbrock Road  
Oxford, CT 06478  
203-264-2831  
[www.klynchandsons.com](http://www.klynchandsons.com)

"Liberty Bench"  
as manufactured by  
Kevin G. Lindelow Quality Site Furnishings  
1352 NJ-12  
Frenchtown, NJ 08825  
908-996-7575

World's Fair Bench as manufactured by  
All City Play Equipment, Inc.  
135 58th Street  
Brooklyn, NY 11220  
888-258-9600  
[www.allcityproducts.com](http://www.allcityproducts.com)

or equal as approved by the Engineer

Standards: Bench standards shall be of cast ductile iron. The tensile strength shall meet a minimum of 65,000 psi, in accordance with ASTM A536, Grade 65-45-12. Standards shall be:

- 1964 World's Fair Bench - hot dipped galvanized, painted or powdercoated.as noted in the contract documents,
- Type 'A' Bench – painted or powdercoated as noted in the contract documents.

**ITEM 615.08XXNN39 WORLD'S FAIR BENCH – RPL SLATS – NYCDPR**

**Steel Supports:**

- 1964 World's Fair Bench - Steel supports for recycled plastic lumber shall be hot-rolled carbon steel flat bars and channels of the sizes indicated in the contract documents and secure to the plastic slats with vandal resistant screws. All steel supports shall be either hot dipped galvanized, painted or powdercoated as noted in the contract documents.
- "Type A" Bench – Steel back supports, steel supports and cross bars shall be steel bar and channel of sizes as indicated in the contract documents, formed to the curve of the back and seat and secured to the recycled plastic slats with vandal-resistant stainless steel screws.

**Finishes for Cast Ductile Iron Standards:** The Contractor shall supply either hot dipped galvanized, powder coated or painted bench standards as noted in the contract documents. The types of finishes are outlined below:

1. *Hot Dipped Galvanized (1964 World's Fair Bench only):* All surfaces of the cast iron bench standards, bars and brace rods shall be hot dipped galvanized in accordance with ASTM A153. Any resulting dimples or sharp points shall be ground smooth.
2. *Powder Coating (1964 World's Fair Bench or 'Type A' Worlds Fair Bench):* All surfaces of the cast iron bench standards, bars and brace rods shall be powder coated with a polyester thermosetting powder coating such as manufactured by:

Tiger Drylac  
1090 Commons Blvd.  
Reading, PA 19605  
800-243-8148  
www.tiger-coatings.us

Spraylat Corporation  
143 Sparks Ave.  
Pelham, NY 10803  
914-438-1600  
www.spraylat.com

Alesta Powder Coatings  
Manufactured by  
DuPont Coating Solutions  
1007 Market Street. Wilmington, DE 19898  
www2.dupont.com/Powder/en-us

or equal as approved by Engineer.

Color of the finish coat shall be:

- 1964 World's Fair Bench - RAL 9007 Grey Aluminum semi-gloss or Federal Standard Color 16251.
- 'Type A' Bench – Gloss Black

**ITEM 615.08XXNN39 WORLD'S FAIR BENCH – RPL SLATS – NYCDPR**

or as specified in the contract documents. Powder coating shall be applied to the metal in such a manner that the coating will not peel off. Ensure surfaces to be coated are clean and dry and free of grease, dust, rust, etc. All surfaces shall first receive phosphating and chromating treatments to improve the adhesion of the surface coating.

Powder coating shall be applied at a film thickness of 3 to 4 mils by electrostatic spray process and bake finished per the manufacturer's directions. It shall be applied without voids, tears or cuts that reveal the substrate and shall thoroughly adhere to the metal without peeling when scratched with a pick device or knife blade point. Nuts, washers and ends of all bolts shall be painted with touch-up paint as described below.

Touch-up and Repair: For minor damage caused by installation or transportation, touch-up finish in conformance with manufacturer's recommendations. Provide touch-up such that repair is not visible from a distance of six feet (6').

Laboratory Test For TGIC-Polyester Powder Coat: Upon request, a sample TGIC-Polyester powder coated bench standard shall be laboratory tested for bonding of the powder coating to the metal. Test shall be the Cross Hatch test per ASTM D3359, Method B. Failure to satisfactorily pass this test shall be a basis for rejection.

3. *Painting(1964 World's Fair Bench or 'Type A' Worlds Fair Bench):* All metal surfaces of the cast iron bench, including standards, hardware, bars and brace rods, shall receive three (3) coats of shop applied paint. All coats of paint used shall be produced by the same manufacturer. Selection of undercoat colors is left to the discretion of the Contractor except that each single paint coat shall be a color different from the others and shall be approved.

Immediately prior to painting, all surfaces shall be thoroughly clean. All surfaces that are rust free shall be cleaned in accordance with SP-1, Solvent Cleaning. Cleaning shall be performed with a solvent such as mineral spirits, xylol, or turpentine to remove all dirt, grease, and foreign matter. Surfaces that show evidence of scale and rust shall be cleaned in accordance with SP-2, Hand Tool Cleaning, a method generally confined to wirebrushing, sandpaper, hand scrapers, or hand impact tools, or SP-3, Power Tool Cleaning, a method generally confined to power wirebrushes, impact tools, power sanders, and grinders in order to achieve a sound substrate. After the standards have been cleaned and prepared, they shall be painted as follows:

First Coat: Primer shall be a phenolic alkyd flat finish coating having a dry film thickness of 2 mils. Paint requires one (1) to two (2) hours drying time before recoating. Primer shall be from one of the following manufacturers:

Universal Metal Primer M07, White  
as manufactured by Benjamin Moore  
51 Chestnut Ridge Road  
Montvale, NJ 07645  
201 – 573- 9600  
[www.benjaminmoore.com](http://www.benjaminmoore.com)

Kem Bond HS Metal Primer, B50NZ3, Red Oxide  
as manufactured by Sherwin Williams Company  
62-16 34th Ave  
Woodside, NY  
718-426-8813  
[www.sherwin-williams.com](http://www.sherwin-williams.com)



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or equal as approved by Engineer

Second Coat: Primer shall be a Primer be a D.T.M.( Direct to Metal) Alkyd semi gloss. The coating is a modified alkyd having a dry film thickness of 2 mils for each coat. Paint requires eight (8) hours drying time before recoating. The paint shall be from one of the following manufacturers:

D.T.M. Alkyd Semi-Gloss  
As manufactured by Benjamin Moore  
51 Chestnut Ridge Road  
Montvale, NJ 07645  
201 – 573- 9600  
www.benjaminmoore.com

Kem Bond HS Metal Primer, B50NZ3, Red Oxide  
As manufactured by Sherwin Williams Company  
62-16 34th Ave  
Woodside, NY  
718-426-8813  
www.sherwin-williams.com

or equal as approved by Engineer

Third Coat: Shall be a D.T.M.( Direct to Metal) Alkyd semi gloss. The coating is a modified alkyd having a dry film thickness of 2 mils for each coat. Paint requires eight (8) hours drying time before recoating. The paint shall be from one of the following manufacturers:

D.T.M. Alkyd Semi-Gloss  
As manufactured by Benjamin Moore  
51 Chestnut Ridge Road  
Montvale, NJ 07645  
201 – 573- 9600  
www.benjaminmoore.com

Steel Master 9500 Silicone Alkyd, Black  
As manufactured by Sherwin Williams Company  
62-16 34th Ave  
Woodside, NY  
718-426-8813  
www.sherwin-williams.com

or equal as approved by Engineer.

All three (3) coats shall be shop painted. All paints shall be applied when the ambient air temperature is forty-five (45) degrees F and rising and when surfaces to be painted are moisture free. No painting will be allowed below the minimum ambient air temperature. In addition, no painting will be allowed below the temperature at which moisture will condense on surfaces.

Bench Slats – Recycled Plastic Lumber (RPL): All slats for benches shall be fabricated from a minimum ninety percent (90%) post consumer recycled plastic, The RPL dimensions shall be as indicated in the contract documents. Recycled plastic lumber shall be manufactured by:

**ITEM 615.08XXNN39 WORLD'S FAIR BENCH – RPL SLATS – NYCDPR**

Selectforce  
Bedford Technology, LLC  
2424 Armour Rd.  
Worthington, MN 56187  
507-372-5558  
www.plasticboards.com

PolyTuf  
Tangent Technologies, LLC  
1001 W. Sullivan Rd.  
Aurora, IL 60506  
630-264-1110  
www.tangentusa.com

or equal as approved by the Engineer.

Color to be Cedar or Weathered Wood unless otherwise indicated in the contract documents.

Recycled plastic lumber slats shall comply with or be tested in accordance with provisions of the following ASTM specifications:

- ASTM D6108
- ASTM D6109
- ASTM D6111
- ASTM D6112
- ASTM D6117
- ASTM D1248

RPL shall be fabricated from recycled High Density Polyethylene (HDPE) and recycled Low Density Polyethylene (LDPE). HDPE resins shall meet the requirements of ASTM D1248 for Type II, III or IV (high density), Grade G7. Lumber shall contain no toxic materials, but shall contain UV-inhibited pigments. Recycled plastic lumber shall not absorb moisture, corrode, rot, warp, splinter, or crack and shall not contain fiberglass or any material that will be irritating in contact with skin Composition and mechanical properties shall be as follows:

Minimum Recycled Content	90%
Minimum High Density Polyethylene	70%
Maximum Percentage of Materials other than Polyolefins	5%
Minimum Specific Gravity (ASTM D6111-09)	0.02 lbs-in3
Minimum Flexural Modulus (ASTM D6109)	85,000 psi
Minimum Nail Pull-out Strength (ASTM D6117)	700 lbs

Flame Spread, Class C or better, tested in accordance with ASTM E84.

Coefficient of Thermal Expansion (ASTM D6341), in the range of 14 degrees F 86 degrees F, shall not exceed 70 x 10-6/°F.

**ITEM 615.08XXNN39 WORLD'S FAIR BENCH – RPL SLATS – NYCDPR**

The State reserves the right to independently test samples of slats from the job site. Upon request, random samples must be supplied to the State for identification. Should the slats provided on the job site not be as previously approved, the Contractor shall replace all the incorrect slat lumber at no extra cost to the State.

Additional RPL requirements for Type A benches: Recycled plastic lumber slats shall be internally reinforced or externally supported with additional steel bar and channel supports. The Contractor shall submit shop drawings showing all external supports if non-reinforced plastic lumber is used. Both types (internally reinforced and externally supported) of RPL shall comply with and be tested in accordance with the provisions listed above.

Reinforced plastic slats shall be precision machined to receive the internal steel support bars and allow expansion and contraction of the slats. The slats with supports on minimum forty-six inch (46") centers and a one-and-one-half inch by one quarter inch (1-½" X ¼") steel support strap midway between the legs, shall be capable of bearing a five hundred pound (500 lb) load for a minimum twenty four hours with a maximum deflection of one-quarter inch (¼") with the weight in place and one-sixteenth inch (1/16") with the weight removed. As-equal submittals will require test data confirming this tolerance.

The different coefficients of expansion require sufficient play in the slot and spacing of fasteners to prevent cracking and splitting. Internal steel reinforcement bars shall be made of A36 electric furnace mild steel from recycled steel scrap. Steel dimension shall be one-quarter inch by one inch (¼" X 1"), secured with stainless steel set screws, countersunk with the resulting cavity filled with recycled plastic plugs.

The steel bars shall be hot-dipped galvanized and powdercoated to match the color of the recycled plastic lumber slats.

**Hardware:**

**Type A and 1964 Bench:** Bolts, locknuts, and washers used to secure slats to standards shall be stainless steel. Bolt or wood screw used for mid section steel support strap (RPL only) shall be a vandal resistant type, either stainless steel or hot-dipped galvanized. Type and dimensions of all bolts, nuts, and washers shall be as indicated in the contract documents. Anchor bolts used to secure the benches to pavements may be either stainless steel or hot-dipped galvanized steel. Bolts for securing slats shall be provided with nylon lock nuts so as to render the connection vandal resistant.

**Type A Bench:** Steel support straps shall be secured with 3/8" hot-dipped galvanized or stainless steel screws with vandal resistant heads.

**CONSTRUCTION DETAILS**

Assembly and Installation: Benches shall be assembled before being installed. Refer to the contract documents for the installation location. After assembly, benches shall be surface-mounted in their final position and secured in place, as indicated in the contract documents and as per manufacturer's instructions.

**ITEM 615.08XXNN39 WORLD'S FAIR BENCH – RPL SLATS – NYCDPR**

Fabrication Tolerances (Type A and 1964): Ends shall be smooth with clean cuts, cross-sections shall not have voids greater than 1/2" dia. Voids of 1/2" dia. or less shall be filled with a matching color of silicone caulk, as per manufacturer's specifications. All edges shall be eased. Maximum variation from flat surface across section shall be 1/8".

Delivery and Storage (Type A and 1964): Keep materials protected at all times against exposure to extreme heat or impact. All material shall be bundled and fully supported during shipping and storage to prevent creep. Any lumber that is damaged or excessively scratched will be rejected and replaced with new. All slat material must be straight and true when bolted to the standards.

Touch-up and Repair: For minor damage caused by installation or transportation, touch-up finish in conformance with manufacturer's recommendations. Provide touch-up such that repair is not visible from a distance of six feet (6').

**Submittals:**

1. Shop Drawings - The Contractor shall submit Shop Drawings when required.
2. Foundry Certificates - Certifying Ductile Iron used in bench standards shall be submitted. The certificate shall be on foundry letterhead, dated and signed by the manufacturer with the
  - Contract No.,
  - Contractor name, and
  - Class of Ductile Iron provided.
3. Sample - The Contractor shall submit a twelve inch (12") sample of the recycled plastic lumber slat for surface and color approval. Required test results shall be submitted for unreinforced recycled plastic lumber slats.
4. Paint Submission - A written request for any paint substitution must be submitted. The Contractor shall submit manufacturer's data sheets and installation instructions for approval of any proposed as-equal product no less than two (2) weeks prior to application.

**METHOD OF MEASUREMENT**

This work will be measured as the number of feet, measured in place along the front slat, of World's Fair Bench – RPL Slats, furnished and installed.

**ITEM 615.08XXNN39 WORLD'S FAIR BENCH – RPL SLATS – NYCDPR****BASIS OF PAYMENT**

The unit price bid per linear foot of World's Fair Bench – RPL Slats shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work.

Excavation and concrete for footings or concrete slab shall be paid for separately under their respective items.

***Payment will be made under:***

<b>Item</b>	<b>Description</b>	<b>Unit</b>
615.08010139	Type 'A' World's Fair Bench – RPL Slats - NYCDPR	Linear Foot
615.08010239	Type 'A' Backless World's Fair Bench – RPL Slats - NYCDPR	Linear Foot
615.08020139	1964 World's Fair Bench – RPL Slats – (Backless and Armless)- NYCDPR	Linear Foot
615.08020239	1964 World's Fair Bench – RPL Slats – with Back and Arms- NYCDPR	Linear Foot
615.08020339	1964 World's Fair Bench – RPL Slats – with Back (Armless) -NYCDPR	Linear Foot
615.08020439	1964 World's Fair Bench – RPL Slats – with Arms (Backless) -NYCDPR	Linear Foot

**ITEM 615.27XX0010 BICYCLE RACK (DESIGN CAPACITY XX BICYCLES)**

**DESCRIPTION:**

This work shall consist of furnishing and installing bicycle racks in accordance with the plans and specifications or as directed by the Engineer.

**MATERIALS:**

The bicycle rack shall be constructed of ASTM F1083 schedule 40 steel pipe or approved equal. The Contractor shall submit shop drawings and/or catalog cuts to the Engineer for review and approval prior to the installation of the bicycle rack. Drawings shall show clearly all materials, finishes, and connecting methods.

Class A concrete shall be used for the footing.

**CONSTRUCTION DETAILS:**

Bicycle racks shall be constructed in accordance with this specification, the contract documents, and as directed by Engineer.

Each bicycle rack shall be permanently installed on the surface by embedding the bottom portion of the galvanized steel frame, or an extension of the frame, into concrete or by installing a surface flange mount as recommended by the manufacturer.

Assembly of bicycle rack components shall be performed in strict accordance with manufacturer's recommendations for installation if applicable. All work shall be free of blemishes or defects, which can affect durability, strength, safety or appearance. Bicycle racks or parts that are received chipped, scratched, bent, dented, stained, or damaged or are damaged during installation as determined by the Engineer will not be accepted and shall be removed immediately from the project site and replaced with new bicycle racks or parts, which are free from all defects.

The contractor shall set the bicycle rack plumb to the height indicated in the contract documents or as directed by the Engineer.

The contractor shall protect all parts of the bicycle rack and maintain it in an undamaged condition until completion and acceptance of the contract. Any sections damaged at any time prior to final acceptance shall be repaired or replaced at the contractor's expense.

All sidewalk restoration and excavation shall be included in the price bid for this item.

**METHOD OF MEASUREMENTS:**

This work will be measured as the number of bicycle racks satisfactorily furnished and installed at the locations shown on the plans or ordered by the Engineer.

**BASIS OF PAYMENT:**

The unit price bid for each bicycle rack shall include the cost of furnishing all labor, materials and equipment necessary to complete the work, including sidewalk restoration where necessary.

*Payment will be made under:*

Item	Description	Unit
615.27020010	Bicycle rack (Design Capacity 2 Bicycles)	Each

**ITEM 615.33XX0011 TEMPORARY WOODEN TREE GUARD – NYCDPR****DESCRIPTION**

This work shall consist of furnishing, installing, maintaining and removing temporary wooden tree guards around existing trees in accordance with the contract documents and as directed by the Engineer.

**Definition:** Temporary wooden tree guard with (or without) tree wrap is intended to protect individual trees. Temporary wooden tree guard for groves shall enclose a group (or grove) of several trees.

**MATERIALS**

The following sections of the standard specifications shall apply:

Timber and Lumber	594-2
Bar Reinforcement, Grade 60	709-01
Epoxy-Coated Bar Reinforcement	709-04

**Tree Guard:** Lumber shall be Yellow Pine, Douglas Fir or Spruce. In addition to the requirements found in §712-13, lumber shall be free of cracks, deformities and bark. No paint will be required.

**Hardware:** Galvanized or stainless steel screws.

**Tree Wrap:** “Snow fencing” composed of High Density Polyethylene (HDPE) mesh.

**Line Post/Stake:** Line post/Stake shall be No. 4 rebar. Rebars shall be uncoated conforming to §709-01 or can be epoxy coated conforming to §709-04.

**CONSTRUCTION DETAILS**

**General:** Temporary wooden tree guards shall be furnished and installed before commencing work on the site.

When directed, branches of existing trees shall be tied up to prevent tree injury during construction.

If temporary wooden tree guards or wrap are damaged before the authorized removal, they shall be immediately repaired, or replaced by a new temporary wooden tree guard or wrap at no additional expense.

**Tree Wrap:** When indicated for use in the contract documents,

The tree wrap shall be carefully wrapped around the trunk of the tree above the root flare and secured with steel or aluminum tie wire. Tree wrap shall be installed prior to the installation of the tree guards.

**ITEM 615.33XX0011 TEMPORARY WOODEN TREE GUARD – NYCDPR**

**Temporary Wooden Tree Guards:** Temporary wooden tree guards shall be installed at the locations shown in the contract drawings. Posts for temporary wooden tree guards for individual trees shall be installed at the corners of the square enclosure as shown in the contract documents.

Posts for temporary wooden tree guards for groves shall be installed every eight feet on center (approximately), unless otherwise noted in the contract documents. Temporary wooden tree guards shall be installed with line post/stakes securely attached with galvanized or stainless steel screws to the wooden posts and driven 18" into the ground, without damage to existing trees.

Temporary wooden tree guards and wrap shall remain in place and not be moved or removed until,

- written permission is granted, AND
- all work which might cause damage or defacement has been completed.

Upon completion of the work, the Contractor shall remove and dispose of all temporary wooden tree guards and tree wrap.

**METHOD OF MEASUREMENT**

**Temporary Wooden Tree Guard With and/or Without Tree Wrap:** The work will be measured as the number of each wooden tree guard with and/or without wrap furnished, installed, maintained and removed.

**Temporary Wooden Tree Guard For Groves:** The work will be measured as the number of linear feet to the nearest whole linear foot of temporary wooden tree guard for groves furnished, installed, maintained and removed. Linear feet will be measured along the top edge of the temporary wooden tree guard.

**BASIS OF PAYMENT**

**Temporary Wooden Tree Guard With and/or Without Tree Wrap** The unit bid price for each temporary wooden tree guard with and/or without wrap shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work. Tying of tree branches, as directed, is included in the cost of work.

**Temporary Wooden Tree Guard For Groves:** The unit bid price for each temporary wooden tree guard for groves shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work. Tying of tree branches, as directed, is included in the cost of work.



**ITEM 615.33XX0011 TEMPORARY WOODEN TREE GUARD – NYCDPR**

**Progress Payments:** Progress payments shall be made at the unit price bid for 75 percent of the quantity of temporary wooden tree guard with and/or without tree wrap and temporary wooden tree guard for groves installed. The remaining 25 percent will be paid upon final removal.

The work will be paid under the following payment items:

<b>Item Number</b>	<b>Description</b>	<b>Units</b>
615.33010011	Temporary Wooden Tree Guard without Tree Wrap – NYCDPR	EA
615.33020011	Temporary Wooden Tree Guard with Tree Wrap – NYCDPR	EA
615.33030011	Temporary Wooden Tree Guard for Groves	LF

**ITEM 615. 43000011 GROUND SURFACE PROTECTION MATS**

**DESCRIPTION:** The work shall consist of furnishing, placing, maintaining, and removing Ground Surface Protection Mats for construction equipment access at work sites with soft soil conditions or for the protection of tree root systems at the locations shown in the plans or where directed by the Engineer.

**MATERIALS:** Ground Surface Protection Mats shall meet the following requirements:

- Manufactured from high-density polyethylene (HDPE).
- Each mat shall be approximately 7.87 foot by 13.78 foot (nominal),
- Each mat is to be equipped with a lip on two sides that creates an overlapping joint with an adjoining mat to allow for effective load distribution between adjacent mats.
- The interlocking mechanism shall consist of multiple connection points uniformly spaced along the full length of the overlapping lips of adjacent mats, fixed with locking pins.
- Manufacturer test data shall be submitted to demonstrate that each mat has a minimum compressive load bearing capacity of 570 pounds/ inch<sup>2</sup> when tested with a clear span of 7.87 foot minimum.

Mulching Material shall conform to Subsection 713-05 Wood Chips and the following:

- Mulch may be either wood chips or shredded bark.
- Wood chips shall be Type A composted (aged).
- Shredded bark shall be from hardwood trees which has been milled and screened to a maximum 3 inch particle size. Shredded bark shall be free from leaves, twigs, wood shavings, sawdust, toxic substances, and any foreign materials.
- Geotextile Fabric shall conform to Subsection 207-2 Materials, Geotextile Stabilization, Strength Class 1.

**CONSTRUCTION DETAILS:** The Contractor shall prepare a layout plan indicating the type and setup of construction equipment at each work site designated for protection to the Regional Landscape Architect for approval. The placement of the Ground Surface Protection Mats shall be supervised by ISA Certified Arborist.

All debris and foreign objects shall be removed from the area to be protected by the mats. When turf exists, the area to be protected shall be mowed to a height of 8 inch to 10 inch.

After mowing, the Contractor shall place a geotextile fabric upon the ground surface of the protection area. 100 to 150 mm of mulching material shall be evenly spread upon the geotextile fabric surface. Ground Surface Protection Mats shall be placed upon the mulching material as directed by the ISA Certified Arborist.

**ITEM 615. 43000011 GROUND SURFACE PROTECTION MATS**

Upon completion of construction operations at the site, the Contractor shall remove the Ground Surface Protection Mats, mulching material, and geotextile fabric. The ground surface shall be raked by hand.

The Contractor shall perform additional surface restoration, including re-seeding grassed areas, shall be performed under the applicable landscape items as indicated on the plans and as directed by the Engineer.

**METHOD OF MEASUREMENT:** Ground Surface Protection Mats shall be measured in place by the number of square feet to the nearest square foot of protection mat surface installed and satisfactorily removed from the site.

**BASIS OF PAYMENT:** The unit price bid per square foot shall include the cost of furnishing all labor, materials and equipment, including Ground Surface Protection Mats, mulching material, geotextile fabric, and all disposal costs necessary and required to complete the work in accordance with the plans and specifications and as directed by the Engineer. Permanent Landscaping will be paid for under their respective items.

**ITEM 615.92010011 PRECAST CONCRETE STEPS (STRAIGHT)**  
**ITEM 615.92020011 PRECAST CONCRETE STEPS (RADIAL)**

**DESCRIPTION**

Under this work, the Contractor shall furnish and install precast concrete steps of the size and type, and at the locations as shown on the Contract Drawings.

**MATERIALS**

Materials shall meet the requirements specified in the following subsections of 700 – Materials except where modified herein.

Precast Concrete	704-03
Masonry Mortar	705-21

- A. Reinforcing Bars: Reinforcing Bars shall comply with Section 709-01 Bar Reinforcement and be Epoxy-Coated Grade 60.
- B. Grout Materials:

Nonmetallic, Nonshrink Grout: Premixed, nonmetallic, noncorrosive, nonstaining grout containing selected silica sands, portland cement, shrinkage-compensating agents, plasticizing and water-reducing agents, complying with ASTM C 1107, Grade A for drypack and Grades B and C for flowable grout and of consistency suitable for application within a 30-minute working time or approved equal.

Sand-Cement Mortar: Portland cement, ASTM C 150, Type I, and clean, natural sand, ASTM C 144. Mix at ratio of 1 part cement to 4 parts sand, by volume, with minimum water required for placement.

Latex-Portland Cement Pointing Grout: ANSI A118.6 and as follows:

1. Dry-grout mixture, factory prepared, of portland cement, graded aggregate, and dry, redispersible, ethylene-vinyl-acetate additive for mixing with water; uniformly colored.
2. Commercial portland cement grout, factory prepared, with liquid styrene-butadiene rubber or acrylic-resin latex additive; uniformly colored.
3. Or approved equal

Colors: Steps shall match color and finish of approved sample.

- C. Design Standards: Comply with ACI 318 and design recommendations of PCI MNL 120, "PCI Design Handbook - Precast and Prestressed Concrete," applicable to types of precast concrete units indicated.

**ITEM 615.92010011 PRECAST CONCRETE STEPS (STRAIGHT)**  
**ITEM 615.92020011 PRECAST CONCRETE STEPS (RADIAL)**

All precast walking surfaces (steps) to have a minimum slip resistance of 0.65. Design Standards:

Comply with ACI 318 and design recommendations of PCI MNL 120, "PCI Design Handbook - Precast and Prestressed Concrete," applicable to types of precast concrete units indicated.

All precast walking surfaces (steps) to have a minimum slip resistance of 0.65.

**CONSTRUCTION DETAILS**

- A. Precast concrete steps shall be laid on the alignment and grade as shown on the plans to provide a uniform surface. No installation shall be done at temperatures below 32°F. Precast concrete steps shall not be placed on frozen subgrade as determined by the Engineer. The temperature of the subbase shall be 36°F or higher. There shall be no snow, frost, or standing water on the subbase.

The Contractor shall use installation equipment which is not bent, twisted, warped or damaged in any way. All wire ropes for cranes or lifting bars shall be of full sections and shall not be bent, kinked, twisted, torn or stretched. The lifting capacity of each lifting device shall be clearly marked.

- B. Reinforcement: Reinforce precast concrete units to resist handling, transportation, and erection stresses. Comply with recommendations in PCI MNL 117 for fabricating, placing, and supporting reinforcement. Clean reinforcement of loose rust and mill scale, earth, and other materials that reduce or destroy the bond with concrete. When damage to epoxy-coated reinforcing exceeds limits specified in ASTM A 775/A 775M, repair with patching material compatible with coating material and epoxy coat bar ends after cutting. Accurately position, support, and secure reinforcement against displacement during concrete-placement and consolidation operations. Completely conceal support devices to prevent exposure on finished surfaces. Place reinforcement to maintain at least 2-inch minimum coverage. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position while placing concrete. Direct wire tie ends away from finished, exposed concrete surfaces. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position while placing concrete. Install welded wire fabric in lengths as long as practicable. Lap adjoining pieces at least one full mesh spacing and wire tie laps, where required by design. Offset laps of adjoining widths to prevent continuous laps in either direction.
- C. Grouting Connections: Grout connections where required or indicated. Retain grout in place until hard enough to support itself. Pack spaces with stiff grout material, tamping until voids are completely filled. Place grout to finish smooth, level, and plumb with adjacent concrete surfaces. Keep grouted joints damp for not less than 24 hours after initial set. Promptly remove grout material from exposed surfaces before it affects finishes or hardens.

**ITEM 615.92010011 PRECAST CONCRETE STEPS (STRAIGHT)**  
**ITEM 615.92020011 PRECAST CONCRETE STEPS (RADIAL)**

**METHOD OF MEASUREMENT**

Precast concrete steps will be measured as the number of cubic yards of precast concrete steps incorporated in the completed work.

**BASIS OF PAYMENT**

The unit price bid per cubic yard of Precast Concrete steps shall cover the cost of furnishing all labor, material, equipment, insurance, and incidentals required to furnish, deliver, and install precast concrete steps.

Payment will be made as follows:

<b>Item:</b>	<b>Description:</b>	<b>Pay Unit:</b>
615.92010011	Precast Concrete Steps (Straight)	C.Y.
615.92020011	Precast Concrete Steps (Radial)	C.Y.

**ITEM 615.9906XX04 LANDSCAPE BOULDERS**

**DESCRIPTION**

The work shall consist of furnishing and installing landscape boulders in accordance with the contract documents and as directed by the Engineer.

**MATERIALS**

The boulder and bedding material shall be described in the contract documents in a special note entitled "*Landscape Boulders*".

**Submittals**

The Contractor shall submit two (2) samples of the proposed landscape boulder for approval prior to delivery. Samples shall be large enough to convey the boulder appearance, including texture and color, but no larger than 20 pounds.

**CONSTRUCTION DETAILS**

The Engineer shall be notified two weeks before the boulders are delivered to the construction site.

The Contractor shall stockpile the materials at an approved location. The boulders shall be approved prior to placement.

The Contractor shall notify the Engineer when the boulder placement site is complete and ready for boulder placement.

The contractor shall mark out the location of boulders in the field for approval, based on the contract documents and as directed by the Engineer.

After the arrangement of boulders is approved, the Contractor shall set the boulders in place and backfill around them with specified bedding material as shown in the contract documents. The placed boulders shall be clean, free from marks or scars caused by construction equipment and in a stable position that prevents future removal or displacement.

**METHOD OF MEASUREMENT**

The work will be measured as the number of each boulder installed in accordance with the contract documents.

**BASIS OF PAYMENT**

The unit price bid for each landscape boulder shall include the cost of all labor, material, and equipment necessary to satisfactorily complete the work.

**ITEM 615.9906XX04      LANDSCAPE BOULDERS**

Payment will not be made for repairs to damaged areas caused by the Contractor's operations. No payment will be made for installing landscape boulders or work related thereto that have not been pre-approved or that have degraded due to the Contractor's negligence, material failure, or improper storage of the material.

Payment will be made under the following:

<b>ITEM</b>	<b>DESCRIPTION</b>	<b>Pay Unit</b>
615.99060104	Landscape Boulders, Type 1	EACH
615.99060204	Landscape Boulders, Type 2	EACH
615.99060304	Landscape Boulders, Type 3	EACH
615.99060404	Landscape Boulders, Type 4	EACH



**ITEM 617.01010024 CONTROLLING INVASIVE PLANT SPECIES WITH HERBICIDES**

**ITEM 617.01020024 CONTROLLING INVASIVE PLANT SPECIES BY PULLING**

**ITEM 617.01030024 CONTROLLING INVASIVE PLANT SPECIES BY EXCAVATION**

**ITEM 617.10000024 DISPOSAL OF MATERIAL CONTAINING INVASIVE PLANT**

**SPECIES**

**ITEM 617.11000024 EQUIPMENT CLEANING FOR INVASIVE PLANT SPECIES**

**DESCRIPTION.** This work shall consist of control and disposal of identified invasive species and disposal of infested soil in accordance with the contract documents and as directed by the Engineer. The work described is to control the spread and/or re-growth of invasive species. Specific control methods to be used are identified in the Special Note entitled Controlling Invasive Plant Species.

**MATERIALS.**

Herbicide: EPA/NYSDEC Label-approved herbicide conforming to §713-13 Pesticides. Surfactants added to increase the effectiveness of the herbicide may be used, in accordance with manufacturers' labels. Tracer dye shall be used in herbicide mixes to aid in identifying application coverage. Additional permitting from regulatory agencies may be required prior to application.

**CONSTRUCTION DETAILS.**

The work shall be performed in accordance with the requirements of Special Note entitled Controlling Invasive Plant Species.

**Site Preparation.** Refer to the Special Note for specific control methods of targeted invasive species.

**Controlling Invasive Plant Species.** Three methods are described:

1. Pulling.
  - a. Contractor shall hand-pull, or remove using hand tools, all stems and associated roots within the designated areas shown in the contract documents at the times specified.
  - b. All plant parts shall be carefully placed in black plastic bags (4 mil minimum) and securely tied or sealed.
  - c. Care shall be taken in pulling stems to remove as much of the root mass as possible.
  - d. Supplemental digging using hand tools to remove roots/ rhizomes or herbicide treatment may be required. Refer to the Special Note entitled *Controlling Invasive Plant Species*.
  - e. Plant material shall be treated and/or transported in accordance with *Disposal of Material*.
2. Excavation.
  - a. Mechanical methods may be used to remove plant material.
  - b. Removal perimeter shall extend no less than 16 ft beyond the leading edge of invasive species stand.
  - c. Excavation shall extend to a minimum depth of 6 ft below proposed final grade.

**ITEM 617.01010024 CONTROLLING INVASIVE PLANT SPECIES WITH HERBICIDES**

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**ITEM 617.11000024 EQUIPMENT CLEANING FOR INVASIVE PLANT SPECIES**

- d. Excavated area shall be backfilled with uncontaminated suitable material.
- e. Excavated material shall be treated and/or transported according to *Disposal of Material*.

3. Herbicide Application.

- a. The herbicide applicator shall be a NYSDEC Certified Commercial Pesticide Applicator. In planning the use of herbicides to control invasive species, the Contractor and Certified Pesticide Applicator shall ensure that herbicides used are labeled for the target species- through the pesticide label or through the unlabeled pest process.
- b. Herbicide shall be applied by hand-sprayer, back-pack, wick application, stem injection or herbicide clippers.
- c. Site preparation for herbicide application shall include cutting dormant stalks and actively growing plants approximately 4 weeks prior to first annual treatment.
- d. Contractor shall be responsible for all public notification and posting requirements.

**Disposal of Material.** Cut plant material shall be placed in (4 mil minimum thickness) black plastic bags for transportation out of the area. Bags shall be securely tied or sealed. Soil containing seeds, roots and/or rhizomes shall be wrapped in black plastic sheeting (4 mil minimum thickness) and transported in a manner which prevents the spread of the contaminated material during transport. Acceptable disposal methods can be one of the following:

- *Bury* - Soil containing invasive plant material shall be buried either in an excavated pit or fill section, covered with at least 6 ft of uncontaminated fill material (eg: embankment in place, topsoil, etc.) Soil containing invasive plant material shall not be buried within 100 ft of a water body (including wetlands). Disposal of surplus excavated material generated from this disposal method shall be at no additional cost to the State.
- *NYSDEC Quarry/ Mine Reclamation* - Where feasible and accessible, material shall be transported to an approved quarry/ mine accepting invasives-contaminated fill material.
- *Landfill/ Incinerator* - Plant material or spoil containing invasive plant material shall be disposed of in a municipal solid waste management facility or incinerator that is operated under current 6 NYCRR Part 360 regulations.
- *Approved NYSDOT disposal facility* - Where available, plant material or spoil containing invasive plant material may be disposed of in regional invasive species disposal facilities as identified in the contract documents.

**ITEM 617.01010024 CONTROLLING INVASIVE PLANT SPECIES WITH HERBICIDES****ITEM 617.01020024 CONTROLLING INVASIVE PLANT SPECIES BY PULLING****ITEM 617.01030024 CONTROLLING INVASIVE PLANT SPECIES BY EXCAVATION****ITEM 617.10000024 DISPOSAL OF MATERIAL CONTAINING INVASIVE PLANT****SPECIES****ITEM 617.11000024 EQUIPMENT CLEANING FOR INVASIVE PLANT SPECIES**

Stockpiling and stockpile location(s) of soil containing invasive plant material shall be approved by the Engineer. Invasive species spoil stockpiled on site shall be identified as such so not to be inadvertently used in a manner that is not consistent with Disposal of Material. Stockpiles shall be stabilized to prevent erosion and transport of invasive material. Stockpiling shall be at no cost to the State.

The Contractor shall identify the disposal location(s) and obtain approval from the Engineer at least 5 calendar days prior to disposal.

**Equipment Cleaning.** Equipment used in areas containing invasive plant species shall be power-washed (1000 psi minimum) and cleaned with clean water (without using cleaning soaps or chemicals) before leaving the invasive control/removal area to prevent the spread of seeds, roots, or other viable plant parts. Water may be supplied by a municipal water source or may be pumped from an on-site or local surface water source. If water is drawn from a local water source, to protect aquatic life, there shall not be any loss of water elevation at the site of withdrawal or immediately downstream of the site. Withdrawal from surface waters may be subject to USACOE, NYSDEC and other regulations. Equipment cleaning stations shall include either a constructed cleaning station conforming to §209-3.13 *Construction Entrances* or a portable commercial cleaning station with a rack. Loose plant and soil material that has been removed from clothing, boots and equipment, or generated from cleaning operations, including constructed cleaning station material after use, shall be disposed of as described in *Disposal of Material*. If sufficient space is not available or precluded by terrain to provide a cleaning station on site, upon approval by Engineer, equipment used within an infested area may be power-washed adjacent to the invasive control/removal area, provided that the wash water (including spray) does not discharge within 100 ft of any stream, existing or proposed wetland, or stormwater conveyance (eg: ditch, catch basin, etc). If upon completion of construction, the area remains infested with invasive plants, the invasive material generated may remain in the infested area.

**Care of Controlled Areas During Construction.** The Department will inspect all treated areas approximately every 4 weeks during the growing season (or during the following growing season for fall applications if contract continues into the following growing season). If additional treatments are necessary, the Contractor shall apply treatment to all identified areas within 10 calendar days of notification. Additional treatments will be considered extra work.

**METHOD OF MEASUREMENT.**

**Herbicides.** The quantity of controlling invasive species to be measured for payment will be in square feet of surface area controlled, measured to the nearest square foot.

**ITEM 617.01010024 CONTROLLING INVASIVE PLANT SPECIES WITH HERBICIDES**

**ITEM 617.01020024 CONTROLLING INVASIVE PLANT SPECIES BY PULLING**

**ITEM 617.01030024 CONTROLLING INVASIVE PLANT SPECIES BY EXCAVATION**

**ITEM 617.10000024 DISPOSAL OF MATERIAL CONTAINING INVASIVE PLANT SPECIES**

**ITEM 617.11000024 EQUIPMENT CLEANING FOR INVASIVE PLANT SPECIES**

**Pulling.** The quantity of controlling invasive species to be measured for payment will be in square feet of surface area controlled, measured to the nearest square foot.

**Excavation.** The quantity of controlling invasive species to be measured for payment will be in cubic yards removed, measured to the nearest cubic yard.

**Disposal of Material Containing Invasive Plant Species.** The quantity to be measured for payment of contaminated material disposal will be in cubic yards removed, measured to the nearest cubic yard.

**Equipment Cleaning for Invasive Plant Species.** The quantity to be measured for payment of equipment cleaning will be on a lump sum basis.

**BASIS OF PAYMENT.**

**Herbicides.** The unit price bid will include the cost of all labor, materials and equipment necessary to perform site preparation and satisfactorily complete the work.

**Pulling.** The unit price bid shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work.

**Excavation.** The unit price bid shall include the material and work required to perform site preparation, excavation, backfill the excavated area and surplus material removal. Backfill quantity shall not exceed the quantity of material excavated.

**Disposal of Material Containing Invasive Plant Species.** The unit price bid shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work.

**Equipment Cleaning for Invasive Plant Species.** The lump sum price bid shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work.

***Payment will be made under:***

<b>Item No.</b>	<b>Item</b>	<b>Pay Unit</b>
617.01010024	Controlling Invasive Plant Species with Herbicides	Square Foot
617.01020024	Controlling Invasive Plant Species by Pulling	Square Foot
617.01030024	Controlling Invasive Plant Species by Excavation	Cubic Yard
617.10000024	Disposal of Material Containing Invasive Plant Species	Cubic Yard
617.11000024	Equipment Cleaning for Invasive Plant Species	Lump Sum

**ITEM 619.02970001 CONSTRUCTION SIGNS (EACH)**

**DESCRIPTION.**

The Contractor shall furnish, install, move, cover, uncover and maintain construction signs in excess of the quantity required by Basic Work Zone Traffic Control Lane Closure items and as directed by the Engineer, and in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).

**MATERIALS.**

All the provisions of §619-2.02H shall apply.

**CONSTRUCTION DETAILS.**

All the provisions of §619-3.02H shall apply.

A standard sign size provided under this item shall be 3 ft x 3 ft in size. All signs in excess of the quantity required by Basic Work Zone Traffic Control Lane Closure items will be provided under this item.

**METHOD OF MEASUREMENT.**

The quantity to be measured for payment will be the number of standard sized signs installed in excess of the quantity required by other contract items, rounded up to the nearest whole unit. For sizes other than the standard size, the following payment factor will be used:

Payment Factor = (Total Area of measured sign face(s)/ 9 ft<sup>2</sup>)

**BASIS OF PAYMENT.**

The unit price bid for each shall include all labor, material and equipment necessary to satisfactorily complete the work.

**ITEM 619.07010001 PLASTIC CONSTRUCTION DRUMS (EACH)**

**DESCRIPTION:**

The Contractor shall furnish, install, move, relocate and maintain construction drums as shown in the Contract Documents or where directed by the Engineer, and in accordance with the Manual of Uniform Traffic Control Devices.

**MATERIALS:**

All the provisions of subsection 619-2.02J shall apply.

**CONSTRUCTION DETAILS:**

All the provisions of 619-3.02J shall apply. Applicable construction drums are those which maintain traffic for the duration of repairs. Drums shall either remain in place twenty four (24) hours per day or be installed and removed daily.

All drums in excess of the quantity required by other contract items will be provided under this item.

Construction drums shall be equipped with warning lights when required.

When warning lights are not required, and when allowed by the Engineer, cones may be substituted for drums.

**METHOD OF MEASUREMENT:**

Measurement will be made on an each basis for plastic drums. If cones are substituted for drums, the number of drums for payment will be computed as follows:

$(\text{Total Number of Cones Used}/25) = \text{Number of Drums (Each)}$  [Round up to the nearest whole unit]

**BASIS OF PAYMENT:**

The unit price bid for each shall include all labor, material, and equipment necessary to provide the required construction drums for the duration of the work at an individual site. The unit price shall include the cost of warning lights when required as well as all costs associated with the daily installation and removal of drums (when required) and the replacement of any damaged/deteriorated drums. No additional payment will be made for relocating construction drums within a given site, regardless of the size of the site or the duration of the work at the site.

**ITEM 620.06010002 EXTRA HEAVY RIP RAP**

**DESCRIPTION:**

The requirements of Section 620-1 and Subsection 620-1.02 shall apply except as follows:

**MATERIALS:**

The requirements of Subsections 620-2.01 shall apply.

Extra Heavy dry rip-rap shall be a product of ledge rock and consist of stone having a minimum specific gravity (saturated surface dry, S.S.D.) of 2.48.

Graduation of extra heavy rip-rap shall conform with the following requirements:

Stone Size	
Heavier than 5000 lbs.	80%
1500 lbs. to 5000 lbs.	20%

The thickness of the individual stones shall be between 18 inches to 24 inches. The top and bottom surfaces of each stone shall be approximately parallel to each other and the sides approximately perpendicular to the bottom and top.

The gradation of materials furnished for use as extra heavy dry rip-rap shall be accepted or rejected based on a visual examination by the Engineer. The Engineer or their inspector will examine the material at the source prior to the shipment to the site.

**CONSTRUCTION DETAILS:**

The requirements of Section 620-3.03 and 620-3.05 shall apply.

**METHOD OF MEASUREMENT:**

The quantity to be paid for shall be the number of tons of stones and spalls incorporated into the work conforming to the requirements of these specifications and in accordance with lines, grades and cross-sections shown on the plans or as directed by the Engineer.

**BASIS OF PAYMENT:**

The unit price bid per ton of this item shall include the costs of furnishing all materials, labor and equipment necessary to satisfactorily complete the work.

**ITEM 620.14010009 EXTRA HEAVY STONE TYPE A**  
**ITEM 620.14020009 EXTRA HEAVY STONE TYPE B**

**DESCRIPTION**

The requirement of Subsection 620-1.01 shall apply.

**MATERIALS**

The requirements of Subsections 620-2.01 and 620-2.02 shall apply, except as follows:

<b>Type A</b>	<b>Stone Size</b>
Heavier than 2500 lb	50% - 100%
Smaller than 9 inches	0% - 10%
<b>Type B</b>	<b>Stone Size</b>
Heavier than 1250 lbs	50% - 100%
Smaller than 8 inches	0% - 10%

**CONSTRUCTION DETAILS**

The requirements of Subsections 620-3.01 and 620-3.02 shall apply.

**METHOD OF MEASUREMENT**

The requirements of Subsection 620-4.01 shall apply.

**BASIS OF PAYMENT**

The requirements of Subsection 620-5.01 shall apply.

<b>Item No.</b>	<b>Description</b>	<b>Payment Unit</b>
620.14010009	Extra Heavy Stone Type A	CY
620.14020009	Extra Heavy Stone Type B	CY



**ITEM 623.10010011 STONE SCREENINGS SURFACE -NYCDPR****DESCRIPTION**

This work shall consist of furnishing and installing the stone screening surface in accordance with the contract documents and as directed by the Engineer. In all cases grades shall be provided to ensure positive drainage. This item is intended for use in areas where slopes do not exceed three (3%) percent and where no vehicles travel.

**MATERIALS**

- A. Submittals: A three (3) pound bag of stone screenings top course shall be submitted to the Engineer for approval with the name of supplier and a certified report by an approved Materials Testing Laboratory showing the materials composition and sieve analysis.
- B. Crushed Aggregate Screenings-Top Course: Material for top course shall consist of one-quarter inch (1/4") minus bluestone screenings, free from clay lumps, organic or other deleterious material. Fines shall be evenly mixed throughout the aggregate. Screenings shall be graded within the following limits:

Sieve Size (Dry Analysis)	Percent Passing
1/4"	100%
No. 4	90-100%
1/8"	75-90%
No. 20	30-50%
No. 40	20-40%
No. 80	10-25%
No. 200	5-15%

- C. Base Course: The materials for the base course shall conform to the requirements of Section 304 "Subbase Course" of the NYS Standard Specifications as well as §733-04 Subbase Course as modified to exclude any recycled materials as an alternate to the subbase including recycled concrete aggregate, blast furnace slag, and reclaimed asphalt pavement.
- D. Geotextile: Geotextile shall meet the requirements of subsection 737-01 Geotextiles except where modified herein. Geotextile shall be synthetic, non-woven and rot proof having no tears or defects which adversely alter its physical properties. Geotextile used shall conform to the following properties:

	ASTM Test	
Elongation	D4632	>=50%
Grab Strength	D4632	400 N
Tear Strength	D4533	250N
Puncture Strength	D4833	250N
Permittivity (min)	D4491	.21/sec
Apparent Opening Size (max)	D4751	.25 mm

- E. Edging: Edging for this work shall consist of forms as specified below, the adjacent pavement, or edging material. The forms for this work shall be 1" by 6" yellow pine with a minimum length of ten

**ITEM 623.10010011 STONE SCREENINGS SURFACE -NYCDPR**

feet (10') for tangents and curves, unless otherwise shown of the plans. All forms shall be straight, free from bends and warps at all times, and shall be cleaned thoroughly and oiled before pavement is placed against them. The forms shall rest firmly upon the thoroughly compacted sub-grade throughout their entire length, shall be joined neatly and tightly and staked securely to line and grade at least two hundred feet (200') in advance of the point of placing pavement by using at least three (3) bracing pins or stakes to each ten foot (10') length of side form. The form shall be properly located with tops flush to the top of the pavement surface and shall remain in place after pavement installation. The soil interface is to be firmly packed against the edging before pavement installation. Unless otherwise noted the forms shall remain in place after installation of the screenings.

**CONSTRUCTION DETAILS**

- A. Subgrade: The Contractor shall remove from the subgrade all debris, foreign material, and all other undesirable material designated by the Engineer. Any roots over 2 inches in diameter shall remain. All effort should be made to leave them intact and free of damage when installing the screenings. Before any pavement is placed upon the fine grade, the fine grade shall be prepared to line and grade and compacted where practicable with an approved riding roller of 1000 to 1500 pounds. Machine rolling shall not occur within 2 feet of a tree trunk. Within 2 feet of the tree trunk shall be hand tamped.

All hollows and depressions, which develop under rolling, shall be filled with acceptable material and shall again be rolled. This process of shaping, filling and rolling shall be repeated until no depressions develop. The fine grade shall be pitched to drain and shall not be muddy or otherwise unsatisfactory when the pavement is placed upon it. If the fine grade becomes rutted or displaced, due to any cause whatsoever, the Contractor shall regrade same without additional payment.

- B. Geotextile: After the ground has been prepared, the geotextile shall be rolled directly on the ground. All seams shall be overlapped approximately six (6) inches. No equipment, materials or machinery shall be placed on or be transported over exposed geotextile. Topsoil backfill or other clean fill shall then be carefully placed to prevent dislocation of the fabric. If the fabric is damaged during installation, the rupture shall be removed and the damaged area shall be covered with a patch of new fabric that will overlap the undamaged fabric approximately six (6) inches in all directions. All repaired fabric surface costs will be deemed part of the price bid.
- C. Base Course: Material for the subbase shall be evenly spread on prepared sub-grade in the position shown on the plans or as directed by the Engineer in one four (4") inch layer and rolled while wet with an approved riding roller 1000 to 1500 pounds (with vibratory unit) as directed by the Engineer.
- D. Top Course: The top course shall be installed in two (2) lifts. Each lift shall be approximately one and one-half (1 ½") inches in thickness for a total of two (2") inches after compaction.
1. Upon the well compacted subbase the top course first lift shall be spread and rolled. After spreading, rake level, smooth and grade screenings to desired finish as shown on the plans and to the direction of the Engineer. Then the second lift shall be spread.

**ITEM 623.10010011 STONE SCREENINGS SURFACE -NYCDPR**

2. Compact the material using an approved riding roller 1000 to 1500 pounds (do not use the vibratory unit) making 3 to 4 passes. Hand tamp within 2 feet of tree trunks taking care not to damage the roots.
3. With fog nozzle water lightly but thoroughly, pressure should not disturb leveled surface. When the water sheen has disappeared and the surface looks damp roll it again following the procedure above.
4. Upon correction of any discrepancies in the first lift the Contractor shall spread the second lift. Properly rolling as above. Rolling shall continue only until a smooth thoroughly compacted surface is achieved; with a minimum of three passes over the entire surface.
5. Any significant irregularities shall be smoothed out prior to final acceptance of work. Smoothing shall be accomplished by rewetting/saturating rough areas thoroughly, and then rolling the paving again with the appropriate roller.

**METHOD OF MEASUREMENT**

This work will be measured as the number of square yards of Stone Screening Surface satisfactorily furnished and installed.

**BASIS OF PAYMENT**

The unit price bid shall include the cost of all labor, materials, equipment, insurance and incidentals to furnish and install the stone screening surface, all in accordance with the contract drawings, specifications and the direction of the engineer.

Excavation shall be paid for separately under its own item.

*Payment will be made as follows:*

<b>Item:</b>	<b>Description:</b>	<b>Pay Unit:</b>
Item 623.10010011	Stone Screenings Surface - NYCDPR	SY

**ITEM 634.69000010 RODENT CONTROL SURVEY, BAITING AND MAINTENANCE**

**DESCRIPTION**

This work shall consist of conducting an initial rodent control survey 4 weeks prior to any construction efforts. This survey is designed to learn the extent and nature of the current rodent problem and shall take into account the following areas: The highway areas to be worked on and adjacent areas within the highway right-of-way which are found to harbor rodent infestations.

The survey shall be completed in one week and all existing rodent burrows including underground harborages such as sewers shall be baited with rodenticide once a week for four weeks.

After completion of initial rodent control survey and baiting, maintenance baiting shall be continued and regular check of bait boxes shall be done until all construction is completed. Monthly records shall be kept on the bait activity, inspections of the rodent activity, sanitation deficiencies and complaint calls.

**MATERIALS**

The materials chosen for the rodent bait shall have very low secondary toxicity and shall be used only after obtaining approval by the Engineer prior to actual use.

**CONSTRUCTION DETAILS**

The bait shall be placed in such a manner that it is not accessible to children, pets or nontarget animals. The personnel engaged in the work must satisfy licensing requirements as prescribed by the NYSDEC, Bureau of Pesticides. The Contractor shall submit a written report of initial rodent control survey to the Engineer.

**METHOD OF MEASUREMENT**

Payment for initial rodent control survey, baiting and maintenance will be made on a lump sum basis.

**BASIS OF PAYMENT**

The lump sum price bid for initial rodent control survey, baiting and maintenance shall include the cost of all labor, materials, and equipment necessary to complete the survey, baiting and maintenance work. The Contractor will be paid 50 percent of the lump sum price after initial survey and baiting is completed and monthly progress payments thereafter. Monthly progress payments will be made for the remaining 50 percent in proportion to the amount of contract work completed.

**ITEM 634.90030011 RODENT AND VERMIN CONTROL - INITIAL SURVEY. BAITING AND SANITATION**

**ITEM 634.90040011 RODENT AND VERMIN CONTROL - MAINTENANCE PROGRAM**

**DESCRIPTION**

- A. Under these items the Contractor shall perform and satisfy the rodent and vermin control (extermination) and site sanitation requirements within construction areas as designated by the engineer.
- B. The contractor shall maintain a cooperative dialogue with appropriate agencies and management representatives of neighborhood properties.
- C. The contractor shall perform the rodent and vermin control tasks described herein and also respond to other pest control needs when directed by the Engineer.

**MATERIALS**

- 1. Products
  - A. Furnish and use only pesticide formulations registered by the US Environmental Protection Agency (EPA) and New York State Department of Environmental Conservation (DEC) where appropriate, according to label directions and as acceptable to the Engineer.
  - B. Furnish and use devices and supplies (e.g., traps and bait stations) to facilitate the effectiveness and safety of the pest control program as appropriate and as acceptable to the Engineer.
- 2. Containers
  - A. Use heavy duty refuse containers with tight-fitting domed lids, with a spring loaded flap, for disposal of all garbage and trash associated with food. Maintain these containers so there are no opening that allow access by rodents or vermin.
  - B. If a dumpster is necessary for the temporary storage of garbage and trash associated with food, it shall not have openings that allow access by rodents or vermin. The dumpster shall have a drain plug if a drain is present, and the doors shall be maintained tightly closed.

**CONSTRUCTION DETAILS**

This work is to be performed prior to the start of construction and also throughout construction, so that Rodents (rats and mice) and Vermin (cockroaches, beetles, and other insects) do not disperse from or infest construction area or adjacent residential areas.

- 1. Submittals

**ITEM 634.90030011 RODENT AND VERMIN CONTROL - INITIAL SURVEY. BAITING  
AND SANITATION**

**ITEM 634.90040011 RODENT AND VERMIN CONTROL - MAINTENANCE PROGRAM**

Submit to the Engineer copies of pesticide applicators certification and licenses within ten (10) days of their issuance or renewal for the duration of this Contract.

- A. After performing the survey described under Construction Details Section 6 and before initiating baiting, submit to the Engineer a written description of proposed pest control procedures, indicating materials, quantities, methods, and time schedule. For all pesticide be used, submit a copy of pesticide manufacture's EPA - approved pesticide label with application directions.
  - B. Submits to the Engineer documentation of pest control activities and results as follows:
    - 1. Monthly - Submits data sheets with location of sites treated, methods and data application, amounts and types of bait used, pesticides dosage, number and types of traps set, survey and inspection results, sanitation condition complaints calls investigated, any problems that occurred and signature of applicator.
    - 2. Monthly — submit a map that shows bait station, manholes and catch basins where baits are being maintained.
  - C. At least 10 days prior to occupancy of Contract area, submit to the Engineer for review a written description of the sanitation procedures to be used.
2. Qualifications:
- A. The Contractor shall perform this work at all times in accordance with the following minimum standards and as acceptable to the Engineer.
  - B. The Contractor, key personnel and applicator shall have experience and/or training in vertebrate pest management and integrated pest management; have experience with various rodent and vermin control techniques, equipment, and strategies; and have knowledge of and experience with techniques to reduce non-targets hazards.
  - C. Applicators shall be licensed and certified by New York State DEC.
3. Coordination:
- A. The contractor shall not proceed with the construction designated on the Plans until written release is issued by the Engineers, after successful completion of the initial phase of rodent and vermin control.
  - B. Initiate the work before field mobilization begins for the construction designated on the Plans and within adequate timing to achieve control before environmental disruption and site work. Provide a

**ITEM 634.90030011 RODENT AND VERMIN CONTROL - INITIAL SURVEY. BAITING AND SANITATION**

**ITEM 634.90040011 RODENT AND VERMIN CONTROL - MAINTENANCE PROGRAM**

maintenance program until construction is completed and all equipment and materials are removed, as determined by the Engineer.

- C. Perform this work in such a manner and post warning signs such that toxicants or other control tools do not pose hazards to persons, domestic animals, or non-targets wildlife.
4. Permits:
- A. Obtain and maintain in coordination with the Engineer appropriate permit(s) from city or state agencies for pest control activities associated with this work.
  - B. Obtain and maintain in coordination with the Engineer all right of entry permits required for the performance of this work. This includes all utilities and private properties to which entrance is required.
5. Meetings:
- A. Before proceeding with the work, all pest control personnel shall attend a two hour orientation session held by the Engineer and discuss planned pest control methods and coordination.
6. Survey:
- A. Prior to baiting, survey the proposed construction area with representatives of adjacent buildings and record signs of rodent and vermin activity and sanitation conditions. Maintain survey in the manner described under Construction Details Section 10.
  - B. Thoroughly inspect construction areas and accessible or observable bordering area designated herein, and any nearby area designated by the Engineers, for rodent and vermin activity and sanitation deficiencies monthly throughout the duration of this contract and in accordance with the work schedule. Maintain inspection records in the manner described under Construction Details Section.
7. Application for Rodent and Vermin Control:
- A. Apply rodenticide and insecticide in strict accordance with EPA-approved label directions and NYSDEC and NYCDEP regulations. Maintain records of all bait placements in the manner described under Construction Details Section 10.

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**ITEM 634.90040011 RODENT AND VERMIN CONTROL - MAINTENANCE PROGRAM**

B. Where appropriate, use properly secured and tamper-resistant bait stations consistent with EPA regulations, remove manhole covers and ventilate manholes according to requirements of appropriate municipal agencies and utility companies. Use a police, or utilities details as appropriate. Coordinate the work with appropriate municipal agencies and utility companies. Individually number and property identify all bait stations.

C. Baited area must be posted with warning signs advising the public that bait has been placed in the area. The signs are to be large (18 inches X 22 inches) and clearly printed at all baits stations.

D. Surface Applications

1. Initial Surface Bating

Rid the construction area of all detectable rodents and vermin before construction begins, as acceptable to the Engineer. Bait all observable rodent burrows and areas of vermin infestation. Install and secure bait stations at regular and appropriate intervals and locations, and document rodent or vermin activity (burrows, dropping, bait consumed, dead rodents). Replenish bait and shift stations as necessary to ensure complete control of rodent and vermin populations. Bait edge and accessible bordering areas designated on the Plans as necessary to ensure that rodents and vermin shall not infest work areas.

2. Maintenance Surface Baiting

Establish a maintenance baiting program prior to the start of construction. This includes construction areas and accessible bordering areas designated herein, as acceptable to the Engineer. Check bait placements weekly. Use survey and baiting data to determine the most effective distribution of baiting locations and bait quantities. Shift and distribute bait and bait stations as appropriate to ensure continuous control.

E. Subsurface Applications

1. Initial Subsurface baiting

Apply appropriate baits to control rodent and vermin populations in manholes and catch basins, This shall involve suspending and securing bait using noncorrosive wire (e.g., 24 gauge plastic coated). Place bait in all accessible manholes and catch basins within the construction work area. In addition, bait an appropriate set of manholes and catch basins in the blocks bordering the work area as designated herein and as acceptable to the Engineer. Identify all baited manholes and catch basins with a standardized paint mark on the street and, a numbered tag to be attached to the suspending wire. Approximately seven days after completion of the first baiting, check all



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manhole and catch basin baits and record estimates on the amount of bait consumed. Replenish or increase the amount of bait applied according to the amount consumed and as acceptable to the Engineer. Repeat this process again approximately fourteen days later and until there is little or no bait consumed. Check manholes and catch basins weekly when they repeatedly have 100 percent of the bait consumed.

2. Maintenance Subsurface Baiting

Prior to the start the construction, establish a maintenance baiting program appropriate for the rodent or vermin infestation patterns identified during initial program appropriate for the rodent or vermin infestation patterns identified during initial subsurface baiting. This program shall ensure continued control and shall be performed acceptable to the Engineer. Maintain bait in manholes and catch basins that have rodent or vermin activity and those that had activity during initial baiting as necessary. Check each bait weekly or more often according to rodent or vermin activity levels and the recent history of bait consumption. Use utility maps and baiting data to determine the most effective distribution of baiting locations and bait quantities. Shift and distribute baiting locations as necessary to ensure adequate interception option points for controlling immigrating rodents or vermin.

F. Cleanup

1. Remove visible rodent carcasses and dispose of them daily consistent with the pesticide label directions and applicable codes, laws, and regulations.
2. Upon completion of any pest control operations at the site, remove remaining bait and dispose of it according to the pesticide label and applicable codes, laws, and regulations. Also remove all wires used for subsurface baiting and any bait stations or traps.

8. Sanitation:

Prior to construction and throughout the duration of this Contract, identify and document harborage and food sources available to rodents on the construction site and in observable bordering areas designated herein. This includes any littering or improper or insufficient use of trash receptacles in construction or structural deficiencies that violate City or State sanitation codes.

Maintain records of sanitation conditions in the manner described under Construction Details Section 10.

- A. Maintain Construction and laydown areas and their perimeters free of trash, garbage, weeds, debris and unnecessary or deteriorated hay and straw bales. Provide and enforce proper use of refuse containers to ensure that rodents and other pests are not harbored or attracted.

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- B. Designate specific locations as lunch and coffee break areas to prevent random disposal of garbage and trash. Keep those areas free of litter and garbage, and provide refuse containers. Keep refuse containers upright with their lids shut tight.
- C. Have all refuse containers (described in Materials Section 2), emptied daily to maintain site sanitation. If a dumpster is used (as described in Materials Section 2) empty it at least weekly and keep the area under and around it clean.
- D. Notify the Engineer within 24 hours whenever rodents (rats or mice) or signs of rodent activity (burrows or droppings) or vermin are observed in construction or laydown areas.

**9. Complaint Calls**

- A. During construction, respond to pest-related complaints from the adjacent neighborhood within 12 hours when directed by Engineer. Inspect the particular premises and adjacent areas for sanitation and structural deficiencies and also signs of historic and recent pest activity. Provide sanitation and structural maintenance information to the property owner or manager. Use pesticides or traps as necessary and appropriate to resolve the complaint when there is a relationship between the pest infestation and construction activities, or when directed by the Engineer.
- B. Maintain records of all complaints investigated, including location, contact person, inspection results, and actions taken. Document the relatedness of the pest infestation to construction activities.

**10. Record Keeping**

- A. Use standard data sheets provided or approved by the Engineer to maintain accurate records of date, placement, type, and amount of pesticides or other control tools (e.g... traps) applied. Similarly, maintain records of surveys, inspection, changes in pest activity, sanitation conditions, or when directed by the Engineer.

**METHOD OF MEASUREMENT**

The quantity to be paid for under the item Initial Survey, Baiting and Sanitation, will be on a lump sum basis for the initial work completed in accordance with the plans, specifications and direction of the Engineer.

The quantity to be paid for under the item, Maintenance Program, will be on a per month basis for the maintenance program completed in accordance with the plans, specifications and direction of the Engineer.

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Extermination work to be performed under Item 202.0lnnnn - Disposal of Buildings will be measured and paid for under Item 202.01nnnn - Disposal of Buildings.

**BASIS OF PAYMENT**

The lump sum price bid for the item, Initial Survey, Baiting and Sanitation, shall cover the cost of all labor, material and equipment necessary to complete the initial survey, planning, documentation, baiting and inspection of the construction and adjacent areas both surface and subsurface as well as sanitation inspection, documentation and corrective measures.

The unit price bid per month for the item, Maintenance Program, shall cover the cost of all labor, materials and equipment necessary to complete the weekly inspections, rebaiting, cleanup and rodent and vermin control documentation, garbage disposal cleanup and sanitation documentation as well as to receive, document and respond to complaints.

**ITEM 634.99010017 BUILDING CONDITION SURVEY**  
**ITEM 634.99020017 VIBRATION MONITORING (NONBLASTING)**

**DESCRIPTION**

- A. **Building Condition Survey.** This work shall consist of performing a building condition survey(s) and preparing permanent records as indicated in the contract documents prior to the commencement of work, after completion of work, and at locations and times during construction as directed by the Engineer.
- B. **Vibration Monitoring (Nonblasting).** This work shall consist of performing vibration monitoring of background and construction activities and preparing daily and summary report(s) of vibration readings.

**MATERIALS**

- A. **Building Condition Survey.** Provide general photography and video equipment, analog or digital, capable of superimposing the date and time on all images.
- B. **Vibration Monitoring (Nonblasting).** Provide a 3-component seismograph, capable of measuring particle velocity data in three mutually perpendicular directions. Annual factory calibration is required throughout the duration of the work.

**CONSTRUCTION DETAILS**

- A. **General.** The Contractor shall engage the services of a firm capable of furnishing a New York State licensed Professional Engineer to conduct a condition survey of the existing building(s) indicated in the contract documents in the Special Note entitled Vibration Criteria and an experienced vibration monitoring Consultant to measure peak particle velocities prior to, and during, construction operations. Submit as proof to the Deputy Chief Engineer Technical Services (DCETS) the experience and qualifications of the firm's personnel conducting the work.
- B. **Building Condition Survey.** Provide, as a minimum, the following information:
  - a. Photographic and videotape documentation of the interior and exterior condition of the building(s).
  - b. Extent and location of existing signs of building distress such as cracks, spalling, signs settlement, flooding, leaking, etc.

The Engineer may accompany the Contractor on each building condition survey for verification of the data recorded. Provide two copies of all documentation of each building condition survey to the Engineer.

- C. **Vibration Monitoring (Nonblasting).** The DCETS may waive the requirements of vibration monitoring based on the results of the building condition survey.

Perform continuous vibration monitoring during construction operations when adjacent construction activities make monitoring prudent. The Contractor shall perform contract work in a manner that will

**ITEM 634.99010017 BUILDING CONDITION SURVEY**

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limit construction vibration at the specified locations to within the limits set within the contract documents.

1. **Submittal of Written Vibration Monitoring Plan.** Prior to performing work adjacent to specified locations, a written Vibration Monitoring Plan prepared by the Contractor shall be submitted to the Engineer a minimum of 10 work days in advance for approval. The Engineer will send a copy of the Vibration Monitoring Plan to the Geotechnical Engineering Bureau, Engineering Geology Section, for review and written comment. The vibration monitoring plan may be returned to the Contractor for revision or clarification.

The vibration monitoring plan shall include the necessary information to outline the recording collection. The vibration monitoring plan shall include, but not be limited to, the following items:

**a. Contract Designations**

- The name of vibration monitoring specialist(s).
- The scheduled start date and length of construction operations which require vibration monitoring.
- The limits of vibration monitoring work, including sites on or off State-owned right-of-way.
- The location of all structures to be monitored in proximity to the construction operation.
- The location of any underground utilities in proximity to the construction operation.

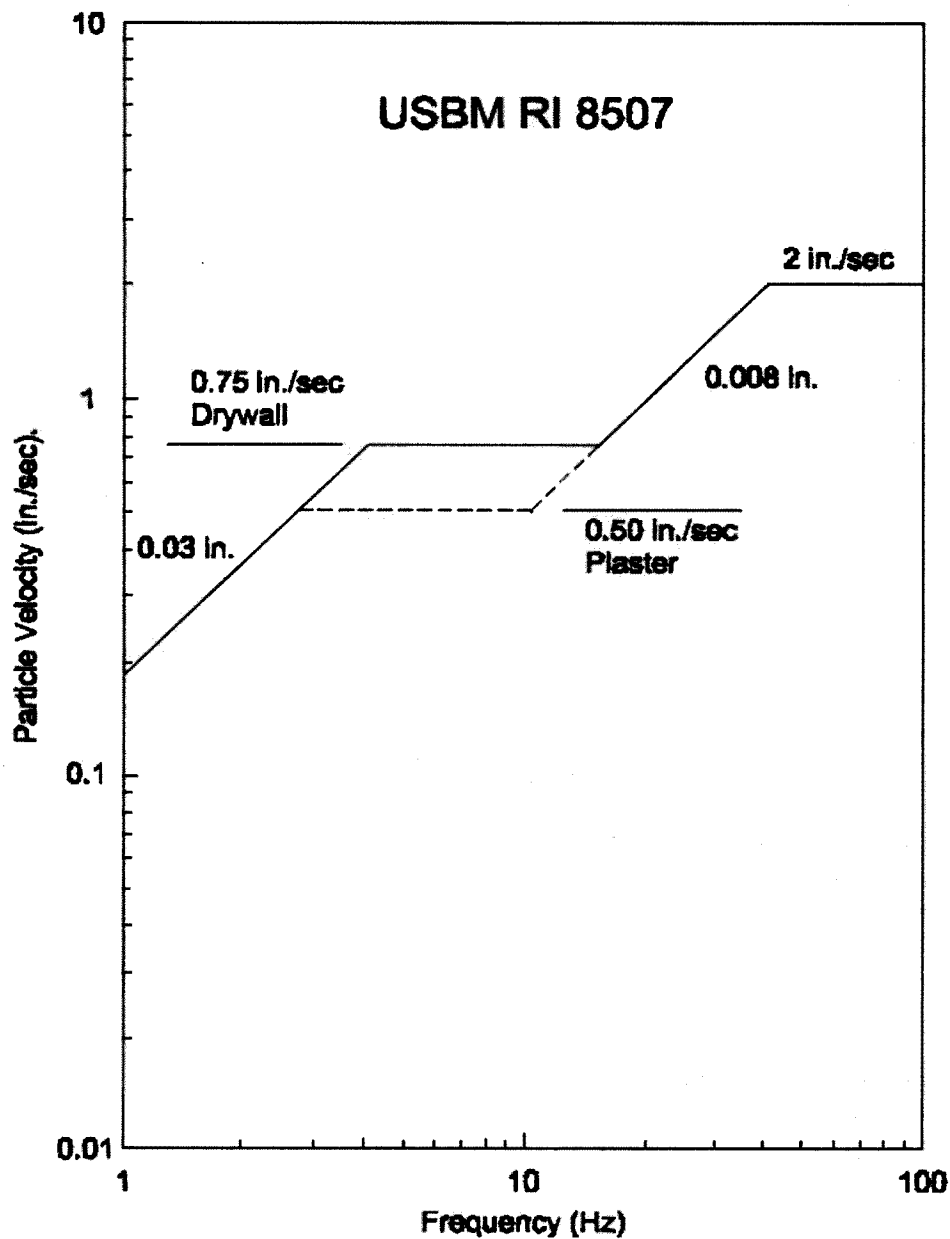
**b. Experience and Equipment**

- Submit proof and details, as references, of two projects in the past five years where the vibration monitoring consultant performing the work has satisfactorily monitored construction operations by recording maximum peak particle velocities (PPVs). Include contact information for each reference.
- Submit information on the required 3-component seismograph, capable of measuring particle velocity data in three mutually perpendicular directions, including: the manufacturer's name, model number, and documentation of factory calibration performed within the last 12 months.

**c. Methods and Procedures**

- The location of adjacent structures to be monitored and maximum allowable PPVs as indicated in the contract documents. If not otherwise specified, a maximum allowable PPV in accordance with the United States Bureau of Mines (USBM) Vibration Criteria (Figure 1) shall be observed at all structures.
- The location of seismograph(s) placements, as directed by the Contractor's Professional Engineer. Recording seismographs may be installed on selected structures.

- Appropriate details for anchoring the geophone(s).
- Driving Operations: pile tip vs. vibrations may be correlated through time of day. A record of the time of day at each depth interval, included on the pile driving records, would be required to correlate to a time-based readout of PPV).



**Figure 1—Safe Vibration Limit Recommendations for Residential Structures**

Figure 1-USBM Vibration Criteria (after Siskind et al, 1980)

**ITEM 642.03000005 CLEANING OF ROADWAY AND ADJACENT AREAS**

*The figure provides a "threshold damage" limit, defined as cosmetic damage (e.g., cracking) within the structure, categorized by both frequency ranges and particle velocity.*

2. **Measuring Vibrations.** The Contractor shall inform the Engineer immediately each time measured particle velocities exceed 85% of the allowable peak particle velocity. The Contractor shall make equipment or procedural modifications as required to avoid exceeding the allowable vibration intensity.

If the measured velocities exceed the maximum allowable PPVs, the Contractor shall stop operations immediately and revise equipment and procedures to reduce vibrations to allowable levels.

The Contractor shall be in communication with his monitoring firm's personnel during vibration monitoring at all locations to verify the data recorded.

The Contractor shall provide the Engineer with the results of daily vibration monitoring, one work day after the readings are taken. Upon completion of the construction operations for those locations requiring vibration monitoring, the daily submittals shall be synthesized into a final report.

If the seismographs show any indication of damage or vandalism, the seismographs shall be immediately recalibrated or replaced.

**METHOD OF MEASUREMENT**

- A. **Building Condition Survey.** This work will be measured on a lump sum basis.  
 B. **Vibration Monitoring (Nonblasting).** This work will be measured on a lump sum basis.

**BASIS OF PAYMENT**

The unit price bid for building condition survey(s) and vibration monitoring shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work.

**Vibration Monitoring (Nonblasting).** Progress payments will be made for this item paid proportionally in accordance with the amount of work completed, measured on a workday basis.

Payment will be made under:

<b>Item No.</b>	<b>Item</b>	<b>Pay Unit</b>
634.99010017	Building Condition Survey	Lump Sum
634.99020017	Vibration Monitoring (Nonblasting)	Lump Sum

**ITEM 645.35010010 INTERPRETIVE SIGN PANEL**

**DESCRIPTION:**

This work shall consist of furnishing and installing INTERPRETIVE SIGN PANELS in accordance with the contract documents and as directed by the Engineer.

**MATERIALS:**

Unless otherwise specified herein, all materials for this work shall meet the requirements of the NYSDOT Standard Specifications. All materials for this work shall be new stock, free from defects impairing strength, durability, and appearance.

**Sign Panel:**

Sign panels shall be exterior grade solid phenolic resin that is resistant to ultraviolet (UV) radiation deterioration and graffiti-proof. The size and thickness of the panels shall be as shown on the plans or as directed by the Engineer. The embedded graphic panels shall have digitally printed subsurface images fused into a single panel and under the effect of high temperature and pressure. All exterior signage shall be weather tight.

The panels shall be of a consistent thickness for all sizes. The finish of all panels is to be opaque and matte. The panels are to be rigid and flat. No warped areas or bowing will be accepted. All sign panels must be obtained from a single manufacturer.

The panels must be resistant to scratching, ink, paint, crayon, steam, acids, and aromatics. All ink, crayon, or paint markings should be readily removable with soap and water or solvents without harm. The panels shall also be resistant to burning by cigarettes.

Panels shall not break, separate, flake, or fray under impact from thrown objects such as rocks. Panels must be resistant to mold and fungus.

The Regional Landscape Architect will provide a digital file with images, fonts and artwork to the Engineer for sign panel manufacturing.

The sign panels shall be as follows or approved equal:

1. Model CD 224 by Fossil Graphics Corp.- 44 Jefryn Blvd., Deer Park, NY 11729 631-254-9200 or
2. Model POD -01 by Folia Industries, Inc. - 58 York Street, Huntington, QC, Canada, 888-264-6122 or
3. Model 24x36 DHPL ½" XT w/ Stainless Steel Posts by Izone Imaging - 2526 Charter Oak Drive, Suite 100, Temple, TX 76502 888-464-9663.

The New York State Department of Transportation shall retain full rights to all designs shown or specified. Designs may not be manufactured, reproduced, or exhibited without the written permission of the New York State Department of Transportation.



**ITEM 645.35010010 INTERPRETIVE SIGN PANEL**

**Mounting Hardware:**

All mounting hardware shall be stainless steel. The types and sizes shall be as indicated on the plans.

**CONSTRUCTION DETAILS:**

The Contractor shall verify the quantity, location, and details of each sign with the Engineer, in consultation with the Regional Landscape Architect or designee prior to ordering.

**Shop Drawings:**

The Contractor shall submit Shop Drawings for each proposed sign location for review and approval of materials and methods by the Engineer and the Regional Landscape Architect, or designee prior to ordering materials and commencing with fabrication.

**Samples:**

Samples of each type of material, finish, and color shall be submitted to the Engineer for approval prior to fabrication.

**Fabrication:**

All fabrication and installation shall be in accordance with the highest standards of the trade. All signs and components shall be complete and free from visual, structural and mechanical defects. All source materials shall be inspected upon arrival. The Engineer shall be notified immediately if any source material is inadequate or unacceptable for reproduction.

The State shall be notified of any discrepancies in the drawings, changes required in construction details, and/or field dimensions or special conditions prior to fabrication.

No fabrication or installation material or procedure shall be used that will in any way change the visual quality or in any manner have an adverse effect on existing materials and surfaces.

The Contractor shall arrange a meeting with the Engineer and/or other State Representatives at the site for confirmation of the final locations of sign elements.

All mechanically fastened signs shall incorporate provisions for attachment and removal as required using no visible screws or fasteners except where noted on the drawings.

**ITEM 645.35010010 INTERPRETIVE SIGN PANEL**

**Protection of Sign Panels:**

The sign panels shall be protected during transportation, handling, and storage. The panels shall be stored above ground on level, non-staining blocking and covered with weatherproof coverings to prevent staining by weather, dirt, mud, oils, and grease. All damaged materials shall be immediately removed from the job site.

**Installation:**

The sign panels shall be installed at the locations indicated in the plans. The panels shall be mounted such that it is true, plumb, and level in its required position.

**Cleaning:**

Upon completion of the installation work, each sign and post shall be thoroughly cleaned, removing all dirt mortar, and stains and left in a condition acceptable to the Engineer. Temporary protection shall be provided during the remainder of the construction to protect the finished work from damage. All damaged work shall be removed and replaced at no cost to the State prior to final acceptance.

**METHOD OF MEASUREMENTS:**

The quantity to be paid for shall be the number of square feet measured to the nearest 0.1 square foot of INTERPRETIVE SIGN PANELS satisfactorily furnished and installed in accordance with the plans.

**BASIS OF PAYMENT:**

The unit price bid shall include the cost of furnishing all labor, equipment and materials necessary to satisfactorily complete the work.

**ITEM 645.8100X039 PARK SIGN – NYCDPR****DESCRIPTION**

This work shall consist of furnishing and installing park signs in accordance with the contract documents and as directed by the Engineer.

**MATERIALS**

The following sections of the standard specifications shall apply:

Portland Cement Concrete – General	501
Signs	645-2
Galvanized Coatings and Repair Methods	719-01

The following ASTM specifications, standards and practices shall apply:

Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless	A53
Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products	A123
Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing	A501
Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings	A780
Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds	D1784
Standard Test Method for Rating Adhesion by Tape Test	D3359
Standard Specification for Polyvinyl Chloride (PVC), Polyolefin and Other Polymer-Coated Steel Chain Link Fence Fabric	F668
Standard Specification for Strength and Protective Coatings on Steel Industrial Fence Framework	F1043
Standard Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures	F108

The following standards also apply:

American Institute of Steel Construction Steel Construction Manual	AISC M027
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**A. Park Signs:** Park signs shall include sign panel, post, post cap, hardware and concrete footing (including reinforcement). Sign panels shall be ½" (0.5") thick, high pressure laminate (HPL) embedded graphic, double sided, and mounted to an all galvanized steel, powder coated post(s). Panel finish shall be matte unless specified otherwise in the contract documents.

**B. High-Pressure, Outdoor-Grade, Laminate Graphic Panel:** High-pressure, laminate- graphic, laminate graphic panel is composed of layers of phenolic resin impregnated kraft filler paper, surfaced by a layer of melamine graphic image substrate, imaged with UV resistant, pigment based process color inks, and translucent UV overlay, and a UV resistant melamine clear overlay, plus an

**ITEM 645.8100X039 PARK SIGN – NYCDPR**

optical coating that will resist no less than 99% of all sunlight and UV rays, as well as provide a graffiti resistant coating. In lamination grades, the back must be sanded to assure even bonding during the lamination process. For purposes of this specification, layers of material are to be assembled, and heat/pressure consolidated at approximately 1200 PSI at temperatures exceeding 275° Fahrenheit.

The panels must be resistant to scratching, ink, paint, steam, acids and aromatics. All ink or paint marking shall be readily removable with soap and water or solvents without harm. The panes shall also be resistant to burning by cigarettes.

All printing must be of the highest quality. Where multiple colors are needed, they shall be in tight register. The images must be consistent in color, opacity and have sharp, clean edges. The colors must be printed, not sprayed, roller coated or applied in some other fashion.

The embedment process requires that the printed paper be totally embedded in resin along with equal fiberglass loading front and back. This composite shall then be cured under pressure and temperature to yield an intricate panel with flat smooth surfaces on both sides. The composition shall consist of all white glass and clear resin so that when combined and cured the index of refraction shall assure total clarity of the embedded printed graphics.

Paper prints shall be a minimum of two (2) inches larger on all sides in order to provide a bleed trim after embedment. The cured panels shall be trimmed to the specified final sizes.

Artwork: Graphics shown on the contract drawings are schematic. All sign information, maps, signs, and logos will be on a computer disc in CS2 EPS format and made available to the Contractor upon registration of the contract. This is provided for use on the applicable sign for this project only. Any unauthorized use is prohibited. The manufacturer shall produce final maps from approved map sources as supplied.

The sign manufacturer shall produce the "camera ready" artwork and mechanical typesetting for sign for approval prior to production.

Inks: The inks used must, in addition, be able to withstand the embedment process and also be able to provide ten years of color integrity in outdoor exposure.

Ink color shall match the specified colors and be opaque and clean. The graphics shall be of multiple single colors on a colored background, and sometimes include 4-color printing.

- C. **Sign Posts:** Sign posts shall be fabricated from 1-1/2" SCH 80 Pipe. Construction shall conform to AISC "Steel Construction Manual", the latest edition, and shall be fabricated and installed in accordance with AISC "Code of Standard Practice for Steel Building and Bridges". Materials for pipe shall conform to the following ASTM specifications: A501 or A53, Type E or S, Grade B. Pipes shall have a one-quarter inch (1/4") wide routed channel through the edge of the steel pipe to receive the panels. Length of the channel shall depend on the length of the panel for each type of sign. Sign posts shall be hot dip galvanized inside and outside in accordance with ASTM F1083 then powder coated.

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**Surface Coatings:** Sign post(s) shall be powdercoated with either polyvinyl chloride (PVC) or TGIC-Polyester. All coated surfaces shall comply with the adhesion specifications listed in ASTM F1043. Color to be black (PMS), unless specified otherwise.

- D. **Post Cap:** Cap shall be model #1WKK6; a socket cap with body material PVC, Schedule DWV. Pipe Size 1-1/2" with a hub type connection. Cap shall comply with standards Cell Class 12454, ASTM D1784. The cap shall be supplied by:

Grainger Industrial Supply  
Brooklyn Branch 556  
815 3rd Ave.  
Brooklyn, NY 11232-1511  
718.965.1430  
www.grainger.com

Sustainable Supply  
  
11586 Colony Row  
Broomfield, CO 80021  
888.207.3005  
www.sustainablesupply.com

or equal as approved by the Engineer.

Cap color shall match green strip at the top of the panel, unless otherwise specified.

- E. **Hardware:** All mounting hardware, such as washers, nuts, and bolts, shall be stainless steel, Grade 316, assembled using prevailing torque-type elastic stop nuts. Anchor bolts shall be cast-in place, one-half inch (1/2") diameter bolts embedded six inches (6") in the concrete footing. Permanent strength thread locker to secure top nut to anchor thread shall be for fasteners 3/8" to 1 in. in diameter and applied to the components before assembly.

- F. **Concrete Footing:** Concrete footings shall be per §645-2.05 and of the dimensions and shape shown in the contract documents.

**CONSTRUCTION DETAILS**

The following sections of the standard specifications shall apply:

Trench, Culvert and Structure Excavation	206-3
Structural Concrete	555-3.03
Signs	645-3

- A. **Excavation:** Excavation for all concrete footings shall be per §206-3.
- B. **Footing:** The concrete footing shall be placed in accordance with §645-3.05, and as shown in the contract documents. All footings shall be placed directly on virgin soil or certified compacted fill. Sign footings may be augured and poured directly against the soil if the footings are formed. When forms are used, refer to §555-3.03.

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Excavations shall be dewatered to allow installation of footings in dry atmosphere. All exterior footings shall be placed a minimum of 4'-0" below final grade when bearing on soil. Refer to the contract documents for the depth of sign footing. The Contractor shall notify the Engineer when the bottom of the footing elevation is changed and obtain a revised footing design.

The Contractor shall carefully check the setting of the anchor bolts to their proper position prior to pouring of concrete for the footing. Refer to the contract drawings for the depth of embedment for anchor bolts.

- C. Posts, Panel Frame and Hardware: Galvanizing of all components shall provide an acceptable substrate for applied powdercoatings. No lacquer, urethane or other coatings that would prevent proper adhesion of powdercoating shall be applied to the framework.

The powdercoating shall be applied to the galvanized sign frame, post and associated hardware in such a manner that the coating will not peel off. Ensure surfaces to be coated are clean and dry and free of grease, dust, rust, etc. All coated parts shall first receive phosphating and chromating treatments to improve the adhesion of the surface coating.

The sign frame shall be coated with one of the two following types of powder coating.

TYPE A - Polyvinyl Chloride Powdercoating: PVC powdercoating shall be applied to the galvanized frame by the fluid bed method to a preheated base which has been cleaned and primed prior to submersion in vinyl, resulting in a firm bond between the PVC and the metal. PVC shall be applied to a film thickness of 10 to 15 mils, without voids, tears or cuts that reveal the substrate and shall thoroughly adhere to the metal without peeling when scratched with a pick device or knife blade point.

TYPE B – TGIC-Polyester Powdercoating: TGIC-Polyester Powder shall be applied to the galvanized frame in such a manner that the coating will not peel off. The TGIC-Polyester shall be applied at a film thickness of 3 to 6 mils by electrostatic spray process and bake finished per manufacturer's directions. The TGIC-Polyester shall be applied without voids, tears or cuts that reveal the substrate and shall thoroughly adhere to the metal without peeling when scratched with a pick device or knife blade point.

Field Test for PVC Powder Coating: As per ASTM F668, three sample sections of the PVC powder coated posts shall be tested for bonding of the powder coat to the metal. Each test will consist of making two cuts parallel to the axis of the pipe, through the coating, approx. one-sixteenth inch (1/16" or 1.6 mm) apart, at least one-half inch (1/2" or 12.7 mm) long. With a knife peel back a section of the coating between one-eighth inch (1/8" or 3.2 mm) and one-quarter inch (1/4" or 6.4 mm) long to produce a tab. Attempt to remove the one-sixteenth inch (1/16") strip of coating by pulling the tab. The posts shall be deemed acceptable if the coating breaks rather than separates from the metal on all three samples.

Laboratory Test For TGIC-Polyester Powder Coat: Upon request, a sample of the TGIC- Polyester powder coated frame shall be laboratory tested for bonding of the powder coating to the metal. Test shall be the Cross-Hatch test per ASTM D3359, Method B. Failure to satisfactorily pass this test shall be a basis for rejection.

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Touch-Up and Repair: For minor damage caused by installation, transportation, field welding and cutting of metal powder coated surfaces:

1. On welded and cut surfaces, apply organic zinc repair paint complying with ASTM A780, then repair powder coating per number 2 below. Galvanizing repair paint shall have 65 percent zinc by weight. Thickness of repair paint shall be not less than that required by ASTM A123.
  2. On damaged powder coated surfaces, touch-up finish in conformance with manufacturer's recommendations. Provide touch-up such that repair is not visible from a distance of 6 (six) feet.
- D. **Park Sign:** The park signs shall be installed in accordance with the contract documents and shop drawings. The signs shall be set plumb and true to line and grade.

The sign framing system has been designed to support the specific items depicted in the contract drawings when assembled in accordance with the contract documents. No additional dead or live loads may be placed on the sign structure. Design wind pressure on the signs is 22.5 psf. The system is designed to be self-supporting only when fully erected and all anchors are completely fastened. Install temporary supports and/or bracing as required during erection to maintain stability and to prevent distortion or damage to the system due to erection forces.

The location of the park signs shall be finalized in the field.

**E. Submittals:**

Shop Drawings: The Contractor shall submit:

- structural steel shop and erection drawings,
- final layout,
- all dimensions, and
- artwork

for approval prior to production.

Samples: A sample of typical sign panel graphics and framing material shall be supplied for approval. All appropriate color samples need to be approved before proceeding with production.

Warranty Against UV Fading / Delamination / Discoloration / Staining / Cracking / Shrinkage:

The manufacturers standard warranty for materials shall apply.

**METHOD OF MEASUREMENT**

The work will be measured as the number of each park sign furnished and installed.

**ITEM 645.8100X039 PARK SIGN – NYCDPR****BASIS OF PAYMENT**

The unit price bid for each park sign furnished and installed shall include all labor, materials, and equipment necessary to satisfactorily complete the work.

***Payment will be made under:***

<b>Item</b>	<b>Description</b>	<b>Unit</b>
645.81001039	Park Sign – Identification; ID-P – NYCDPR	EA
645.81002039	Park Sign – Feature; ID-F – NYCDPR	EA
645.81003039	Park Sign – Orientation; O-P - NYCDPR	EA
645.81004039	Park Sign – Directional; DIR – NYCDPR	EA



**ITEM 651.01000111 HANDS-FREE CALL BOX**

**DESCRIPTION**

Under this item, the Contractor shall furnish and install HANDS-FREE CALL BOXES with all casing, hardware and fittings as shown on the plans and as directed by the Engineer.

**MATERIALS**

**A. Call Box:**

Call Box shall be Hands-Free Call Box - Blue Light Tower as manufactured by CASE Systems, Inc., 5 Goddard, Irvine, CA 92618 at [www.casesystemsinc.com](http://www.casesystemsinc.com), Telephone (949) 988-7504. Call Box shall have the following minimum requirements:

**Call Box- Blue Light Tower**

Height: 10'-8" (with panel)

9'-0" (without panel)

Width: 10.5"

Depth: 8"

Weight: 182 lbs. with battery

**Solar Panel (Standard)**

Power (Peak): 20.0 W

Voltage (Peak): 16.5 V

Current (Peak): 1.22

Amps Weight: 13.0 lbs.

**Battery (Standard)**

Voltage: 12 V

Capacity: 17 Ah

**Foundation**

Depth: 38.25"

Width: 18" O.D.

**B. Testing & Acceptance Criteria**

The system shall be tested and demonstrated to perform as specified to the satisfaction of the Engineer.

**ITEM 651.01000111 HANDS-FREE CALL BOX**

**CONSTRUCTION DETAILS**

The system shall be installed in accordance with all instructions from the manufacturer. The Contractor shall coordinate with the Engineer, NYCDPR, Case Systems, Inc. and the NYPD prior to installation. The Contractor shall note that ownership and maintenance of the call boxes, after installation will be the NYPD. Programming of the call boxes will be completed by the

NYPD following installation and inspection by Case Systems, Inc personnel. Contact information is as follows:

NYPD: Detective Chris Decker, (646) 610-8855, NYCCALLBOXES@YAHOO.COM

**METHOD OF MEASUREMENT**

The quantity of HANDS-FREE CALL BOX – Blue Light Tower to be paid for under this item shall be the number of each unit installed in the final position, furnished, installed and functioning correctly in accordance with the plans, specifications, and directions of the Engineer.

**BASIS OF PAYMENT**

The price bid shall be per each Hands-Free Call Box – Blue Light Tower furnished and installed and shall include the cost of all labor, materials, equipment, mounting brackets and hardware, accessories, test and demonstration, inspection, fitting and incidental expenses necessary to complete the work, all in accordance with the plans and specifications to the satisfaction of the Engineer.

***Payment will be made under:***

<b>Item No.</b>	<b>Description</b>	<b>Pay Unit</b>
651.01000111	Hands-Free Call Box	Each

**ITEM 655.00XX0011 CAST FRAMES AND GRATES AND MANHOLE COVERS****DESCRIPTION**

This work shall consist of furnishing and installing Cast Frames and Grates and Manhole Covers, in accordance with the contract documents and as directed by the Engineer.

**MATERIALS**

All the provisions of §655-2.01 Castings shall apply, and in addition, the requirements shown on the following drawings shall also apply:

REGION 11 DESIGN GUIDE SHEET, DRAINAGE DETAILS, FRAMES, GRATES & STEPS REGION 11 DESIGN GUIDE SHEET, DRAINAGE DETAILS, FRAME WITH CURB BOX

N.Y.C. DEPARTMENT OF ENVIRONMENTAL PROTECTION, SEWER DESIGN STANDARDS,

- STANDARD FOR 27" DIAMETER CAST IRON FRAME AND MANHOLE COVER
- STANDARD FOR CAST IRON FRAME FOR CATCH BASINS (WITH CURB PIECE)
- STANDARD FOR CAST IRON GRATING, BACK PLATE, AND CURB PIECE FOR CATCH BASINS

N.Y.C. DEPARTMENT OF PARKS AND RECREATION, STANDARD DETAILS,

- DRAINAGE DETAILS – NO. 1
- PARKS LEAF MANHOLE AND CATCH BASIN COVERS

**CONSTRUCTION DETAILS**

All the provisions of §655-3 CONSTRUCTION DETAILS shall apply, and in addition, the requirements shown on the appropriate New York City drawings shall also apply.

**METHOD OF MEASUREMENT**

This work will be measured as the number of Cast Frames and Grates, or Cast Frames and Manhole Covers, satisfactorily furnished and installed.

**BASIS OF PAYMENT**

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work, including the cost of any field repair work for improperly fitting castings, or to render the frame and grate non-rocking.

***Payment will be made under:***

<b>Item No.</b>	<b>Item</b>	<b>Pay Unit</b>
655.00010011	Cast Frame for Catch Basin (Region 11)	Each
655.00020011	Cast Frame and Curb Box for Catch Basin (Region 11)	Each
655.00030011	Cast Grate for Catch Basin (Region 11)	Each
655.00040011	Cast Grate for Catch Basin (NYCDEP)	Each
655.00050011	Cast Frame for Manhole (NYCDEP)	Each
655.00060011	Cast Cover for Manhole (NYCDEP)	Each
655.00070011	Rectangular Cast Frame for Catch Basin (NYCDPR)	Each
655.00080011	Cast Grate for Catch Basin (NYCDPR)	Each
655.00090011	Cast Grate for Catch Basin (NYCDPR, ADA)	Each
655.00100011	Round Cast Frame for Manhole or Catch basin (NYCDPR)	Each
655.00110011	Cast Cover for Manhole (NYCDPR)	Each

**ITEM 655.08010010 CAST FRAME F1, WITHOUT CURB BOX AND WITH PARALLEL  
BAR GRATE 6PCB**

**ITEM 655.08020010 CAST FRAME F2, WITHOUT CURB BOX AND WITH  
PARALLEL BAR GRATE 7PCB**

**ITEM 655.08030010 CAST FRAME F3, WITHOUT CURB BOX AND WITH PARALLEL  
BAR GRATE 8PCB**

All conditions and requirements of Items 655.0801, 655.0802, and 655.0803 of the Standard Specifications shall apply except for the following modifications:

These shall be cast frame without curb box and with parallel grate as detailed on the plans.

**ITEM 660.97020111 STORM SEWER CLEANOUT ASSEMBLY**

**DESCRIPTION:**

This work shall consist of furnishing and installing a storm sewer cleanout system assembly at the location shown in the plans and/or as directed by the Engineer.

Storm sewer cleanout assembly shall include a concrete manhole as well as any bends, tees, crosses, reducers, caps, plugs, sleeves, or other pieces necessary to complete the installation. Where AWWA or ANSI specifications are noted, the most recent revision of that specification shall apply.

**MATERIALS:**

- A. Concrete Manhole shall conform to Section 604-2 "Materials" of the NYSDOT Standard Specifications. Dimensions shall be as shown on the Plans or as directed by the Engineer.
- B. Fittings shall conform to AWWA C110. All pipe and fittings shall be lined with cement-mortar on the inside and shall have a petroleum asphaltic coating on the outside. The cement-mortar lining shall conform to AWWA C104. The thickness of the lining shall be double the standard thickness required by this Specification.
- C. Pipe and Fitting Joints shall be rubber gasket joints, either the mechanical type or the push-on type, and shall conform to AWWA C111.
- D. PVC and Ductile Iron Pipe shall conform to Sections 706 "Concrete, Clay and Plastic Pipe" & 707 "Metal Pipe" of the NYSDOT Standard Specifications respectively.
- E. Bedding for Manhole: as shown on Contract Drawings

**CONSTRUCTION DETAILS:**

- A. General. All work shall be done in accordance with the Plans and the Specifications, and shall be satisfactory to the Engineer and the owner of the storm sewer system.

The Contractor shall make all necessary arrangements, obtain all permits, and pay all charges as required to satisfy the requirements and regulations of the local sewer department.

Before the start of work, the Contractor shall prepare and submit for approval to the Engineer, schedules of the proposed sequence of work and drawings or catalog cuts of the sewer pipes, details of the connection to the storm sewer utility service and appurtenances comprising the work.

The Contractor shall, as directed by the Engineer, provide temporary connection when the storm sewer service is interrupted and shall notify the user sufficiently in advance of this interruption.

**ITEM 660.97020111 STORM SEWER CLEANOUT ASSEMBLY**

- B. Excavation and Backfill. Installation details and payment lines shall be as shown on the NYSDOT Standard Sheet 203-04 entitled "Installation Details for Reinforced Concrete Pipes".
- C. Pipe Installations. Excess coating, blisters, etc., shall be removed from the bell and spigot end of each pipe, and the outside of the spigot and the inside of the bell shall be wire brushed and wiped clean and dry before the pipe is laid.

Every precaution shall be taken to prevent foreign material from entering the pipe while it is being placed. All pipe connections shall be made in the trench. No joining of pipes will be allowed before lowering and setting in the trench. Pipe shall be placed with bell ends facing in the direction of laying. The spigot end shall be centered in the bell and the pipe forced home and brought to correct line and grade.

**METHOD OF MEASUREMENT:**

- A. The quantity to be paid for will be the number of Storm Sewer Cleanouts that are installed in accordance with this specification and the contract documents.

**BASIS OF PAYMENT:**

The unit price bid shall include the cost of all labor and materials, including the concrete manhole, crushed stone bedding, frame and grates, manhole steps, pipe, fittings, testing, documentation, incidentals, insurance, and equipment necessary to satisfactorily complete the work.

*Payment will be made as follows:*

Item:	Description:	Pay Unit:
Item 660.97020111	Storm Sewer Cleanout Assembly	EA.

**ITEM 663.120X0039 PLUG AND GATE VALVES – NYCDPR**

**DESCRIPTION**

This work will consist of furnishing and installing PLUG AND GATE VALVES – NYCDPR including all plumbing work, connection to water service and irrigation in accordance with the contract documents and as directed by the Engineer.

**MATERIALS**

Plug Valves: Valves shall be of the cylindrical Plug Type with a closed bottom and a top seal, fully enclosed one-quarter (1/4) turn check, straight through flow way which is resistant to turbulation of the flow stream, one piece cast bronze cylindrical plug and “T” head that aligns with the ports to provide a visual check of valve position, inside screw ends with I.P. threads, and shall be:

1. Model #H-10283 as manufactured by Mueller Co., 500 West Eldorado St. PO Box 671, Decatur, IL 62525 (217) 423-4471
2. Model #72832 as manufactured by A.Y. McDonald Mfg. Co., PO Box 508, Dubuque, IA 52004-0508 (563) 583-7311
3. Model #B11 as manufactured by The Ford Meter Box Company, Inc., 775 Manchester Ave. Wabash, Indiana 46992-0443 (260) 563-3171

or approved equal.

Gate Valves: Valves shall be iron body, bronze mounted, inside screw, non-rising stem, screwed ends, bolted bonnet, modified with a two inch operating nut and shall be:

1. Model #W4 as manufactured by Walworth, Industria Lote 16 Sin Numero, Fracc. Industrial El Trebol De Tepotzotlan, Tepotzotlan Estado de Mexico C.P. 54610, 0155 5899 1700
2. Model #460 as manufactured by Crane Energy Flow Solutions, 2129 3rd Ave SE, Cullman, AL 35055 (256) 775-3800

or approved equal.

Operating Key for Plug and Gate Valves: An approved operating key of proper size for each valve shall be furnished by the Contractor, except that the Contractor need not furnish more than two (2) keys for each type of valve, regardless of the quantity of valves called for in the contract.

**SUBMITTALS:**

All submittals shall be as specified in the contract documents.

Shop Drawings/catalogue cuts: The Contractor shall submit shop drawings when required, in accordance with the requirements of the contract documents. Shop Drawings must be approved prior to manufacture. The Contractor shall submit catalogue cuts of valve materials.

**ITEM 663.120X0039 PLUG AND GATE VALVES – NYCDPR****CONSTRUCTION DETAILS**

**General:** Valves shall open in the direction specified in the plans or standard details. Valves shall be lowered into place, and shall not be rolled, dropped or allowed to fall into the trench or pit. Valves shall not be lifted or moved by the valve stem.

**Valve Installation:** Valves shall be installed where shown on the contract plans during the process of the pipe laying. Valves shall be laid with full, firm and even bearing. Bearing shall be provided by concrete blocks, or a minimum of 6" of well-compacted granular fill or crushed stone, or standard details as shown on the plans.

**METHOD OF MEASUREMENT**

The work will be measured as the number of Plug Valves and Gate Valves furnished and installed, complete with all plumbing work in accordance with the contract documents, and directions of the Engineer, and delivery of all materials.

**BASIS OF PAYMENT**

The unit price bid shall include the cost of all labor, materials, equipment and incidental expenses necessary to complete the work. Payment will be made under:

<b>Item No.</b>	<b>Item</b>	<b>Pay Unit</b>
663.12010039	Plug Valve – 1 NPS – NYCDPR	Each
663.12020039	Plug Valve – 1 1/4" NPS - NYCDPR	Each
663.12030039	Plug Valve – 1 1/2" NPS - NYCDPR	Each
663.12040039	Plug Valve – 2" NPS - NYCDPR	Each
663.12050039	Gate Valve – 2 1/2" NPS - NYCDPR	Each



**ITEM 663.13010039 GROUND HYDRANT - 1" DIA. NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION (NYCDPR)**

**DESCRIPTION:**

This work will consist of furnishing all labor, materials and equipment to install GROUND HYDRANT - 1" DIA. NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION (NYCDPR) including all plumbing work, connection to water service and irrigation in accordance with the contract documents, and directions of the Engineer.

**MATERIALS:**

Hydrant: Ground Hydrant with one inch (1") diameter inlet and hose connections shall be:

1. Model #Z-1360-BC-HD-RK-NB as manufactured by Zurn Industries Inc., Hydromechanics Division, Erie, PA.
2. Model #5951 as manufactured by J.R. Smith, Montgomery, AL;

or approved equal.

Brass Garden Hose Adaptor: (1" => 3/4") shall be:

1. Model # FM1076 as manufactured by George Taylor Brass and Bronze Works, Huntington, N.Y.
2. Model #4X072 as manufactured by Grainger, Lake Forest, IL;

or approved equal.

Broken Stone: Broken Stone shall consist solely of crushed ledge rock. Stone shall be as designated on the detail and shall be of the approved size and quality as per Section 304 Subbase Course.

Coupling Valve & Key: Quick coupling valve shall be solid red brass, bayonet type, with a one (1") inch inlet size and shall be:

1. Model #QB44LRC10 as manufactured by Buckner/Superior, Torrance, CA
2. Model #4NPDP2 as manufactured by Grainger, Lake Forest, IL;

or approved equal.

Corresponding coupling key, three quarter (3/4") inch inside diameter with a one (1") inch male thread and shall be:

**ITEM 663.13010039 GROUND HYDRANT - 1" DIA. NEW YORK CITY DEPARTMENT  
OF PARKS AND RECREATION (NYCDPR)**

1. Model #QB44K10, as manufactured by Buckner/Superior, Torrance, CA
2. Model #4NPDP1 as manufactured by Grainger, Lake Forest, IL;

or approved equal.

Hose Swivel Ell: Hose Swivel Ell shall be bronze with one (1") inch female thread for coupler and three quarter (3/4") inch male garden thread for hose. *Hose Swivel Ell must be manufactured by the same company as the Quick Coupling Valve & Key*, and shall be:

1. Model #HS-100 as manufactured by Buckner/Superior, Torrance, CA
2. Model #6XUW0 as manufactured by Grainger, Lake Forest, IL;

or approved equal.

Brass Garden Hose Adaptor: One (1") inch FPT, with a three-quarter (3/4") inch garden hose thread and shall be:

1. Model # FM1076 as manufactured by George Taylor Brass and Bronze Works, Huntington, N.Y.
2. Model #540B as manufactured by Damm, Manitowoc, WI;

or approved equal.

Siamese "Y" Connectors: Brass with shut-off valves at each connection. Size shall be three quarter (3/4") inch by three quarter (3/4") inch and shall be:

1. Model #4NDT2 as manufactured by Grainger, Lake Forest, IL
2. Model #261 as manufactured by Akron Brass Co., Columbus, OH;

or approved equal.

Nozzle: Nozzle shall be a solid brass nozzle to fit a three-quarter (3/4") inch hose and shall be:

1. Midsize #529 as manufactured by Gilmour, Chicago, IL
2. Model #6ANW1 as manufactured by Grainger, Lake Forest, IL;

or approved equal.

Brass Rose: Brass, four (4") inches in diameter with protective rubber guard and metric to inch hose thread converter and shall be:

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1. Model #540B, as manufactured by Damm Corporation, Manitowoc, Wisconsin
2. Model #V132 as manufactured by Haws Corporation, Sparks, NV;

or approved equal.

**Extension Handle:** Extruded aluminum tubing, thirty (30") inches long, with forged brass hose couplings and comfort hand grip and shall be:

1. Model #130-Gas manufactured by Damm Corporation, Manitowoc, Wisconsin
2. Model #MK8A as manufactured by Grainger, Lake Forest, IL;

or approved equal.

**Shut-Off Valve:** Shut-off valve shall be brass with Teflon® seals and a hard chrome plated ball and shall be:

1. Model #300, as manufactured by Damm Corporation, Manitowoc, Wisconsin
2. Model #4KHH03 as manufactured by Grainger, Lake Forest, IL;

or approved equal.

**Sprinkler Head with Base:** Sprinkler head shall be brass and stainless steel impulse type mounted on a die-cast zinc sled base, with powder coat finish, to fit three-quarter (3/4") inch hose. Sprinkler head and base shall be:

1. "Pulsating Sprinkler" Model # 50260 as manufactured by Nelson, Peoria, IL
2. Model #1HLX1 as manufactured by Grainger, Lake Forest, IL;

or approved equal.

**Hose:** Three-quarter (3/4") inch diameter in four (4) fifty (50') foot lengths, with a burst pressure of 500 psi minimum, equipped with approved connectors. Hose shall be:

1. "Flexogen" as manufactured by Gilmour, Chicago, IL
2. Model #CSNCCDCD3450 as manufactured by Grainger, Lake Forest, IL;

or approved equal.

**Hose Reel:** Hose Reel shall be constructed of one (1") inch diameter steel frame, with heavy-duty eight (8") inch wheels. Cart and reel shall have a baked enamel finish and be capable of holding two hundred (200') feet of 3/4" hose. Hose reel shall be:

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OF PARKS AND RECREATION (NYCDPR)**

1. Model #2380500 as manufactured by Ames-True Temper, Camp Hill, PA
2. Model #2LRK8 as manufactured by Grainger, Lake Forest, IL;

or approved equal.

Soaker Hose: Shall be porous pipe constructed primarily of recycled rubber tires. Hose shall weep along its entire length. Hose shall be five eighth (5/8") inch diameter in fifty (50') foot coupled lengths. All fittings shall be brass. Hose shall be:

1. Model #34050 as manufactured by Lawson Products, Flora, IN
2. Model #WP12050FM as manufactured by Water Works, Danbury, CT;

or approved equal.

Anchor Pins for Soaker Hose: Shall be five (5") inch x one (1") U-shaped 11-gauge stainless steel pins. Each package shall contain ten (10) pins.

Tests: Before any irrigation materials are accepted, they shall meet such tests as may be required to prove to the satisfaction of the Engineer that they are in proper working order and will do the work for which they are intended, in a satisfactory manner.

**SUBMITTALS:**

All submittals shall be as specified in the contract documents.

Shop Drawings/catalogue cuts: The Contractor shall submit shop drawings when required, in accordance with the requirements of the contract documents. Shop Drawings must be approved prior to manufacture. The Contractor shall submit catalog cuts of Irrigation materials.

Operating Keys: The Contractor shall furnish four (4)-operating keys for each hydrant installed under this item.

Parts Repair Kit: Contractor shall supply one (1) Parts Repair Kit for each Ground Hydrant installed under this item.

**ITEM 663.13010039 GROUND HYDRANT - 1" DIA. NEW YORK CITY DEPARTMENT  
OF PARKS AND RECREATION (NYCDPR)**

**CONSTRUCTION DETAILS:**

Ground Hydrant is encased for flush-with-grade installation, complete with bronze casing, polished nickel bronze box, all bronze interior parts, bronze seat and replaceable seat washer, non-turning operating rod with free-floating compression closure valve with one (1") inch connection. Polished nickel-bronze box shall have a scoriated heavy-duty cover with operating key lock and "Water" cast on cover. Depth of bury is two (2) feet minimum for both size Ground Hydrants. Four (4) keys are to be supplied to the Borough Foreman of Mechanics.

**METHOD OF MEASUREMENT:**

The work will be measured by the number of Ground Hydrants furnished and installed, complete with all plumbing work in accordance with the contract documents, and directions of the Engineer, and delivery of all irrigation materials.

**BASIS OF PAYMENT:**

The unit price bid shall include the cost of all labor, materials, equipment and incidental expenses necessary to complete the work. This includes all plumbing work and connections to water service within five (5') feet of the ground hydrant, all submittals in accordance with the contract documents, and to the satisfaction of the Engineer.

Plug Valve, Valve Box, Excavation and Average Concrete shall be paid for under their respective items.

**ITEM 670.75XX0011      GROUND WIRE AWG****DESCRIPTION:**

This work shall consist of furnishing and installing ground wires of the sizes shown and at the locations indicated on the plans or where directed by the Engineer.

**MATERIALS:**

The bare conductor and any other materials required, shall conform to the requirements of Section 723-75 of the Standard Specifications with the additional requirements that the conductors shall be of the size indicated in the plans and shall consist of 7 strands for cable size less than 1/0 and 19 strands for size 1/0 or greater of soft-drawn bare copper wire complying with ASTM B-3 and ASTM B-8. The ground wire shall be Underwriter's Laboratory approved.

**CONSTRUCTION DETAILS:**

The Contractor shall furnish, install and test the conductors in conformance to Section 670 of the Standard Specifications, except that only Method No. 2 for splicing shall be used.

**METHOD OF MEASUREMENT:**

Ground wire will be measured for payment by the number of linear feet of ground wire of each size actually installed in accordance with the plans and specifications or as directed by the Engineer.

**BASIS OF PAYMENT:**

The unit price bid per linear foot shall include the cost of furnishing all labor, materials and equipment to satisfactorily complete the work.

XX = Ground wire AWG gage as per the following table:

XX =	02	04	05	06	07	08	10	20	30	40
GAGE	2	4	6	8	10	12	1/0	2/0	3/0	4/0

*Payment will be made under:*

Item	Description	Unit
670.75020011	Ground Wire Number 2 AWG	LF

S - PAGES

## **SPECIAL PROVISIONS**

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### **NOTICE**

THE PAGES CONTAINED HEREIN (S-PAGES) ARE SPECIAL PROVISIONS THAT SHALL APPLY TO AND BECOME A PART OF THE CONTRACT.

(NO TEXT ON THIS PAGE)



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## **SPECIAL PROVISIONS**

### **1. SCOPE OF WORK**

This scope of work summarizes the activities which establish the requirements of this Project P- 1STARLP - "Bronx River Greenway: Starlight Park Phase II, Stage 2 – Bridge the Critical South Bronx Gap". The project location is between Westchester Avenue and East 174<sup>th</sup> Street.

The anticipated scope of work for this project includes, but is not limited to, the following:

#### **Construction as follows:**

- Installation of site access control and erosion and sediment features, and tree plantings as shown on plans.
- Removal of concrete structures, fences etc. clearing and grubbing, tree removal and excavation of site as shown on removal plans.
- Placement of proposed site retaining walls, wing walls, and pedestrian bridges and bridge abutments and fill operations to bring site to proposed grade.
- Installation of street lighting and plumbing equipment and conduits for site, and foundations and setting beds for all site features, including landscape walls, pavers, greenway path, benches, fences, railing, curbs, boulders, bike racks, signage, etc.
- Installation of all site features including landscape walls, pavers greenway path, benches, fences, railing, curbs, boulders, lighting, bike racks, etc.
- Installation of planting soil, site planting, etc. as directed in plans.
- Installation of Maintenance and Protection of Traffic (MPT) on East 172<sup>nd</sup> Street and Bronx River Avenue.
- Construction of ramps, and stairs on East 172<sup>nd</sup> Street
- Installation of new curb, sidewalk, guiderail, and fence on Bronx River Avenue and East 172<sup>nd</sup> Street as proposed on plans.
- Installation of all striping and signage for the greenway as shown on plans.
- Demobilize Maintenance and Protection of Traffic (MPT) equipment and any remaining E&S equipment.
- Clean-up work zone and open roadway to traffic.
- Complete punch-list items.

## **2. SITE HOUSEKEEPING**

This section describes the maintenance, protection and cleanup of the construction site. The Contractor is placed on notice that he shall be required to provide a safe and clean site throughout all phases of the work and during all of his operations, and further that the monitoring by the City of the Contractor's site maintenance, site protection and site clean up is considered for the purposes of the contract to be a project objective necessary to eliminate and/or mitigate public disruption and inconvenience, and to insure public health and safety. The Contractor shall therefore, at all times, conduct this operation in a manner which promotes a clean site and insures the convenience, safety and health of general users consisting of, but not limited to, the motorist, the pedestrian and the abutting property owners/tenants, as well as those of his own employees.

The provisions of this section are supplementary to the General Notes on the Contract Drawings relating to the protection and cleanup of the site, and the delivery and storage of materials at the site. Furthermore, any conditions pertaining to the maintenance, protection and cleanup of the construction site during the life of the contract which are addressed in the General Conditions and in the General Notes on the Contract Drawings, whether or not addressed under this Section, shall be deemed as having been addressed under this Section.

### **2.1 METHODS.**

#### **(A) GENERAL**

Work under this section shall start from the date of written notice to commence work or from the actual start of construction work at the site, whichever is later.

The Contractor shall provide the necessary personnel and equipment for adequate site maintenance within and adjacent to the contract site and all detour routes. He shall keep the work site and adjacent areas free and clean from all rubbish, debris, dust, idle construction equipment, discarded or leftover construction material and excavated material as outlined below. He shall also keep his haul routes outside the work site free and clean from all rubbish, debris and dust resulting from his operations.

The Contractor shall protect the public from damage to persons and property, which may result directly or indirectly from any construction operation. Such protection shall include, but not be limited to, providing proper street drainage and diversion of runoffs from private properties by such means as sandbagging or pumping, controlling soil erosion and/or soil migration.

All existing Fire Department Communication facilities shall be protected and provisions made for their continuous operation during construction. ALL ALARM BOXES AND POSTS MUST REMAIN ACCESSABLE. If, due to the Contractor's operations, Fire Alarm Service is inadvertently interrupted or Fire Communication System equipment or facilities are damaged, the Contractor will be held responsible and shall replace them at its own expense and in accordance with Fire Department requirements.

The Contractor shall be fully responsible for maintaining the completed work in an acceptable condition and protecting the completed work until relieved of such responsibility by acceptance of the contract or the completed items of work. Upon completion of each phase of work, or when ordered by the Engineer, and before acceptance and final payment are made, the Contractor shall remove all surplus and discarded material, rubbish, equipment, debris, and temporary structures from the site, and restore the working site

as directed by and to the satisfaction of the Engineer. All sewers, water mains, appurtenant structures, etc., shall be clean, free from debris and deposits.

#### (B) MAINTENANCE OF STREETS

Maintenance of streets and detours for vehicles shall include any repairs, as directed, including the filling of pre-existing and new potholes that may be necessary due to usage of streets by traffic. The repair shall be done using any Items 304.12, 402.127103 402.257903, 402,377903 or 407.0102 or as directed by engineer.

Also, the Contractor shall provide reasonably safe and convenient walkways and passageways for pedestrian traffic. Where required by the contract documents or when ordered by the Engineer, the Contractor shall construct and maintain, as directed, temporary asphalt walkways and ramps in accordance with the requirements of Subsection (G)(1), below, temporary wood plank or steel plate ramps or other configurations and materials, as may be required, and provide temporary pedestrian passageways (as per the NYC Department of Transportation's Standard Details of Construction, Standard Drawing H-1004, or as otherwise approved). He shall make the surface(s) of the pedestrian pathway(s) safe by eliminating ponding conditions, removing debris, sweeping, and wetting for dust control.

He shall maintain access to all abutting properties and pedestrian usage of sidewalk areas, both old and new, at all times, as directed by the Engineer and as shown on the Contract Drawings, except at "Sidewalk Closings" as designated or as directed.

The Contractor shall maintain the traveled way in such a condition and conduct operations in such a manner that snow and ice may be readily removed by others as and when necessary, and in such a manner that proper drainage is provided for the melting of snow in the banks resulting from normal plowing. However, the Contractor will not be responsible for snow or ice removal on the pavement or traveled way opened for public usage, except within the limits of the work zone(s) which may include, but is not limited to, stairway, promenades, esplanade areas, and sidewalk, including those fronting his office and the Engineer's field office all of which will be the responsibility of the Contractor.

#### (C) CONTROL OF DUST AND DEBRIS

The Contractor shall control dust and debris within the work area and the traveled way. He shall mitigate material spilling from trucks with the use of tarpaulin covers. All dust producing materials shall be wet down with water to the extent necessary to minimize dust. When public or local inconvenience is caused by dust occasioned by the sweeping and cleaning operations, the Contractor shall furnish and sprinkle water onto the affected surfaces during the sweeping and cleaning operations; however, the application of water shall not be used as a substitute for sweeping.

The Contractor shall perform all his work operations so that dust and debris is minimized within the work zone and mitigated before any of it leaves the work zone. Movement of dust and debris by wind, vehicles, persons, and the Contractor's operations shall be cause for sweeping and watering to be implemented immediately as directed by the Engineer. Also, should dust and dirt cover over all or portions of the work site it shall also be cause for immediate sweeping and watering by the Contractor.

All water furnished and applied under this section shall be free from harmful materials and shall be reasonably clean. Water shall be delivered in tanks or tank trucks, or by use of hydrants as permitted by the Department of Environmental Protection; however, no guarantee is made by the City as to the availability of suitable hydrants at the site. Where no suitable hydrants exist at the site, the Contractor shall be required to furnish water in tanks or tank trucks at no additional cost to the City.

(D) CLEANING OF SITE AND WASTE DISPOSAL

The Contractor shall be responsible for the removal of all rubbish and debris from the site of the project. He shall remove all piles of rubbish, debris, waste material and wood cratings as a result of his operations as they accumulate and when directed by the Engineer, and he shall cart them away from the site. He shall employ and keep engaged for this purpose an adequate force of laborers.

The Contractor shall at the beginning and end of each day be required to pickup all litter, trash and debris (excluding garbage and recycled material set to be picked up by scheduled private and/or public sanitation pickups) adjacent to and within the work zone on a daily basis, seven (7) days a week. He shall also during the day keep clean all roadways, sidewalks and other places in which the work is being performed or which are to be used in connection therewith.

The Contractor shall protect the site against unauthorized dumping of waste materials by patrolling the site and reporting violations to the Engineer, and should any unauthorized dumping occur, it shall be immediately remove by the Contractor to the Engineer's satisfaction.

While performing the above site cleaning work, the Contractor shall have available an approved mechanical street sweeper, with operator, suitable for removing dirt, debris, dust and loose stones; a sprinkler truck; adequate size pick-up truck with driver and laborers; an adequate supply of brooms, sixteen (16) inch wide or larger; and necessary hand tools and materials. The Contractor shall arrange to have necessary persons and equipment assigned to satisfy concerns relating to required clean up and restoration work. These persons with equipment shall be available to correct all matters requiring attention and shall be immediately available to respond to directives issued by the Engineer regarding specified problems of maintenance and cleaning.

The Contractor shall perform this work during the normal or extended working days. However, when required in accordance with the approved schedule or directed, the Contractor shall be prepared to extend this work beyond the normal work day, including weekends.

The Contractor shall provide trash receptacles for use by its construction staff. The trash shall be periodically removed and disposed of in compliance with local ordinances.

(E) DISPOSAL OF REMOVED MATERIALS

Except as may be otherwise specified herein or in the General Conditions, all materials which are permanently removed from the existing construction by the Contractor in accordance with the contract documents shall become his property and shall be disposed of by him away from the site.

In addition, it is the intent of NYCDDC to have all metals that are excavated and removed from the site, such as iron castings street hardware (i.e. manhole frames and cover, valve box covers, hydrants, etc.), ductile iron sewer pipe, steel and ductile iron water main pipe, trolley track rails, etc. (excluding steel reinforcement embedded in concrete), recycled provided that they are not deemed contaminated or hazardous. Therefore, the Contractor shall agree to make every effort possible to recycle said metals removed from the site. As a record of such compliance, the Contractor shall be required to keep an accurate log of said materials that are excavated and removed from the site and where and how said materials are either processed for reuse or disposed of away from the site. A copy of said log shall be submitted to the Engineer along with the invoice that he submits for payment each month. For a list of possible recycling and reuse outlets, the Contractor is referred to the "Directory of Recycling and Reuse Outlets for Reclaimed and Surplus Building Materials" published by NY WasteMatch, c/o Industrial & Technology Assistance Corp., 253 Broadway, Room 302, New York, N.Y. 10007, Tel. 212-442-5219, web site: "www.wastematch.org".

#### (F) REMOVAL OF SURPLUS PLANT AND EQUIPMENT

When ordered by the Engineer, the Contractor shall be required to promptly move from any location within the contract area all such items of plant and equipment determined to be no longer necessary for the effective prosecution of the work at such point, to other locations to be designated by the Engineer. If, in the opinion of the Engineer, plant and equipment are no longer required on any portion of the work, they shall be removed from the site when so ordered.

Where access to regularly scheduled private and/or public sanitation pickups, such as garbage and recycled materials, is blocked due to the Contractor's operations, the Contractor shall coordinate a schedule for collection of said materials, and/or he shall collect and transport garbage and recycled materials to collection points, as directed by the Engineer, for disposal by public or private collections, as appropriate.

Waste material shall not be dumped in or on any part of the City's property except by special permission of the Engineer. Concrete mixing trucks shall not be washed on City streets nor shall the waste material from the washing out of concrete mixing trucks be discharged to any street, public property, sewer manhole, catch basin, sewer, street gutter, or other above or below ground structures. All excavated materials falling on roadways and sidewalks shall be promptly swept up and removed.

#### (G) MAINTAINING ACCESS TO PROPERTIES AT CUT AND FILL LOCATIONS

When it is necessary to cut or fill at abutting properties in accordance with the contract requirements, the Contractor shall immediately commence construction to provide entrance to and egress from said properties as shown on the Contract Drawings and/or by one of the following methods, or modifications made thereto, when so ordered by the Engineer:

##### (1) "Asphalt Ramps"

Temporary access ramps shall be made hard and smooth surfaced with asphaltic material using any item 304.12, 402.127103 402.257903, 402.377903 or 407.0102 or as directed by engineer. The slope of temporary ramps at driveways and transition areas shall be approximately 25% [approximately a three (3") inch rise in one (1') foot] and be limited to a width of not more than eight (8') feet for single driveways and not more than twelve (12') feet for double driveways. The slope of temporary ramps at street hardware shall range between 1:10 and 1:6 (rise:run).

The slope of temporary pedestrian ramps shall be limited to a width of not less than four (4') nor more than five (5') feet and a slope of approximately 1:12.

(2) "As Specified"

By methods specified and detailed on the Contract Drawings.

(H) FINAL CLEARANCE OF SITE

Immediately after the completion of the contract and before final acceptance of the Work by the Department, the Contractor shall remove all surplus material, temporary structures, and debris resulting from his operations. Any painted markings (layout survey, etc.), excluding utility markings made under 16

NYCRR Part 753 (utility markings made under Part 753 shall not be removed), that have been placed by the Contractor and which are still remaining at the end of the contract shall be removed. Removal of painted markings shall be done using an approved power-washing method. The entire area shall be cleared and left in a neat presentable manner satisfactory to the Commissioner.

If as a result of the Contractor's operations, obstructions have fallen into a navigable waterway, they must be removed and the waterway and channel cleared; and the Contractor must obtain a release from the United States Coast Guard.

**2.2 STORAGE OF MATERIALS AND EQUIPMENT.** Roadways, sidewalks, gutters, crosswalks, and driveways shall at all times be kept clear and unobstructed unless a permit has been obtained from NYC Department of Transportation authorizing encumbrance of the roadway and/or sidewalk with equipment and/or material, provided it is in a manner which will not prevent the safe passage of vehicular traffic on such roadway designated to remain open, or the safe passage of pedestrians on such sidewalk and crosswalks, or block the normal drainage flow within the streets.

(A) DELIVERED MATERIALS NOT TO OBSTRUCT TRAFFIC

All materials delivered upon but not placed in the work shall be neatly piled so as not to obstruct public travel and shall be removed from the line of the work, at the direction of the Engineer, at no additional cost to the City. Unless the materials are so removed by the Contractor upon notice from the Engineer, the materials may be removed by the Commissioner and the expense thereof charged to the Contractor.

(B) PILING OF MATERIALS DELIVERED TO WORK SITE

Materials placed on the sidewalk or roadway shall be piled or stacked in a satisfactory and safe manner, enclosed with plastic construction drum (Item 619.07010001) or barricades (Item 619.04), and temporary chain link fence (Item 607.98010111 ), signs (Item -619.02970001-), plastic barrier fence (Item 607.41010010), and as directed by Engineer . Loose materials shall be covered with tarpaulins, suitably held down. Areas adjacent to stored materials shall be kept clean and watered as required and as directed by the Engineer. When such materials are removed, the sidewalks and roadways must be immediately swept clean by the Contractor and control of dust shall be mitigated in accordance with the requirements of Subsection (C), above.



Materials to be used in the work shall be compactly piled within limits to be designated by the Engineer. Sand and coarse aggregate may be piled within the roadway area. All old and such new material as has been approved, except sand and coarse aggregate, shall be neatly piled by the Contractor on the front half of the sidewalk, on planks or plates, if the same be flagged or otherwise improved.

Stored material shall be neatly stacked, placed at locations designated by the Engineer, and suitably enclosed or covered, protected, and wet down, as stipulated above. Streets under such construction material or equipment shall be shielded by wooden planking, skids or other protective covering approved by the Engineer. All pipes, fittings and appurtenances must be carefully stored, as approved by the Engineer, so as to prevent surface drainage, excavation material or other foreign matter from entering into the pipes, fittings and appurtenances.

Waste material and excavated material will under no conditions be permitted to remain on the work site or project streets, but must immediately be removed by the Contractor.

Provisions must be made by the Contractor to maintain curb-line drainage through storage areas. Stored materials shall not block the normal drainage flow or cause ponding conditions within streets, and shall not be placed within fifteen (15') feet of any fire hydrant (working or not), at bus stops, within tree root zone areas, or any other areas as set forth in the rules of the department the obstruction of which would impair the safety or convenience of the public (also see General Notes on Contract Drawings for any additional information). In a street upon which there is a surface railroad, construction materials or equipment shall not be placed nearer to the track than five (5) feet.

The Contractor shall not be permitted to store, stockpile or lay down any construction material within the boundaries of tree pits or critical root zone (CRZ) of existing trees. This material includes but is not limited to: lumber, fuel and oil containers, pipes, pipe fittings, barricades, hand tools, hoses, hardware, bricks, salvaged stone or granite, trash receptacles, or asphalt. Bulk material, equipment, or vehicles shall not be stockpiled or parked within the CRZ of any tree, or within ten (10') feet of the trunk (whichever is greater). This is done to minimize surface and subsurface root and soil compaction. This applies to all CRZs within or outside the project limit line. CRZ is calculated as  $(DBH \times 1.5 \text{ ft} = \text{Radius})$ . The radius calculation is equal to the critical root zone.

When no work is in progress, at least one half of the roadway must be left clear at all times.

The Contractor must remove any stored materials/equipment from the project street(s), as directed by the Engineer, within forty-eight (48) hours notice, at no additional cost to the City.

#### (C) ILLUMINATION OF BUILDING MATERIAL AND EQUIPMENT ON STREETS

Pursuant to Section 19-121 of the Administrative Code of the City of New York, The Contractor's attention is directed to the following:

1. Whenever a permit is issued for any construction material or equipment, the outer surface of such construction material or equipment shall be clearly marked with high intensity fluorescent paint, reflectors, or other marking which is capable of producing a warning glow when illuminated by the headlamps of a vehicle or other source of illumination.
2. Each approved storage area shall have at least one (1) sign identifying the Contractor's name, Project ID/Name, and the phone number of the Engineer's Field Office.
3. Violations. Any person who shall violate any of the above provisions, upon conviction thereof, shall be subject to the Criminal penalties pursuant to Section

19-149 of the Administrative Code of the City of New York or Civil penalties pursuant to Section 19-150 of the Administrative Code of the City of New York, or both such fines and imprisonment.

#### (D) STORAGE WITHIN THE PROJECT LIMITS

The Contractor will not be permitted to store construction equipment, construction material or excavated material within the project limits, except where specifically approved by the Engineer and only under the following conditions: The Contractor will not be permitted to allow the personal vehicles of his work force to be stored, parked, or to stand within the limits of any designated work area or in "no parking", "no standing", and/or other restricted zones; vehicles so stored, parked, or found standing may be ticketed and/or towed at the owner's expense. This restriction shall exclude Contractor owned vehicles transporting and/or storing specialized equipment and/or materials necessary for the execution of ongoing contract work, as approved by the Engineer. The Contractor shall be responsible for properly notifying his work force of these restrictions.

Payment for traffic control devices such as plastic barrels, barricades, pedestrian steel barricades, and warning signs used to enclose stored materials and equipment within the project limits will be paid for under the appropriately scheduled items; however, when no appropriately scheduled item or items are provided in the bid schedule, the cost of those items shall be deemed included under all scheduled items.

Materials stored on site shall be "Installed in Place" within two (2) consecutive working days of delivery to the job site, unless otherwise specified or permitted by the Engineer. (Construction supervisor will be required to maintain accurate records of all delivery dates.) No material shall be stored on site during construction shutdowns and/or stoppages scheduled to last more than five (5) consecutive working days.

#### (E) STORAGE OUTSIDE THE PROJECT LIMITS

The Contractor may be permitted to occupy off site street/roadway areas for material storage, subject to their availability and conformance with City wide permitting requirements for storage of materials; however, this neither implies nor guaranties the Contractor the availability and/or approval of any off site street/roadway areas.

Materials and/or equipment must be stored safely and neatly as specified above, with appropriate Maintenance and Protection of Traffic devices separating the storage area from vehicular traffic and pedestrians. Loose materials must be properly and neatly stored. .

No separate payment will be made for providing off site storage site(s) where approved or for providing any traffic control devices used for off site storage, the cost of which shall be deemed included under all scheduled items.

#### **NONCONFORMANCE.**

If the Contractor shall fail to comply, within twenty-four (24) hours after receiving written notice from the Engineer, with the requirements of this contract in the matter of providing facilities for vehicular and pedestrian traffic, including personnel to patrol the work site, the Contractor shall pay the City of New York until such notice has been complied with or rescinded, the sum of ONE THOUSAND FOUR HUNDRED DOLLARS (\$1,400.00) per calendar day during which there are deficiencies in compliance with the foregoing specification requirements, as liquidated damages, for such default.

If the Contractor fails to maintain and protect the site, or any portion thereof, adequately and safely for a period of three (3) or more consecutive hours, the Engineer may correct the adverse conditions by any means he deems appropriate, including, but not limited to, "outside services," and shall deduct the cost of the corrective work from any monies due the Contractor. The cost of this work shall be in addition to the nonpayment for site maintenance listed above.

However, where continued nonconformance with the requirements of this specification is noted by the Engineer, and prompt Contractor compliance is deemed not to be obtainable, all contract work may be stopped by direct order of the Engineer, regardless of whether corrections are made by the Engineer as stated in the paragraph above.

Furthermore, in addition to the remedies specified above, in the event the Contractor shall fail to comply, within three (3) consecutive hours after written notice from the Engineer, with the requirements of the contract and the specifications in the matter of providing facilities and services for the maintenance, protection and cleanup of the construction site, the Contractor shall pay to the City of New York, until such notice has been complied with or rescinded, the sum shown per calendar day in Schedule A, for each instance of such failure, as liquidated damages and not as a penalty, for such default.

Any money due the City of New York under this provision shall be deducted from the amounts due or to become due to the Contractor for work performed under the contract.

### **3. INSURANCE AND INCIDENTALS**

The price bid for any specifications needed to this contract shall include but not limited to the cost of furnishing, installation, labor, material, plant, equipment, insurance, transportation and any other incidentals necessary or required.

#### **4. SHOP, WORKING AND RECORD AS-BUILT DRAWINGS, COMPUTERIZED INDEXING AND MICROFILMING**

The preparation and furnishing of record as-built drawings; computerized indexing and microfilming of all shop, working and record as-built drawings; and a "shop and working drawing indexing sheet" will be performed by the Resident Engineering and Inspection Services (R.E.I.) or Construction Support Services (C.S.S.) under separate contracts. However, the Contractor shall coordinate with R.E.I. or C.S.S. and provide the R.E.I. and C.S.S. with all relevant information for the preparation of record as-built drawings, shop, and working drawing indexing sheet.

The Contractor shall prepare and furnish all shop and working drawings in accordance with this special provision and the following:

##### **1. Shop and Working Drawings**

###### **(A) GENERAL**

The Contractor shall promptly prepare and submit accurate and complete shop and working drawings for all parts of the work (including drawings showing the locations and details of steel reinforcement) as may be required for the proper performance of the work, and such other detail drawings, diagrams, photographs or bulletins as may be demanded by the Commissioner, in accordance with the plans and specifications. He shall submit these shop and working drawings as directed herein, and have them approved by the appropriate agency as specified, before any work covered by these drawings shall be undertaken. In addition, any electrical drawing which requires the approval of the Division of Traffic Operations shall have its stamp of approval affixed thereon before work covered by said drawings may be undertaken.

All shop drawings submitted for review and approval are to be sealed and signed by a licensed New York State Professional Engineer.

###### **(B) SCOPE**

Shop and working drawings shall accurately and distinctly represent the following:

1. All working and erection dimensions.
2. Arrangements and sectional views.
3. Necessary details, including complete information for making necessary connections with other work.
4. Kinds of materials and finishes.
5. All other information requested by the Commissioner, and as required under other headings of the Specifications.

###### **(C) STRUCTURAL STEEL SHOP DRAWINGS**

Structural steel shop drawings shall show all dimensions and details. They shall include erection, camber and match marking diagrams; lists of field rivets, bolts, nuts and other parts for structural steel, castings and metal parts. Shop drawings for castings shall be so complete that the parts

may be duplicated without reference to patterns, other drawings, or individual shop practice. Shipping statements for castings shall contain the actual weight of each member or piece.

#### (D) STEEL REINFORCEMENT SHOP DRAWINGS

Steel reinforcement shop drawings shall be made to a sufficiently large scale to show clearly the arrangement, splicing and spacing of the reinforcement rods. The drawings shall show the location of construction joints and shall give all pertinent dimensions of the concrete construction, to the end that the details and lengths of rods may be readily checked. They shall show the rods in their true position, tying in the reinforcement steel with the concrete and structural steel construction.

#### (E) ELECTRICAL SHOP AND WORKING DRAWINGS

Electrical shop and working drawings shall show complete wiring and installation details, and shall include the following:

1. Equipment details and ratings.
2. Conduit, cable and wiring runs and layouts.
3. Conduit, cable, cabinet and box support details.
4. Cabinet and box connection diagrams.
5. Complete wiring diagrams.
6. Any other items and details which the Engineer may require.

#### (F) SIZES OF SHOP AND WORKING DRAWINGS

All shop and working drawings shall be submitted on ANSI, F size, sheets 28" x 40", which includes a border of 2" on the left and a border of 1/2" on the other three sides. Sketches may be 8-1/2" x 11", including 1/4" border. Each drawing shall be dated, numbered and shall have an identifying title.

#### (G) SUBMISSION OF SHOP AND WORKING DRAWINGS

The Contractor shall submit the following number of prints:

1. Three (3) for each structural shop or working drawing, and for each mechanical drawing not having electrical work.
2. Five (5) for each electrical drawing and for each mechanical drawing having electrical work.

A satisfactory drawing will be stamped "Approved", be dated, and one copy thereof will be returned to the Contractor. Should the drawing be not approved, one copy of the drawing with the corrections and changes indicated thereon will be returned to the Contractor, and the Contractor shall independently check and make such corrections and changes, and again submit prints of the drawing for approval in the number specified above. Each submission of drawings shall be accompanied by a letter of transmittal in triplicate. If the drawings show variations from the contract requirements because of standard shop practice or other reasons, the Contractor

shall make specific mention of such variations in his letter of submittal and shall clearly indicate them on the shop drawings.

(H) UNCHECKED SUBMISSIONS TO BE RETURNED UNEXAMINED

Any submission not containing the signature of the checker as an indication that the drawing has been completely checked, will be deemed to be substantially incomplete, and will be returned marked "UNEXAMINED" by the Engineer.

(I) PRINTS OF APPROVED SHOP AND WORKING DRAWINGS

Upon approval of the drawings by the Engineer, the Contractor shall insert the date of final approval on the original tracing and shall promptly furnish prints of the approved drawings in accordance with the following schedule:

1. Five (5) for each structural shop or working drawing, and for each mechanical drawing not having electrical work.
2. Seven (7) for each electrical drawing and for each mechanical drawing having electrical work.

(J) CONTRACTOR'S RESPONSIBILITY

The approval of shop and working drawings will be as to general design only and such approval shall not relieve the Contractor of responsibility for the accuracy of such drawings nor the proper fitting of the work, and any incorrect work resulting therefrom shall be corrected by the Contractor without additional cost to the City.

(K) TRACINGS OF APPROVED SHOP AND WORKING DRAWINGS

Upon completion of the work, the Contractor shall check all approved tracings and make them conform to the work as executed, and shall furnish, for the records of the Department, a complete set of legible, corrected and approved original ink on cloth tracings of all shop and working drawings for the records of the Department.

The following types of legible black line photographic reproductions, made from intermediate negatives, will be accepted in lieu of the original ink on cloth tracings, subject to the conditions stated hereinafter:

1. Wash-off on 4 mil mylar base, with intermediate negative, or
2. Photo-Tracing, 4 mil mylar base, with intermediate negative, or
3. Approved equivalent process, on 4 mil mylar base, with intermediate negative,

provided that:

1. A sample reproduction is first made, and submitted to the Engineer together with the intermediate negative. After approval by the Engineer, all tracings submitted by the Contractor or his subcontractors shall be of this approved type.

2. All defects in the reproductions have been touched up or otherwise rectified by the Contractor or his subcontractors.
3. Each reproduction shall be submitted together with its intermediate negative. The intermediate negative will be returned to the Contractor if so requested.

The diazo/ammonia process is not acceptable for the reproduction of tracings, and is prohibited.

2. Specifications for the preparation of Record Drawings, Indices, Microfilm, and CD Media and latest revision thereof.

Copies of the Specifications are available at Records Management Unit, Department of Transportation, Division of Bridges, 2 Rector Street, 6th floor, New York, New York 10006.

3. A.N.S.I. (American National Standards Institute) standards latest edition, as listed below:

Y1.1-1972	Abbreviations for use of Drawings in Text (Where Applicable)
Y10.1-1972	Glossary of Terms Concerning Letter Symbols
Y14.1-1980	Drawing Sheet Size and Format
Y14.2M-1979	Line Conventions and Lettering

ANSI Standards maybe obtained from American National Standards Institute, 11 West 42<sup>nd</sup> Street, New York, New York 10036.

#### (G) AS-BUILT DRAWINGS.

As-built drawings will be made by the Engineer, with the exception of as-built drawing for Trunk Water Mains twenty-four (24") inches and above which shall be done by the Contractor as per the Specification for Trunk Main Work. The Contractor shall fully cooperate with the Engineer in the making of the as-built drawings to insure their accuracy. They shall contain data, measurements and information necessary to accurately show the work "as installed", special attention being given to data on concealed construction and on construction that differs from the plans in their present form.

The sizes and type of material for as-built drawing sheets shall be as specified for tracings of approved shop and working drawings.

The Engineer will provide one (1) additional set of all as-built tracings pertaining to sewers, water mains and their appurtenances installed in the work.

### **5. SUPERINTENDENT**

The Contractor shall have a fully competent superintendent in charge of the work at the site. Any careless or incompetent superintendent or employee shall be removed forthwith by the Contractor when notified to do so in writing by the Engineer or his designated representative.

### **6. NEW YORK CITY REQUIREMENTS TO PREVENT OVERLOADING OF CRANES DURING CONCRETE PLACEMENT OPERATIONS**

1. Each concrete bucket shall be labeled with a metal tag welded to the bucket which shall indicate the

capacity of the bucket in cubic yards and shall also give the combined weight of the bucket and concrete in pounds when the bucket is filled to capacity.

2. Buckets which, when filled to capacity, exceed the allowable load on the crane shall not be permitted to be used.
3. Any concrete placement operations which do not comply with the above requirements shall be issued stop work orders by the Engineer.

## **7. LEGAL LOADS**

It is the intent of these specifications to permit the use of the most efficient equipment that is consistent with conditions at the time of use. It is anticipated that seasonal or weather conditions combined with the nature of the terrain will often require the use of lighter and smaller equipment than might be used under optimum conditions.

Construction equipment or vehicles delivering materials or traveling to a project from outside the contract limits shall have all required permits issued through the established Department vehicle permit system in accordance with Section 385 of the Vehicle and Traffic Law of the State of New York. The permit will indicate the limits within which such equipment with over-legal gross weights or axle loadings may operate, the frequency of such passages and all other limiting factors.

Construction equipment or vehicles operating within the contract limits having gross weights or axle loadings within the legal limits stated in Section 385 of the Vehicle and Traffic Law may operate without specific approval.

Prior to the use of construction equipment or vehicles with over-legal gross weights or axle loadings on any structure, on any new pavement, existing pavement to remain, or on any resurfaced pavement within the project limits, the Contractor shall submit a written request to the Engineer. This request shall be accompanied, upon request, by an appropriate analysis performed by a New York State licensed Professional Engineer, including the pertinent equipment data, and shall demonstrate that the operations will not result in detrimental effects on any pavement or structure to be retained in the completed work.

Use of over-weight construction equipment or vehicles on portions of the project other than the listed above shall be subject to the approval of the Engineer. If it is determined that the use of construction equipment or vehicles is having a detrimental effect or will result in detrimental effects on the finished highway, the Engineer will notify the Contractor to modify or cease the operations.

This Special Provision does not apply to vehicles and construction equipment operating solely within the project limits and which do not operate on structures or pavement courses which are to be retained in the finished work.

All bidders are cautioned to reflect in the bid prices the cost of operating all affected hauling units and construction equipment within the legal load limitations, including the cost of operating presently owned equipment at less than full vehicle capacity as well as the costs involved in mobilizing, leasing, or purchasing new equipment.

No waivers shall be granted for off-site operations or deliveries. This may require the use of existing concrete, blacktop, or aggregate delivery units at less than optimum loading capacity. Such units may be used only to the extent that their partial loading is within the legal load limitations and conforms with other materials specifications requirements.



## 8. FALL PROTECTION REQUIREMENT

This project includes work that may require exposure of workers to risks associated with elevated work locations. By issuance of this Special Note, Contractors are on notice that the provision of fall protection for all workers, in full compliance with OSHA Part 1926, is mandatory on all Department contracts, including this contract. The Contractor is further placed on notice that the proposed procedures to meet the fall protection requirements must be identified in the Project Safety and Health Plan, as required under Section 107-05 of the New York State Department of Transportation, Standard Specifications.

The requirement of all applicable OSHA regulations notwithstanding, the minimum fall protection requirements on this project shall include the following:

1. All fall protection systems must meet the requirements of Part 1926, Subpart M.
2. For situations where lifelines are interrupted, double lanyards are necessary to ensure that the worker is continuously protected, from falling by attaching one lanyard ahead of the discontinuity prior to unhooking the trailing lanyard.
3. Ladders or stairways are required at all points of personnel access where there is a change in elevation of 19 inches (483 mm) or more, and no ramp, runaway, sloped embankment or personnel hoist is provided. These devices must meet the requirements of Part 1926 Subpart X. Climbing on forms, falsework, or the structure to gain access to work areas is expressly prohibited. However, it is not intended to prohibit the use of ladders for access to work areas, provided the operation is in compliance with OSHA Part 1926 Subpart X and other relevant requirements.
4. Where scaffolds are necessary to provide temporary access to work areas, they must be in compliance with Part 1926, Subpart L. Scaffolds must include a top rail, mid rail, and toe board in compliance with Subpart L. When required by 1926.451(g), personal fall arrest systems must meet the criteria of Part 1926 Subpart M. In addition, the provisions included in §1926.451(g) for fall protection during installation and dismantling of scaffold systems shall be observed on this project at all times.
5. Suspended scaffolds may be used for bridge painting or other purposes only if personnel lifts, scaffolds, or other means are not practical, and only if they meet the requirements of Part 1926, Subpart L. Specifically, the scaffold must be secured to the suspension cables at all times. All personnel working on a suspended scaffold must be provided fall protection in compliance with Part 1926, Subpart L. The anchorage for any fall protection system must be independent of the suspended scaffold.
6. Fall protection is required for open sides or ends of floors or bridge decks, and for openings in floors or bridge decks, as required in Part 1926 Subpart M. In no case shall a height of fall 6 ft (1829 mm) or greater from the side, end, or opening in a floor or bridge deck remain unprotected.
7. All workers in approved personnel aerial lifts must use a personal fall arrest system meeting the criteria of Part 1926 Subpart M, with lanyards attached to the boom or basket, as required by OSHA § 1926.556.
1. Because falls from structural members constitute a serious and clearly recognizable hazard, fall protection for all steel or concrete beams and other structural elements must be in place prior

to erection to provide protection for workers involved in the initial erection and in subsequent operations until the deck forms are in place. This fall protection shall consist of personal fall arrest systems, safety nets or other means meeting the requirements of Part 1926 Subpart M. During the initial connection structural elements, workers exposed to moving members shall be required to tie off only if they are not exposed to a greater risk from the moving members. Initial connection is defined as that period during placement or removal of structural members when the member is supported by a crane or other lifting device.

9. During the installation of bridge deck forms, either wood or stay-in-place corrugated metal (SIP), all workers must be protected from falls 6 ft (1829 mm) or greater in height by means of personal fall arrest system safety nets, guardrail systems, or other means meeting the requirements of Part 1926 Subpart M. If the Contractor can demonstrate that using one of conventional fall protection systems described in Subpart M would create greater safety hazard or is infeasible, i.e. impossible to construct or would prevent the performance of the required work, an alternate system may be used. The Contractor must develop and implement a written fall protection plan meeting the requirements of § 1926.502.
10. Instances in which it is impossible to provide fall protection for workers are rare. Where an individual worker must rig the fall protection system, and it cannot be accomplished from an aerial lift or by tying-off to existing structure, momentary exposure to a fall hazard may be unavoidable. Likewise, ironworkers making initial connections during steel erection or removal may at times not be able to tie off, or otherwise be protected because they need to remain mobile. It is essential that adequate planning of construction procedures minimize such occurrence of unprotected exposed to fall hazards. It is equally essential that the fall protection systems utilized actually enhance safety, rather than creating a secondary hazard.

The following list summarizes commonly encountered situations where protection is required, the heights at which fall protection must be provided, type of protection, and provides the OSHA reference for that requirement.

<b><u>Height requiring fall</u></b>		
<b><u>Situation</u></b>	<b><u>Protection</u></b>	<b><u>OSHA Reference</u></b>
Scaffold	10 ft. (3048 mm)	1926.451(a)(4)
Impalement Hazard	Any exposure	1926.20(a)(1); P.L. 91-596 §5(a)(1)
Bridge Decks, unprotected sides & edges	6 ft. (1829 mm)	1926.500(b)(1)
Bridge Decks, form installation	6 ft. (1829 mm)	1926.500(b)(2)
Formwork and Reinforcing Steel	6 ft. (1829mm)	1926.501(b)(5)
Precast Concrete Erection	6 ft. (1829 mm)	1926.501(b)(12)
Ramps, Walkways, and Runways	6 ft. (1829 mm)	1926.501(b)(7)

Aerial Lifts	All situations	1926.556(b)(2)(v); must satisfy criteria in 1926.502
Ladders	Varies	1926 Subpart X
Holes and Floor Openings	6 ft. (1829 mm)	1926.501(b)(4)
Dangerous Equipment	All situations	1926.501(b)(8)
Any situation with potential for tipping, impalement or other sever hazard	Any height  91-596 §5(a)(1)	1926.20(a)(1); 1926.28(a); P.L.

## 9. NIGHT WORK

When the Contractor is permitted to perform work at night, the work site shall be illuminated to an intensity required by applicable regulations, but not less than 50 lux (5 foot candles). In addition, for the purpose of inspection by the Engineer, the Contractor shall provide satisfactory lighting of an intensity of 500 lux (50 foot candles) over any area designated by the Engineer.

## 10. SURVEY AND STAKEOUT

The Contractor shall furnish lines and grades in accordance with the rest of the section specified below, except that survey controls established for this project may no longer exist and the Contractor shall be required to re-establish the survey control information using official Borough Survey Control Monuments and Bench Marks, where they exist. The Contractor shall check with Topographic Section of the Borough President's Office as to the reliability and accuracy of the data to be used for lines and grades.

Bench marks and control lines for the alignment and grades necessary for the prosecution of the work, where required, shall be established by a licensed Professional Land Surveyor retained by the Contractor. When necessary, the Land Surveyor shall obtain the required data from the Topographical Bureau of the Borough President's Office, in the respective borough in which the work is to be performed.

The Contractor shall furnish all stakes, range poles, range sights, scaffolding, platforms and staging required, and shall maintain the said controls.

The Contractor shall take cognizance of datum planes used in the work.

Unless otherwise noted, the elevations indicated on the plans refer to the respective Borough Datum specified below in feet above mean sea level as established by the U.S.C.&G. Survey at Sandy Hook, New Jersey is:

The Bronx	2.608	Manhattan	2.750	Brooklyn	2.560
Queens	2.725	Staten Island	3.192		

The Contractor shall provide the required survey parties and all necessary surveying equipment. He shall make all necessary computations and determine the alignment, elevation and position for all construction work from the controls furnished by the Engineer. The Contractor shall be responsible for the accuracy of all lines and grades established by him. The Engineer may check any or all of the survey work done by the Contractor, but such check shall not relieve the Contractor of his responsibility for the accuracy of his work.

The Contractor's survey parties shall take all preliminary measurements, prepare all sketches and obtain other field data, as required, when so ordered by the Engineer. Copies of survey notes and sketches shall be delivered to the Engineer, when required, and such copies shall be signed by, and bear the seal of a Professional Engineer or Land Surveyor licensed in the State of New York.

The Contractor must furnish the necessary forms, templates, lines, levels, stakes and other tools, implements and materials and employ competent and skillful men to correctly set out from the grade marks or stakes all details of the work, in full accordance with the plans, specifications, and directions of the Engineer.

Prior to commencement of work, preliminary transverse cross-sections extending from building line to building line shall be taken by the Contractor at longitudinal intervals not exceeding fifty (50') feet, at all grade breaks and at ends of streets midway into the intersecting street. Transverse cross-sections shall be plotted on approved cross-section paper to a scale of 1" = 1'- 0", vertical, and 1" = 10'- 0", horizontal. The Contractor shall plot to the same scale, a longitudinal profile for each curb line, showing the proposed curb line grades and existing elevations at not more than twenty-five (25') feet intervals and at intermediate points where unusual sidewalk conditions occur. He shall also prepare two (2) copies of curb and gutter grade sheets, one (1) for his use and one (1) for the Engineer's use.

All plotted material, curb and gutter grade sheets and supporting data shall be submitted to the Engineer, for approval, at least one week before work, which is dependent upon approval of the submitted material, is started.

The Contractor shall submit to the Engineer a certification from a Professional Engineer or Land Surveyor, licensed in the State of New York, that the lines and grades used in the completed work comply with the contract requirements or such revisions thereof which the Engineer shall direct or order.

#### (A) PRESERVATION OF MONUMENTS, POINTS, STAKES, ETC.

The Contractor shall safeguard all points, stakes, grade marks, monuments and bench marks, made or established on or near the line of the work, and he agrees to accept the responsibility for and to remedy at his cost any mistakes that may be caused by the unauthorized disturbance or removal of such points, stakes, grade marks, monuments and bench marks.

The Contractor shall not disturb or excavate within five (5') feet of any City monument which may be within the limits of or be disturbed by the work herein contemplated, or in any manner disturb the same, but shall cease work at such places until the said monument has been referenced and reset or otherwise disposed of, except upon special permit from the Commissioner in accordance with the City ordinance therefor. After permission is given to remove any monument, the Contractor shall take up and preserve such monument, and, if required, remove same to the nearest Bureau yard.

Any expense incurred in replacing any points, stakes or bench marks, which the Contractor, or any person working under him, may have failed to preserve, shall be charged to the Contractor and deducted from the amount to be paid him for doing the work under this contract.

A New York State licensed Professional Land Surveyor shall perform all work regarding the re-establishment of monuments.

#### (B) LICENSED SURVEYOR

All bench marks and control lines for the alignment and elevations necessary for the prosecution of the work shall be established by a Professional Land Surveyor, licensed in the State of New York, retained by the Contractor.

### **11. HOLIDAY EMBARGO**

A special construction embargo may be in effect on the Friday of the week preceding Thanksgiving Day week from 6:00 AM to 11:59 PM and again from the Monday of Thanksgiving Day week from 6:00 AM through January 2, at 11:59 PM. Street and sidewalk construction will be restricted from 6:00 AM to midnight during the upcoming holiday season on the roadways listed below\*. Any permits issued prior to the date of this notice for work in the areas listed for the Holiday Embargo which do not already have the Embargo Waiver traffic stipulation "410" are hereby voided for the period of Friday of the week preceding Thanksgiving Day week at 6:00 AM through January 2, at 11:59 PM. The permits will be in effect again on January 3. All permittees must comply with this embargo unless a special waiver is granted by OCMC. Waiver requests must be filed at least thirteen days before Thanksgiving Day, with the Permit Office by filing a "Request for Roadway/Sidewalk Permits During Embargo Periods" with supporting documentation. Work may only occur from 12:01 AM to 6:00 AM with the issuance of the necessary permits, no Embargo Waiver request is needed for work during these times. Waiver requests should only be submitted for critical reasons for a specific project. If a waiver is granted, you will be notified to apply for the approved permits. Necessary measures must be taken to ensure that all streets and sidewalks are in proper condition to allow for the expeditious and safe movement of vehicular and pedestrian traffic. OCMC will also impose similar restrictions on public utilities and private contractors for those roadways that are listed below by borough. Tool carts, cable reels, containers, and material stored on roadways must be removed during the embargo period. Utility cover openings are prohibited on roadways noted below between the hours of 6:00 AM and midnight unless the utility or contractor can prove an emergency exists.

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\* For the list of Holiday Constriction Embargo locations and maps for each Borough, see the following web site: [http:// www.nyc.gov/html/dot/html/motorist/trafalrt.shtml](http://www.nyc.gov/html/dot/html/motorist/trafalrt.shtml)

Temporary restoration of the streets and sidewalks and removal thereof, if required for the Holiday Embargo period, will be paid for under the appropriate scheduled items.

No extension of time due to the shutdown period will be granted to the Contractor for completion of the work.

Please note that this embargo only applies to NYCDOT construction permits.

## **12. NYC Department of parks And recreations (NYCDPR)**

All tree preservation work shall run concurrently with the removal and installation of all material for the length of the contract.

All trees (unless otherwise noted) are to be preserved and shall be marked by the Contractor, before the start of any demolition or construction work, with a ribbon which reads "DO NOT CUT" in bold black letters which can be read from a distance of 100 feet.

There shall be no stockpiling/storage of fill, removals or any construction materials within the Critical Root Zone (CRZ) (note: Critical Root Zone extends a minimum of 4' beyond the drip line of a tree) of any existing tree to be preserved at anytime before, during and after the construction period. This also includes parking any personal vehicles and equipment not directly associated with the days activities. If the Contractor violates this stipulation he shall, at his own expense, remediate any and all soil compaction utilizing the methodology approved by NYCDPR.

All protective tree barriers (see drawing on page A1-1b herein) shall be in place before any demolition or excavation takes place.

No roots greater than 2" in diameter shall be cut without permission from NYCDPR.

Trees that are removed shall have the resultant stump(s) ground down to a minimum of three (3) feet below exist grade.

Trees that are injured or damaged as the result of Contractor negligence (by accident or lack of adherence to this specification) and can be saved, as determined by the NYCDPR, shall be deep root fertilized and/or watered, at the Contractor's expense, using the following formulations and specifications:

### **Tree Fertilization Specifications**

<b><u>Material</u></b>	<b><u>Active Ingredients(%)</u></b>	<b><u>Form</u></b>	<b><u>Rate</u></b>
Dogget XL310	30-10-10	Powder	1 lb./100 gal.
Adams Earth Soil Amendment	0-2-4	Liquid	1 gal./100 gal.
Ectomycorrhizal Fungal Inoculant		Powder	16 oz/100 gal.
Bio-Pak		Powder	as per Manuf.

Depth of injection shall be 6"-8" deep and in a 2' x 2' on-center grid over entire Critical Root Zone. The amount of fertilizer per injection site shall be 1 qt. Work shall be performed by an approved company with a current ISA Certified Arborist on staff.

If a tree dies or certain death is imminent, as the result of Contractor negligence and as determined by Engineer, in consultation with the NYCDPR, the Contractor will be back charged the value of the tree or trees. NYCDPR will determine the value of the casualty by utilizing the formula below:

**Trunk Formula** - This method is used when the plant is too large to be replaced. This value uses the cost of replacing the largest locally available plant and adjusting it for the size difference, the condition and location of the appraised tree.

$$\text{Appraised Value} = \text{Basic Value} \times \text{Condition} \times \text{Location}$$

$$\text{Basic Value} = \text{Replacement Cost} + (\text{Basic Price} \times [\text{TA(A)} - \text{TA(R)}] \times \text{Species})$$

**Condition** = A rating of the tree's structure and health and based on 100 percent

**Location** = the average for the tree's Site, Contribution and Placement and based on 100 percent

**Replacement Cost** = the cost to purchase and install the largest locally available and transportable tree in the area.

**Basic Price** = the cost per square inch of trunk area of a replacement tree measured at the height prescribed by the American Nursery Standards.

**TA(A)** = **Trunk Area** at 4.5 feet above the ground of the appraised tree

**TA(R)** = **Trunk Area** at 6 inches or 12 inches above the ground of the replacement tree

**Species** = the rating for a particular species and based on 100 percent

### **13. DISPOSAL OF EXCESS EXCAVATED MATERIAL BY THE CONTRACTOR AT A SITE DESIGNATED BY THE CONTRACTOR**

Excess material excavated by the Contractor becomes the Contractor's property and is to be properly disposed of at the Contractor's expense.

### **14. CONTRACT ITEMS THAT INCLUDE BACKFILL AS A PART OF THEIR WORK**

The following shall pertain to all contract items that have backfill as a part of their work: Backfilling shall comply with Subsection (A) through (G) and no additional payment will be made for any Highway or Street Lighting work item requiring Contractor to furnish additional fill material to meet these requirements when backfilling.

#### **(A) GENERAL**

All material for fill or backfill shall have an optimum moisture content as determined by the Standard

Proctor Test conducted in accordance with AASHTO T-99 Method.

All material for fill or backfill shall be free from frost at the time of placement.

Miscellaneous fill material removed from trenches and excavations shall not be considered as acceptable backfill material unless found to be in compliance with these specifications and approved in writing by the Engineer. The project site subsurface conditions may consist partially of variable thickness layers of unsuitable material. This material may not be considered to be acceptable backfill material as described herein, or as determined by the Engineer.

**(B) FILL AND BACKFILL**

Filling and Backfilling materials whose composition is inorganic soil, blasted or broken rock and similar materials of natural or man-made origin, including mixtures thereof, shall be considered suitable materials provided it is free of shale or other soft, poor durability particles.

Glass or Recycled Porcelain Aggregate (RPA) from recycling facilities that meets the requirements of **Subsection (E)** for Glass and **Subsection (F)** for RPA shall be considered suitable material for mixing with fill provided the Contractor maintains the gradations specified herein. However, glass shall not be placed in contact with synthetic liners, geogrids, geotextiles or other geosynthetics.

Glass and/or RPA incorporated into fill shall be thoroughly mixed with other suitable material so that glass, RPA or combination of both constitutes no more than 30 percent by volume anywhere in the fill as visually determined by the Engineer.

The material within the top one (1') feet of subgrade shall have the following gradation:

<u>Sieve Size</u>	<u>Passing Percent By Weight</u>
4 Inch	100
1/4 Inch	30 to 75
No. 40	5 to 40
No. 200	0 to 10

Stone in filling shall not exceed the following maximum dimensions:

More than thirteen (13') feet below grade	Unlimited
More than four (4') feet and less than thirteen (13') feet below grade	2'-0"
More than one (1') feet and less than four (4') feet below grade	1'-0"
Within one (1') feet of grade	0'-4"
Within two (2') feet of structures	1'-0"
In embankment slopes beyond street lines	1'-0"
Within five (5') feet of the center line of existing or proposed sewers, water mains and their appurtenances	1'-0"

The Contractor may use, as fill, that portion of the excavated material conforming to these specifications. However, all materials used for fill shall be free from organic material and other unsuitable material. The only exception would be the allowable contamination of recycled glass.

Excavated materials not complying with the above specifications shall be considered unsuitable for fill and shall be removed from the job site to an approved dump.

**(C) SELECT GRANULAR FILL**

Select Granular Fill shall be a natural sand, well graded crushed stone or approved clean earth of low silt and clay content, free from bricks, blocks, excavated pavement materials and debris, stumps, roots and other organic matter, as well as ashes, oil and other perishable or foreign material. All materials furnished under this item shall have no particles greater than 1/4 inch in maximum dimension for use in trenches and shall have the following gradation:



<u>Sieve Size</u>	<u>Percent Passing by Weight</u>
1/4"	100
No. 40	0-50
No. 200	0-8

**(D) PROCESSED FILL**

If approved in writing by the Engineer, excavated material determined to be unsuitable for fill may be processed (i.e. screened and/or crushed) to produce select granular fill material or fill material. Such processed materials for backfill must be in compliance with the material specifications herein for either Select Granular Fill or for Fill, as required. No separate or additional payment will be made for the cost of all labor, materials, plant, equipment, samples, tests and insurance necessary or required to perform this processing work. Payment for the costs of all labor, material, equipment and insurance necessary and required to furnish and deliver, and to place, compact, sample and test these processed acceptable backfill materials shall be in accordance with **Subsection (G)**. (Excavated material that is hand groomed and/or groomed with the use of excavating equipment of bricks, blocks, pavement materials, debris, stumps, roots, stones, boulders, timber, wood, etc., so as to render the excavated material acceptable for backfill, whether ordered by the Engineer or at the Contractor's own discretion, shall not be considered as processed material but shall be considered as approved excavated suitable material. No separate or additional payment will be made for the use of this groomed excavated material as backfill, the cost of all labor and material shall be deemed included in the prices bid for all contract items of work.)

**(E) GLASS**

Glass shall be crushed to a maximum particle size of 3/8 inch.

Glass may contain up to a maximum of five (5%) percent by volume of china, ceramics, plate glass products, paper, plastics or other deleterious materials. The material shall be subject to visual inspection by the Engineer or his representative, and may be rejected based on this inspection. In case of rejection, the inspection must be documented in writing by the Engineer who shall indicate the basis of rejection.

**(F) RECYCLED PORCELAIN AGGREGATE (RPA)**

All porcelain to be used as RPA shall be crushed by a New York City Department of Environmental Protection (NYCDEP) approved recycling facility to a maximum particle size of 3/8 inch and graded to meet the gradation specified above for use in either fill, backfill or select fill, as may be required. RPA from any other source will not be permitted. The NYCDEP approved recycling facility will also certify that the RPA being furnished is free from organic material and other unsuitable material.

**(G) DEFICIENCY IN FILL MATERIAL**

Unless otherwise shown on the plan, trenches shall be backfilled to the height of the surface of the ground as it existed at the commencement of the work. Should there be a deficiency of suitable material for that purpose, the Contractor shall furnish and place such additional material as may be required. Payment for the cost of all labor, material, and equipment necessary and required to furnish and deliver these acceptable backfill materials, where a deficiency of acceptable backfill material occurs, shall be made as follows:

(1) For providing acceptable select granular fill (whether natural or processed) to satisfy the requirements of below.

Select Granular Fill. The Contractor shall use Select Granular Fill for backfilling trenches and excavations within any area less than two (2') feet wide in its least dimension (i.e. space between face of trench and outside face of cavities behind sheeting, filling of voids left by removal of boulders beyond the limits of sheeted trench, etc.) and within eighteen (18") inches around all underground facilities (i.e. conduit, cable, etc.).

Select granular fill shall be deposited and spread by approved methods in uniform horizontal layers not exceeding twelve (12") inches in depth and each layer shall be thoroughly compacted to the satisfaction of the Engineer, before a successive layer is deposited. A minimum of 95 percent of Standard Proctor Maximum Density will be required after compaction.

The cost of providing Select Granular Fill as specified hereinabove, together with all labor, materials, plant, equipment, samples, and tests necessary and required for delivering, placing, compacting and testing of Select Granular Fill, shall be deemed included in the prices bid for all respective items of work. No separate or additional payment shall be made for this work unless otherwise specified.

Payment shall be deemed included in the prices bid for all contract items of work. No separate payment will be made for this work.

(2) For providing acceptable clean fill (whether natural or processed) ordered by the Engineer, payment shall be deemed included in the prices bid for all contract items of work. No separate payment will be made for this work.

## **15. SCHEDULING PRESENTATION**

The Contractor shall submit construction schedule in the form of a bar chart using "Microsoft Project 2010" or latest version, or in an approved equivalent program which shall be directly and fully translatable into Microsoft Project 2010 format, within seven days of the initial Pre-Construction Meeting. Each bar in the chart shall show dates the Contractor plans to start and complete each construction activity after the initial Pre-Construction Meeting. Bar chart shall show the order and interdependence of all activities necessary to complete the work and the sequence in which activity is to be accomplished as planned by the Contractor and in accordance with all subcontractors or suppliers whose work shall be shown on the bar chart. The Contractor shall submit the bar chart for the Engineer's review and revise it, if required, until approved by the Engineer.

The Contractor shall submit weekly progress status update reports or as otherwise directed by the Engineer. The Contractor shall submit updated bar chart every month. The revised bar chart shall be made in the same form and detail as the original submittal and shall be accompanied by an explanation of the reasons for the revisions all of which shall be subject to approval by the Engineer.

## **16. ACCELERATED PROJECT SCHEDULE AND COMBINATION OF STAGES**

Contractor shall plan and/or stage his/her work schedule using all hours/days available. Contractor is advised that all applicable unit prices shall include, for the purpose of this contract, all overtime costs,

premium time costs, shift differentials required to complete construction within the specified "Time(s) of Completion" stipulated in this contract.

Contractor shall be permitted to accelerate this project, to combine stages and/or work sequences. Any such changes shall be shown in the construction schedule, to be furnished in accordance with the General Provisions of the Standard Specifications and the above "Scheduling Presentation" Article, and shall be submitted for approval of the Engineer.

#### **17. NO EXTENSION OF TIME FOR WINTER SHUT-DOWN**

Where the Contractor's approved work schedule for installing sidewalk, curb, roadway base and/or pavement falls within the winter period of December 1st through April 1st, the Contractor will not be granted an extension of time for completion of this contract due to the winter shutdown period, except as otherwise provided in Schedule A.

#### **18. AMTRAK REQUIREMENTS**

The Contractor is notified that the Amtrak Requirements attached to the end of these Special Provisions as Appendix A.

#### **19. CSXT REQUIREMENTS**

The Contractor is notified that the CSXT Requirements attached to the end of these Special Provisions as Appendix B.

#### **20. NYSDEC PERMIT AND FACILITY INFORMATION**

The Contractor is notified that the NYSDEC Permit And Facility Information attached to the end of these Special Provisions as Appendix C.

#### **21. WORK ZONE TRAFFIC CONTROL**

The Contractor is notified that the Work Zone Traffic Control attached to the end of these Special Provisions as Appendix D.

#### **22. OCMC TRAFFIC STIPULATIONS**

The Contractor is notified that the OCMC Traffic Stipulations attached to the end of these Special Provisions as Appendix E.

#### **23. NYCDOS INTERPRETIVE MEMORANDUM #2**

The Contractor is notified that the NYCDOS Interpretive Memorandum #2 attached to the end of these Special Provisions as Appendix F.

## **24. ENVIRONMENTAL ASSESSMENT**

The Contractor is notified that the Environmental Assessment attached to the end of these Special Provisions as Appendix G.

## **25. ACOE PERMIT AND CONDITIONS**

The Contractor is notified that the ACOE Permit And Conditions attached to the end of these Special Provisions as Appendix H.

## **26. N.Y.C. TRANSIT INSURANCE AND REQUIREMENTS**

The Contractor is notified that the N.Y.C. Transit Insurance attached to the end of these Special Provisions as Appendix I.

The following requirements must apply:

- Prior to starting construction the Contractor must submit for NYC Transit approval detailed sketches with a NYS licensed Professional Engineer stamp for all the work near the structure.
- Sheeting and bracing design for the sewer and water main prepared by the NYS licensed Professional Engineer must be submitted for approval by NYC Transit Outside Projects.
- The Contractor is notified herein that there shall be no machine excavation within 3 (three) feet of NYC Transit structure, power duct lines or any other facilities until they have been carefully exposed by hand excavation.

## **27. USE OF CITY WATER**

The Contractor is notified that for use of City water under this project the Contractor shall be required to obtain a water use permit from the Department of Environmental Protection at the Contractor's own cost.

## **28. FUEL COST**

The Contractor is notified that the fuel cost per gallon used in the formula under Sub-Article 26.2.8 of the Standard Construction Contract for **Extra Work** will be derived from the fuel price index for the United States East Coast published weekly by the United States Energy Information Administration ("USEIA"), and available on its website at <http://www.eia.gov/petroleum/gasdiesel/>. The USEIA-published cost per gallon for the applicable fuel on the East Coast for the week in which the first day of each calendar quarter during the contract term occurs (i.e., January 1<sup>st</sup>, April 1<sup>st</sup>, July 1<sup>st</sup> and September 1<sup>st</sup>) will be used in the reimbursement formula for all **Extra Work** invoiced that was performed during that calendar quarter. Should the USEIA stop publishing this fuel price index, the fuel cost per gallon will be determined by reference to a substitute index to be agreed upon by the Contractor and the City.

## **29. START OF CONTRACT WORK**

The Contractor is notified that a Notice To Proceed (NTP) date will be issued for work to commence within 21 to 30 Days of Contract Registration.

**30. PRICES TO COVER**

No direct payment will be made for costs incurred in complying with the foregoing Special Provisions, unless otherwise provided. Said costs will be deemed to have been included in the prices bid for all the scheduled contract items.

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## **APPENDICES**


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## **APPENDIX A: AMTRAK REQUIREMENTS**

- a) The City shall not be required to procure any insurance with respect to work being performed by the City's employees for the Project. The City shall require its Consultants and Contractors to procure insurance for all work being performed by the Consultant or Contractor for the Project, as set forth in the then current Permit to be executed by the Consultant or Contractor.
- b) In the event that the Company performs any force account work under the terms of this Agreement, then the Company shall carry force account insurance in an amount not less than One Million Dollars (\$1,000,000), as determined by the Company. The Company reserves the right to change its practice and self-insure at a rate comparable to those charged by commercial carriers. Documentation detailing comparable common carrier rates will be provided to the City and shall be consistent with the rates the Company charges other governmental entities requiring access to its property.
- c) Before commencing the work, the Company shall furnish to the Commissioner a certificate or certificates of insurance in a form satisfactory to the Commissioner, showing that the Company has complied with this Article, which certificate or certificates shall provide that the policy shall not be changed or canceled until thirty (30) days written notice has been given to the Commissioner. Company may comply with the provisions of this Article by providing equivalent protection through a self-insurance program. Should the Company elect this option, the Company shall provide written notice to the Commissioner to that effect prior to the commencement of work.
- d) In case the Company shall, with the consent of the City, make contracts for any part of the work or facilities covered by this Agreement, it is hereby agreed that said subcontractor, at no cost to the City or Company, shall procure and maintain, until the work covered by said contract has been completed to the satisfaction of the City and Company, Workers Compensation insurance for the benefit of such employees engaged therein as is required to be insured by the provision of the Worker's Compensation Law of the State of New York.
- e) Each of the City's Contractors or Consultants who performs design, inspection or engineering functions in support of the Project shall provide and maintain in force during the course of the Project, at no cost to the Company, professional liability insurance covering the liability for any and all errors or omissions committed by the Consultant, or by agents or employees of the Consultant, in the performance of the Project design, regardless of the type of damages. The coverage shall be maintained until such time as the design and construction is completed and for at least three years following completion of all operations to be performed. Such contractors and consultants shall maintain a policy with limits of liability of not less than Two Million Dollars (\$2,000,000) per claim (but such limit may be modified by Company to fit a specific Project). The City must require its Consultants performing design or engineering functions to provide the Company with written proof of the insurance coverages required by the Company for the specific Project.

Each policy shall provide: (a) a policy retroactive date that coincides with or precedes the Consultants' start of work (including subsequent policies purchased as renewals or replacements); (b) that if the insurance is terminated for any reason, the Consultants and/or the City agree to purchase an extended reporting provision of at least three (3) years to report claims arising from work that is being performed; and (c) for reporting of circumstances or incidents that might give rise to future claims.

 <b>ENGINEERING PRACTICES</b>	ORIGINAL ISSUE DATE <b>01/25/01</b>		NUMBER <b>EP3014</b>																				
	REVISED DATE <b>10/01/2012</b>																						
	TITLE <b>MAINTENANCE AND PROTECTION OF RAILROAD TRAFFIC DURING CONTRACTOR OPERATIONS</b>	RECOMMENDED by <i>John Brun</i>	DATE <b>10/01/12</b>	PAGE <b>1</b> OF <b>2</b>																			
		APPROVED by CHIEF ENGR, STRUCTURES <i>James Richter</i>	DATE <b>10/01/12</b>																				
<p><b>SCOPE AND NATURE</b></p> <p>This practice provides procedures for Contractors to follow, when working on Amtrak Right-of-Way, adjacent to Amtrak tracks, to assure the protection of trains and maintenance of scheduled railroad operations.</p> <p><b>SPECIAL REFERENCE</b></p> <p>Note: This information was Included under former Engineering Practice 1305.</p> <p>Contractors shall comply with procedures detailed in the following specifications, when applicable:</p> <table border="1"> <thead> <tr> <th>Section</th> <th>Title</th> <th>Revision No.</th> <th>Revision Date</th> </tr> </thead> <tbody> <tr> <td><b>01141A</b></td> <td>Safety and Protection of Railroad Traffic and Property</td> <td>4</td> <td>10/01/12</td> </tr> <tr> <td><b>01142A</b></td> <td>Submission Documentation Required for Amtrak Review and Approval of Plans for Bridge Erection, Demolition and Other Crane/ Hoisting Operations over Railroad Right-of-Way</td> <td>1</td> <td>12/15/05</td> </tr> <tr> <td><b>01520A</b></td> <td>Requirements for Temporary Protection Shields for Demolition and Construction of Overhead Bridges and Other Structures</td> <td>1</td> <td>08/07/01</td> </tr> <tr> <td><b>02261A</b></td> <td>Requirements for Temporary Sheet piling and Shoring to Support Amtrak Tracks</td> <td>3</td> <td>06/20/08</td> </tr> </tbody> </table> <p><b>SPECIAL MATERIALS</b></p> <p>Not Applicable</p> <p><b>PROCEDURE</b></p> <ol style="list-style-type: none"> <li>1. The Contractor shall conform to the applicable specifications.</li> <li>2. Amtrak I&amp;C shall assure that agencies and other third parties proposing construction on or adjacent to Amtrak Right-of-Way conform to Amtrak requirements detailed herein.</li> <li>3. Amtrak Design and Construction shall review the Contractor's proposed design and construction procedures for conformance with specifications, with sound engineering design practice and with the procedures detailed in the applicable Engineering Practice documents.</li> </ol>				Section	Title	Revision No.	Revision Date	<b>01141A</b>	Safety and Protection of Railroad Traffic and Property	4	10/01/12	<b>01142A</b>	Submission Documentation Required for Amtrak Review and Approval of Plans for Bridge Erection, Demolition and Other Crane/ Hoisting Operations over Railroad Right-of-Way	1	12/15/05	<b>01520A</b>	Requirements for Temporary Protection Shields for Demolition and Construction of Overhead Bridges and Other Structures	1	08/07/01	<b>02261A</b>	Requirements for Temporary Sheet piling and Shoring to Support Amtrak Tracks	3	06/20/08
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<b>TITLE</b>  <b>MAINTENANCE AND PROTECTION OF RAILROAD TRAFFIC DURING CONTRACTOR OPERATIONS</b>	<b>ORIGINAL ISSUE DATE</b> <b>01/25/01</b>	<b>NUMBER</b> <b>EP3014</b>
	<b>REVISED DATE</b> <b>10/01/2012</b>	
		<b>PAGE</b> <b>2 of 2</b>

4. Amtrak Construction shall monitor the activities of the Contractor on-site to assure compliance/ adherence to approved procedures throughout the construction period.

**REPORTING**

As detailed in the specifications.

**RESPONSIBILITY**

Amtrak I&C Staff	Comply with Procedure
Director Project Initiation & Development	Assure Compliance
Amtrak Design Staff	Comply with Procedure
Director Structures Design	Assure Compliance
Amtrak Construction Staff	Comply with Procedure
Deputy Chief Engineer Construction	Assure compliance

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SECTION 01141A - SAFETY AND PROTECTION OF RAILROAD TRAFFIC AND PROPERTY

PART 1 - GENERAL

1.1 SCOPE

- A. This specification describes the safety procedures and protection provisions for Contractors and Permittees entering and working upon railroad property.
- B. Use of this specification is as required by Amtrak, as described in Amtrak Engineering Practice EP3014.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.3 DEFINITIONS

- A. CHIEF ENGINEER: Amtrak Chief Engineer
- B. RAILROAD: National Railroad Passenger Corporation (Amtrak), and/or the duly authorized representative
- C. ENGINEERING PRACTICE: Amtrak Engineering Practices establish a system of uniform practices, notices and instructions for the Amtrak Engineering Department, providing current, permanent and temporary, departmental procedures and policies.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 PRE-ENTRY MEETING

- A. Before entry of Permittee and/or Contractors onto Railroad's property, a pre-entry meeting shall be held at which time Permittee and/or Contractors shall submit for written approval of the Chief Engineer, plans, computations and a detailed description of proposed methods for accomplishing the work, including methods for protecting Railroad's traffic. Any such written approval shall not relieve Permittee and/or Contractor of their complete responsibility for the adequacy and safety of their operations.

SAFETY AND PROTECTION OF RAILROAD TRAFFIC AND PROPERTY

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Rev 4 10/1/2012**3.2 RULES, REGULATIONS AND REQUIREMENTS**

- A. Railroad traffic shall be maintained at all times with safety and continuity, and Permittee and/or Contractors shall conduct their operations in compliance with all rules, regulations, and requirements of Railroad (including these Specifications) with respect to any work performed on, over, under, within or adjacent to Railroad's property. Permittee and/or Contractors shall be responsible for acquainting themselves with such rules, regulations and requirements. Any violation of Railroad's safety rules, regulations, or requirements shall be grounds for the immediate suspension of the Permittee and/or Contractor work, and the re-training of all personnel, at the Permittee's expense.

**3.3 MAINTENANCE OF SAFE CONDITIONS**

- A. If tracks or other property of Railroad are endangered during the work, Permittee and/or Contractor shall immediately take such steps as may be directed by Railroad to restore safe conditions, and upon failure of Permittee and/or Contractor to immediately carry out such direction, Railroad may take whatever steps are reasonably necessary to restore safe conditions. All costs and expenses of restoring safe conditions, and of repairing any damage to Railroad's trains, tracks, right-of-way or other property caused by the operations of Permittee and/or Contractors, shall be paid by Permittee.

**3.4 PROTECTION IN GENERAL**

- A. Permittee and/or Contractors shall consult with the Chief Engineer to determine the type and extent of protection required to insure safety and continuity of railroad traffic. Any Inspectors, Track Foremen, Track Watchmen, Flagman, Signalmen, Electric Traction Linemen, or other employees deemed necessary by Railroad, at its sole discretion, for protective services shall be obtained from Railroad by Permittee and/or Contractors. The cost of same shall be paid directly to Railroad by Permittee. The provision of such employees by Railroad, and any other precautionary measures taken by Railroad, shall not relieve Permittee and/or Contractors from their complete responsibility for the adequacy and safety of their operations.

**3.5 PROTECTION FOR WORK NEAR ELECTRIFIED TRACK OR WIRE**

- A. Whenever work is performed in the vicinity of electrified tracks and/or high voltage wires, particular care must be exercised, and Railroad's requirements regarding clearance to be maintained between equipment and tracks and/or energized wires, and otherwise regarding work in the vicinity of electrified tracks, must be strictly observed. No employees or equipment will be permitted to work near overhead wires, except when protected by a Class A employee of Railroad. Permittee and/or Contractors must supply an adequate length of grounding cable (4/0 copper with approved clamps) for each piece of equipment working near or adjacent to any overhead wire.

**3.6 FOULING OF TRACK OR WIRE**

- A. No work will be permitted within twenty-five (25) feet of the centerline of track or the energized wire or have potential of getting within twenty-five (25) feet of track wire without the

SAFETY AND PROTECTION OF RAILROAD TRAFFIC AND PROPERTY

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approval of the Chief Engineer's representative. Permittee and/or Contractors shall conduct their work so that no part of any equipment or material shall foul an active track or overhead wire without the written permission of the Chief Engineer's representative. When Permittee and/or Contractors desire to foul an active track, they must provide the Chief Engineer's representative with their site-specific work plan a minimum of twenty-one (21) working days in advance, so that, if approved, arrangements may be made for proper protection of Railroad. Any equipment shall be considered to be fouling a track or overhead wire when located (a) within fifteen (15) feet from the centerline of the track or within fifteen (15) feet from the wire, or (b) in such a position that failure of same, with or without a load, would bring it within fifteen (15) feet from the centerline of the track or within fifteen (15) feet from the wire and requires the presence of the proper Railroad protection personnel.

- B. If acceptable to the Chief Engineer's representative, a safety barrier (approved temporary fence or barricade) may be installed at fifteen (15) feet from centerline of track or overhead wire to afford the Permittee and/or Contractor with a work area that is not considered fouling. Nevertheless, protection personnel may be required at the discretion of the Chief Engineer's representative.

## 3.7 TRACK OUTAGES

- A. Permittee and/or Contractors shall verify the time and schedule of track outages from Railroad before scheduling any of their work on, over, under, within, or adjacent to Railroad's right-of-way. Railroad does not guarantee the availability of any track outage at any particular time. Permittee and/or Contractors shall schedule all work to be performed in such a manner as not to interfere with Railroad operations. Permittee and/or Contractors shall use all necessary care and precaution to avoid accidents, delay or interference with Railroad's trains or other property.

## 3.8 DEMOLITION

- A. During any demolition, the Contractor must provide horizontal and vertical shields, designed by a Professional Engineer registered in the state in which the work takes place. These shields shall be designed in accordance with the Railroad's specifications and approved by the Railroad, so as to prevent any debris from falling onto the Railroad's right-of-way or other property. A grounded temporary vertical protective barrier must be provided if an existing vertical protective barrier is removed during demolition. In addition, if any openings are left in an existing bridge deck, a protective fence must be erected at both ends of the bridge to prohibit unauthorized persons from entering onto the bridge.
- B. Ballasted track structure shall be kept free of all construction and demolition debris. Geotextiles or canvas shall be placed over the track ties and ballast to keep the ballast clean.

## 3.9 EQUIPMENT CONDITION

- A. All equipment to be used in the vicinity of operating tracks shall be in "certified" first-class condition so as to prevent failures that might cause delay to trains or damage to Railroad's property. No equipment shall be placed or put into operation near or adjacent to operating tracks without first obtaining permission from the Chief Engineer's representative. Under no

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circumstances shall any equipment or materials be placed or stored within twenty-five (25) feet from the centerline of an outside track, except as approved by the Site Specific Safety Work Plan. To insure compliance with this requirement, Permittee and/or Contractors must establish a twenty-five (25) foot foul line prior to the start of work by either driving stakes, taping off or erecting a temporary fence, or providing an alternate method as approved by the Chief Engineer's representative. Permittee and/or Contractors will be issued warning stickers which must be placed in the operating cabs of all equipment as a constant reminder of the twenty-five (25) foot clearance envelope.

### 3.10 STORAGE OF MATERIALS AND EQUIPMENT

- A. No material or equipment shall be stored on Railroad's property without first having obtained permission from the Chief Engineer. Any such storage will be on the condition that Railroad will not be liable for loss of or damage to such materials or equipment from any cause.
- B. If permission is granted for the storage of compressed gas cylinders on Railroad property, they shall be stored a minimum of 25 feet from the nearest track in an approved lockable enclosure. The enclosure shall be locked when the Permittee and/or Contractor is not on the project site.

### 3.11 CONDITION OF RAILROAD'S PROPERTY

- A. Permittee and/or Contractors shall keep Railroad's property clear of all refuse and debris from its operations. Upon completion of the work, Permittee and/or Contractors shall remove from Railroad's property all machinery, equipment, surplus materials, falsework, rubbish, temporary structures, and other property of the Permittee and/or Contractors and shall leave Railroad's property in a condition satisfactory to the Chief Engineer.

### 3.12 SAFETY TRAINING

- A. All individuals, including representatives and employees of Permittee and/or Contractor, before entering onto Railroad's property and before coming within twenty-five (25) feet of the centerline of the track or energized wire must first attend Railroad's Contractor Orientation Computer Based Training Class. The Contractor Orientation Class will be provided electronically at [www.amtrakcontractor.com](http://www.amtrakcontractor.com). Upon successful completion of the course and test, the individual taking the course will receive a temporary certificate without a photo that is valid for three weeks. The individual must upload a photo of himself/herself that will be embedded in the permanent ID card. The photo ID will be mailed to the individual's home address and must be worn/displayed while on Railroad property. Training is valid for one calendar year. All costs of complying with Railroad's safety training shall be at the sole expense of Permittee and/or Contractor. The Permittee and/or Contractor shall appoint a qualified person as its Safety Representative. The Safety Representative shall continuously ensure that all individuals comply with Railroad's safety requirements. All safety training records must be maintained with the Permittee's and/or Contractor's site specific work plan.



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3.13 NO CHARGES TO RAILROAD

- A. It is expressly understood that neither these Specifications, nor any document to which they are attached, include any work for which Railroad is to be billed by Permittee and/or Contractors, unless Railroad gives a written request that such work be performed at Railroad's expense.

END OF SECTION 01141A

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SECTION 01142A - SUBMISSION DOCUMENTATION REQUIRED FOR AMTRAK REVIEW AND APPROVAL OF PLANS FOR BRIDGE ERECTION, DEMOLITION AND OTHER CRANE/ HOISTING OPERATIONS OVER RAILROAD RIGHT-OF-WAY

PART 1 - GENERAL

1.1 SCOPE

- A. Amtrak requires that a site-specific work plan for accomplishing hoisting operations be prepared for every applicable project, and for each type of lift on a project.
  - 1. The plan shall demonstrate adherence to Amtrak safety rules.
  - 2. The plan shall demonstrate constructibility.
  - 3. The plan shall minimize impact to rail operations.
  - 4. The approved plan will provide the basis for field inspection/ verification of the actual work.
- B. Preparation, review and approval of the Crane/ Hoisting site-specific work plan does not relieve the Contractor from meeting other Amtrak requirements for adequate planning and documentation of proposed work procedures within the Right-of-Way of the railroad..
- C. Current Amtrak safety rules shall be adhered to in every respect.
- D. Use of this specification is as required by Amtrak, as described in Amtrak Engineering Practice EP3014.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.3 DEFINITIONS

- A. CHIEF ENGINEER: Amtrak Vice President, Chief Engineer
- B. RAILROAD: National Railroad Passenger Corporation (Amtrak), and/or the duly authorized representative
- C. ENGINEERING PRACTICE: Amtrak Engineering Practices establish a system of uniform practices, notices and instructions for the Amtrak Engineering Department, providing current, permanent and temporary, departmental procedures and policies.

1.4 SUBMISSION REQUIREMENTS

- A. Unless otherwise directed in the Contract, the Contractor shall submit five sets of plans and calculations to the authorized representative of the Chief Engineer, Structures, whose name and address will be provided at the project pre-construction meeting.
- B. Submitted calculations and plans shall be signed and sealed by a Professional Engineer, registered in the State in which the work will be performed.

SUBMISSION DOCUMENTATION...CRANE/ HOISTING OPERATIONS...

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- C. The Contractor shall revise and resubmit plans and calculations as many times as necessary, until a complete and correct site-specific work plan for crane/ hoisting operations has been approved.

## PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION

- 3.1 THE CONTRACTOR SHALL PROVIDE, AT A MINIMUM, THE FOLLOWING INFORMATION FOR REVIEW AND APPROVAL BY AMTRAK ENGINEERING STRUCTURES:
- A. Plan view showing location(s) of cranes, operating radii, with delivery and/or disposal locations shown. Provide all necessary dimensions for locating the elements of the plan.
  - B. Plans and computations showing the weight of the pick.
  - C. Crane rating sheets, demonstrating that cranes are adequate for 150% of the calculated pick weight. That is, the cranes shall be capable of picking 150% of the load, while maintaining normal, recommended factors of safety. The adequacy of the crane for the proposed pick shall be determined by using the manufacturer's published crane rating chart and not the maximum crane capacity. Crane and boom nomenclature is to be indicated.
  - D. Calculations demonstrating that slings, shackles, lifting beams, etc. are adequate for 150% of the calculated pick weight.
  - E. Location plan showing obstructions, indicating that the proposed swing is possible. "Walking" of load using two cranes will not be permitted. Rather, multiple picks and repositioning of the crane may be permitted to get the load to the needed location for the final pick, if necessary.
  - F. Data sheet listing types and sizes of slings and other connecting equipment. Include copies of catalog cuts for specialized equipment. Detail attachment methods on the plans.
  - G. A complete procedure, indicating the order of lifts and any repositioning or re-hitching of the crane or cranes.
  - H. Temporary support of any components or intermediate stages, as may be required.
  - I. A time schedule of the various stages, as well as a schedule for the entire lifting process.

END OF SECTION 01142A

SUBMISSION DOCUMENTATION...CRANE/ HOISTING OPERATIONS...

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I&C Specification

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SECTION 01520A - REQUIREMENTS FOR TEMPORARY PROTECTION SHIELDS FOR DEMOLITION  
AND CONSTRUCTION OF OVERHEAD BRIDGES AND OTHER STRUCTURES

PART 1 - GENERAL

1.1 SCOPE

- A. This engineering practice describes items to be included in the design and construction of temporary protection shields for construction overhead and near to Amtrak tracks.
- B. Use of this specification is as required by Amtrak, as described in Amtrak Engineering Practice BP3014.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.3 DEFINITIONS

- A. CHIEF ENGINEER: Amtrak Vice President, Chief Engineer
- B. RAILROAD: National Railroad Passenger Corporation (Amtrak), and/or the duly authorized representative
- C. ENGINEERING PRACTICE: Amtrak Engineering Practices establish a system of uniform practices, notices and instructions for the Amtrak Engineering Department, providing current, permanent and temporary, departmental procedures and policies.

1.4 SUBMISSION REQUIREMENTS

- A. Unless otherwise directed in the Contract, the Contractor shall submit five sets of plans and calculations to the authorized representative of the Chief Engineer, Structures, whose name and address will be provided at the project pre-construction meeting.
- B. Submitted calculations and plans shall be signed and sealed by a Professional Engineer, registered in the State in which the work will be performed.
- C. The Contractor shall revise and resubmit plans and calculations as many times as necessary, until a complete and correct site-specific work plan for crane/ hoisting operations has been approved.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

- 3.1 CONTRACTORS WORKING ON OVERHEAD OR NEARBY DEMOLITION AND/OR CONSTRUCTION ADJACENT TO AMTRAK TRACKS, SHALL CONFORM TO THE FOLLOWING

...TEMPORARY PROTECTION SHIELDS...

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## DESIGN AND CONSTRUCTION REQUIREMENTS FOR TEMPORARY PROTECTION SHIELDING:

- A. The Contractor shall maintain a specified level of protection to railroad facilities, during demolition and construction activities that occur overhead and nearby Amtrak tracks, as shown on the Contract Plans, as detailed in the Contract Specifications, and as described below.
- B. Prior to the start of construction, the Contractor shall submit to Amtrak for review and approval, detailed, site specific plans for temporary protection shields. The plans will be reviewed as to the methods of erection, and as to whether or not the proposed installation will provide the required level of protection. No construction shall proceed until the Contractor has received written approval of the Contractor's complete, site specific plans, from Amtrak.
- C. The Contractor shall design the protection shields to conform to all applicable and governing federal, state and local laws and regulations.
- D. Drawings for the proposed temporary protection shields shall be signed and sealed by a Licensed Professional Engineer. Complete design calculations, clearly referenced to the drawings, and easy to review, shall be provided with submission of drawings.
- E. Protection shields shall be designed for the following, minimum load and size criteria.
  - 1. The horizontal shield design liveload on horizontal surfaces shall be the greater of a minimum of 100 pounds per square foot (psf) [5000 Pascals] or the anticipated liveload to be produced by the Contractor's anticipated operations. When determining the appropriate design live load, the designer shall consider factors such as the physical capacity of proposed debris-catching platforms to retain materials, and the type of equipment the platforms might support. Positive means of demolition and construction controls shall be provided to assure that debris that may collect on the shield will not exceed the design live load. The horizontal protection shield, in plan view, shall cover no less than the area directly over the tracks plus ten feet minimum beyond the centerline of the outermost tracks.
  - 2. The vertical shield shall be designed to carry a minimum 30 psf [1500 Pascals] allowance for wind load. The vertical shield shall extend a minimum of 6'-6" [1950 millimeters] above the top of the adjacent surface, such as curb or sidewalk. Anti-climb wings shall be installed at each end, as necessary, to restrict access to the railroad property.
- F. The vertical and horizontal clearance envelopes required for maintenance of railroad operations, shall be indicated on the site specific work plans. These clearances are subject to review and approval by Amtrak. If applicable, both temporary and permanent envelopes shall be indicated on the plans. The temporary protection shields shall be installed outside the limits of these minimum vertical and horizontal clearances shown on the site specific work plans.
- G. In electrified territory, temporary protection shields shall be bonded and grounded.
- H. Temporary protection shields shall be designed and constructed to prevent dust, debris, concrete, formwork, paint, tools, or anything else from falling onto the railroad property below.
- I. The temporary protection shields shall be attached to the structure in accordance with site specific work plans submitted by the Contractor and approved by Amtrak. Drilling in structural members and welding will generally not be permitted in members that are scheduled to remain in place in the reconstructed structure. For existing members scheduled for demolition or for later reconstruction, any proposed attachment shall be designed with consideration of potential existing, deteriorated conditions.
- J. The Contractor shall provide the Amtrak on-site representative, for review and approval prior to any construction activity in the effected area, a proposed construction schedule for the installation, maintenance and removal of the temporary protection shields.

...TEMPORARY PROTECTION SHIELDS...

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- K. The temporary protection shields shall be installed prior to the start of any other work over the railroad in the effected areas. No construction shall proceed until the Amtrak on-site representative reviews and approves the Contractor's installed protection. Before proceeding with the work, Amtrak must be satisfied, in its sole judgment, that sufficient protection has been provided to proceed with the work.
- L. The Contractor shall install and remove temporary protection shields only when an Amtrak representative is on-site.
- M. The Contractor shall not install or remove temporary protection shields during train operations.
- N. Temporary protection shields shall remain in place for the duration of construction activities over and nearby the railroad in the effected areas. The Contractor may remove temporary construction only after approved by Amtrak on-site representatives.
- O. Where site specific conditions impose insurmountable restrictions to the design of temporary construction conforming to the limitations listed above, the design of temporary construction shall be developed in close coordination with Amtrak design review personnel. The Chief Engineer, Structures shall provide final approval of temporary construction that does not conform to the above limitations.

END OF SECTION 01520A

...TEMPORARY PROTECTION SHIELDS...

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SECTION 02261A - REQUIREMENTS FOR TEMPORARY SHEETING AND SHORING TO  
SUPPORT AMTRAK TRACKS

PART 1 - GENERAL

1.1 SCOPE

- A. This engineering practice describes items to be included in the design and construction of temporary sheeting and shoring construction adjacent and proximate to Amtrak tracks.
- B. Use of this specification is as required by Amtrak, as described in Amtrak Engineering Practice BP3014.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.3 DEFINITIONS

- A. CHIEF ENGINEER: Amtrak Vice President, Chief Engineer
- B. RAILROAD: National Railroad Passenger Corporation (Amtrak), and/or the duly authorized representative
- C. ENGINEERING PRACTICE: Amtrak Engineering Practices establish a system of uniform practices, notices and instructions for the Amtrak Engineering Department, providing current, permanent and temporary, departmental procedures and policies.

1.4 SUBMISSION REQUIREMENTS

- A. Unless otherwise directed in the Contract, the Contractor shall submit five sets of plans and calculations to the authorized representative of the Chief Engineer, Structures, whose name and address will be provided at the project pre-construction meeting.
- B. Submitted calculations and plans shall be signed and sealed by a Professional Engineer, registered in the State in which the work will be performed.
- C. The Contractor shall revise and resubmit plans and calculations as many times as necessary, until a complete and correct site-specific work plan for temporary sheeting and shoring has been approved.

PART 2 - PRODUCTS (Not Used)

...TEMPORARY SHEETING AND SHORING TO SUPPORT AMTRAK TRACKS

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I&amp;C Specification

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## PART 3 - EXECUTION

## 3.1 CONTRACTORS INSTALLING TEMPORARY CONSTRUCTION SHEETING AND SHORING TO SUPPORT AMTRAK TRACKS SHALL CONFORM TO THE FOLLOWING:

- A. Footings for all piers, columns, walls, or other facilities shall be located and designed so that any temporary sheeting and shoring for support of adjacent track or tracks during construction, will not be closer than toe of ballast slope. The dimension from gage of rail to toe of ballast, along tangent track, is 7'-5"; see dimensions on Track standard plans for curved track dimensions.
- B. USE OF SHEETING: When support of track or tracks is necessary during construction of the above-mentioned facilities, interlocking steel sheeting, adequately braced and designed to carry Cooper E80 live-load plus 50 percent impact allowance is required. Soldier piles and lagging will be permitted for track support ONLY when required penetration of steel sheet piling cannot be obtained, due to site-specific conditions that make steel sheet piling placement impracticable, in the opinion of the authorized, Amtrak design review engineer.
  - 1. For usual soil conditions and limited excavations, sheeting is required when the near-track excavation extends beneath or nearer to the track than the Theoretical Railroad Embankment Line. The Theoretical Railroad Embankment Line is defined as a line that starts at grade, ten foot from the centerline of the outer track, and extends downward, away from the track, at a slope of 1-1/2 horizontal to one vertical.
  - 2. For special soil conditions, such as soft organic soils and rock conditions, and for unusual excavation conditions, temporary supports for excavations may be necessary even when the limits fall beyond the Theoretical Railroad Embankment Line, requiring site specific analysis by a professional, geotechnical engineer.
  - 3. See Sketch SK-1, "Normal Requirements for Sheet Piling Adjacent to Tracks".
- C. Exploratory trenches, three feet deep and 15 inches wide in the form of an "H", with outside dimensions matching the proposed outside dimensions of sheeting, shall be hand dug, prior to placing and driving the sheeting, in any area where railroad or utility underground installations are known or suspected. These trenches are for exploratory purposes only, and shall be backfilled and immediately compacted, in layers. This work shall be performed only in the presence of a railroad inspector.
- D. Absolute use of track is required while driving sheeting adjacent to running track. Track usage shall be prearranged per standard procedures, through the Amtrak project representative.
- E. Cavities adjacent to sheet piling, created by pile driving, shall be filled with sand, and any disturbed ballast shall be restored and tamped immediately.
- F. Sheet piling cutoffs
  - 1. During construction, sheeting shall be cut off at an elevation no higher than the top of tie.
  - 2. At the completion of construction activities involving the use of sheet piling, sheet piling may be pulled if there will be no adverse impact to the railroad track support bed, as determined by the Amtrak site engineer. This will generally be permitted when both of these conditions are met:
    - a. the sheeting face is at least ten feet distant from the centerline of track, and
    - b. the bottom of the excavation that the sheeting supported prior to backfilling, does not fall within an assumed influence zone under the tracks. The assumed influence

...TEMPORARY SHEETING AND SHORING TO SUPPORT AMTRAK TRACKS

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I&amp;C Specification

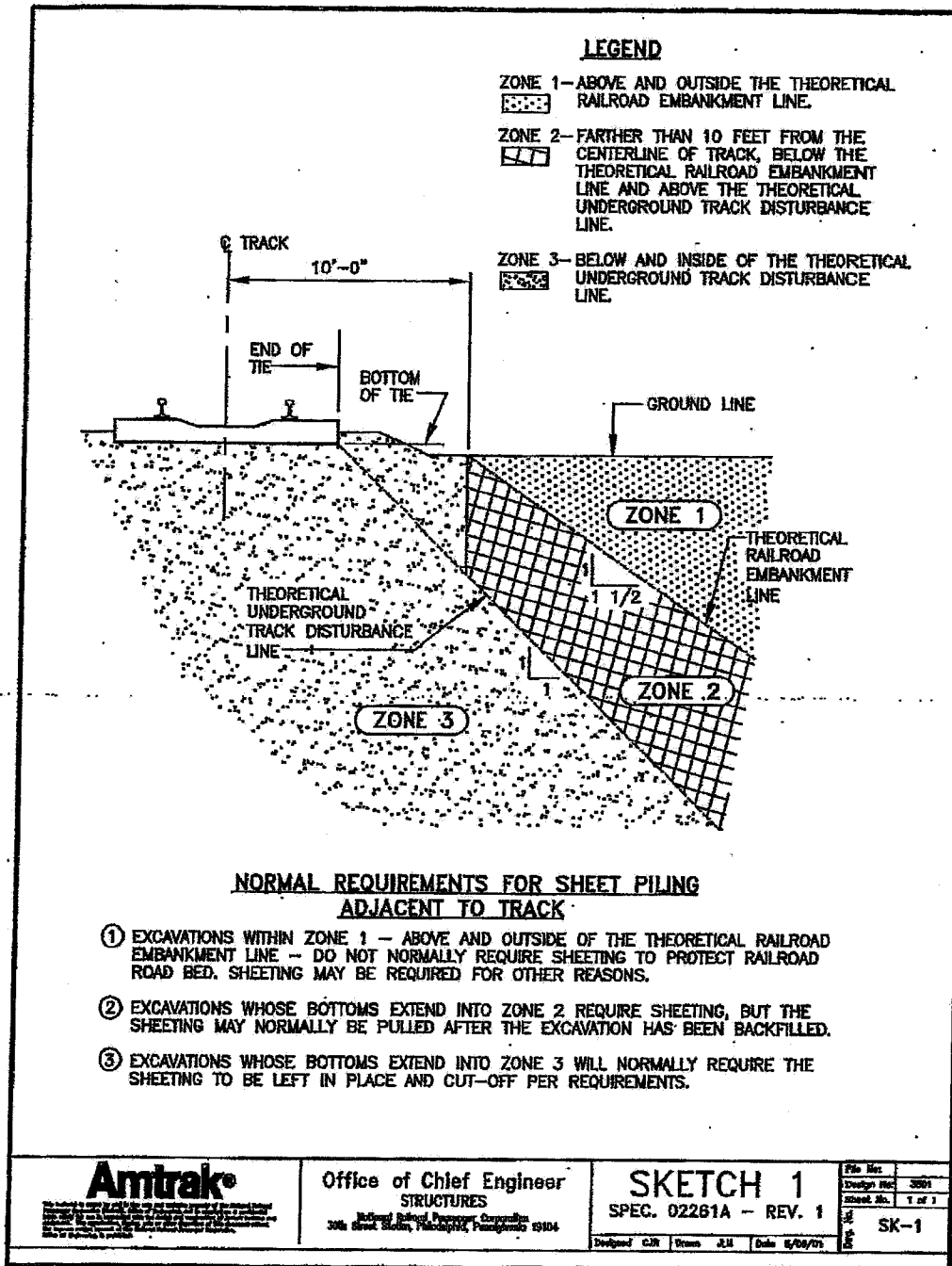
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- zone is defined as the area, as seen in cross-sectional view, falling beneath the Theoretical Underground Track Disturbance Line. This line is defined as a line that starts at the end and bottom of the ties, and extends from the track outward and downward at a one-to-one (45-degree) slope.
3. Sheet piling that is to be left in-place, shall be cut off below the ground line
    - a. at least eighteen inches below final ground line at the sheeting, and
    - b. no higher than 24 inches below the elevation of the bottom of the nearest ties
  4. See Sketch SK-1, "Normal Requirements for Sheet Piling Adjacent to Tracks".
- G. The excavation adjacent to the track shall be covered, ramped and protected by handrails, barricades and warning lights, as required by applicable safety regulations, and as directed by Amtrak.
- H. Final backfilling of excavation shall conform to project specifications.
- I. The Contractor shall provide Amtrak with a detailed schedule of proposed construction operations, detailing each step of the proposed temporary construction operations in proximity to Amtrak tracks, so that Amtrak may review and approve the proposed operations, and may properly inspect and monitor operations.
- J. Drawings for the proposed temporary sheeting and shoring shall be signed and sealed by a Licensed Professional Engineer. Complete design calculations, clearly referenced to the drawings, and easy to review, shall be provided with submission of drawings.
- K. Where site specific conditions impose insurmountable restrictions to the design of temporary construction conforming to the limitations listed above, the design of temporary construction shall be developed in close coordination with Amtrak design review personnel. The Chief Engineer, Structures shall provide final approval of temporary construction that does not conform to the above limitations.
1. When Amtrak grants approval for sheeting closer than standard minimum clearances, the Contractor shall develop a survey plan, if not already required by the project, for the adjacent tracks, to be conducted prior to, during, and after the temporary sheeting construction operations. If settlement is detected, construction operations shall be suspended until the track has been returned to its initial condition, and stabilized, as determined by the Amtrak project site representative.
2. The Contractor shall stockpile ten (10) tons of approved ballast at the project site, and maintain that amount in ready reserve, to allow for the possible need to restore track profile.
- L. Particular care shall be taken in the planning, design and execution of temporary construction, as relates to railroad slope protection and drainage facilities. Erosion and sediment control best management practices shall be designed and employed, as approved by Amtrak. Any unintended disruption to railroad drainage facilities, caused by the temporary construction, shall be promptly remedied, as directed by the Engineer, solely at the Contractor's cost.
- M. The following Information Sketch is attached:
1. Figure No. SK-1: Normal Requirements for Sheet Piling Adjacent to Track

END OF SECTION 02261A

...TEMPORARY SHEETING AND SHORING TO SUPPORT AMTRAK TRACKS

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 <b>ENGINEERING PRACTICES</b>		ORIGINAL ISSUE DATE <b>07/18/02</b>		NUMBER <b>EP3005</b>											
		REVISED DATE <b>01/27/15</b>													
TITLE <b>PIPELINE OCCUPANCY</b>		RECOMMENDED by <b>K.L. Kulick</b>	DATE <b>01/27/15</b>	PAGE <b>1</b> OF <b>2</b>											
		APPROVED by CHIEF ENGR, STRUCTURES  <b>James S. Richter</b>	DATE <b>01/27/15</b>												
		<p><b>SCOPE AND NATURE</b></p> <p>To provide design and construction specifications for pipelines within Amtrak right-of-way.</p> <p><b>SPECIAL REFERENCES</b></p> <p>Note: The former number for this Engineering Practice was 1604.</p> <table border="1"> <thead> <tr> <th>Section</th> <th>Title</th> <th>Revision No.</th> <th>Revision Date</th> </tr> </thead> <tbody> <tr> <td>02081A</td> <td>Pipeline Occupancy Specifications</td> <td>2</td> <td>06/23/14</td> </tr> <tr> <td>02082A</td> <td>Additional Requirement for Horizontal Directional Drilling (HDD) / Directional Boring</td> <td>3</td> <td>01/27/15</td> </tr> </tbody> </table> <p>ANSI Standards ASTM Standards AWS Standards AWWA Standards Engineering Practice 3014 Section 02261A Engineering Practice 3014 Section 01142A Horizontal Directional Drilling Good Practices Guidelines IEEE Standards National Electric Code National Electric and Safety Code NACE Standards AREMA Manual for Railway Engineering OSHA Standards</p> <p><b>SPECIAL MATERIALS</b></p> <p>N/A</p>				Section	Title	Revision No.	Revision Date	02081A	Pipeline Occupancy Specifications	2	06/23/14	02082A	Additional Requirement for Horizontal Directional Drilling (HDD) / Directional Boring
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<b>TITLE</b>  <b>PIPELINE OCCUPANCY</b>	<b>ORIGINAL ISSUE DATE</b> <b>07/18/02</b>	<b>NUMBER</b>
	<b>REVISED DATE</b> <b>01/27/15</b>	<b>EP3005</b>
		<b>PAGE</b> <b>2 OF 2</b>

**PROCEDURE**

1. The Contractor shall conform to the applicable specifications.
2. Amtrak I&C shall assure that agencies and other third parties proposing construction on or adjacent to Amtrak Right-of-Way conform to Amtrak requirements detailed herein.
3. Amtrak Design and Construction shall review the Contractor's proposed design and construction procedures for conformance with specifications, with sound engineering design practice and with the procedures detailed in the applicable Engineering Practice documents.
4. Amtrak Construction shall monitor the activities of the Contractor on-site to assure compliance/ adherence to approved procedures throughout the construction period.

**REPORTING**

As detailed in specification.

**RESPONSIBILITY**

Amtrak I&C Staff	Comply with Procedure
Director I&C	Assure Compliance
Amtrak Design Staff	Comply with Procedure
Amtrak Construction Staff	Comply with Procedure
Division Engineer	Comply with Procedure
Real Estate Department	Distribute Specification to Applicants

**EP 3005- PIPELINE OCCUPANCY- SPECIFICATION 02081A****TABLE OF CONTENTS**

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## PART 1 – GENERAL

### 1.1 SCOPE AND NATURE

These specifications apply to the design, construction and maintenance of pipelines and casings carrying flammable and non-flammable substances, or containing wires and cables, under, over, across and longitudinally along Amtrak property, right-of-way and facilities.

It is to be clearly understood that Amtrak owns its right-of-way for the primary purpose of operating a railroad. All occupancies shall therefore be designed and constructed so that operations and facilities are not interfered with, interrupted or endangered. In addition, the proposed facility shall be located to minimize encumbrance to the right-of-way so that the railroad will have unrestricted use of its property for current and future operations.

### 1.2 APPLICATION FOR OCCUPANCY

Individuals, Owners, Corporations and Municipalities (hereinafter known as the Applicant) desiring pipeline occupancy on Amtrak property must agree, upon approval of the construction plans by Amtrak, to execute an appropriate License Agreement and pay any required fees and/or rentals outlined therein.

Application for a License Agreement shall be made by letter addressed to Real Estate Department – National Railroad Passenger Corporation, 30th Street Station, Box 25, Philadelphia, PA 19104. The application must provide the following information:

1. Name of Applicant desiring the occupancy.
2. Complete mailing address of Applicant.
3. Name and title of person who will sign the License Agreement.
4. The State in which the Applicant is incorporated.
5. Complete description of the project, including installation, location and specific details of the occupancy.

No entry upon Amtrak property for the purpose of conducting surveys, field inspections, obtaining soil information, or for any other purpose required for the design and engineering of the proposed occupancy, will be allowed without a Right of Entry Permit executed by Amtrak. The Applicant must apply for the Right-of-Entry Permit and pay any associated fees.

It is to be clearly understood that the issuance of a Right of Entry Permit does not constitute authority to proceed with the actual construction. Actual construction cannot begin until a formal License Agreement has been fully executed by Amtrak and authorization to proceed has been granted.

All persons entering Amtrak property must first attend Railroad's Contractor Orientation Computer Based Training Class. The Contractor Orientation Class will be provided electronically at [www.amtrakcontractor.com](http://www.amtrakcontractor.com). Upon successful completion of the course and test, the individual taking the course will receive a temporary certificate without a photo that is valid for three weeks. The individual must upload a photo of himself/herself that will be embedded in the permanent ID card. The photo ID will be mailed to the individual's home address and must be worn or displayed while on Railroad property. Training is valid for one calendar year. All costs of complying with Railroad's safety training shall be at the sole expense of Permittee and/or Contractor. The Permittee and/or Contractor shall appoint a qualified person as its Safety Representative. The Safety Representative shall continuously ensure that all individuals comply with Railroad's safety requirements. All safety training records must be maintained with the Permittee's and/or Contractor's site specific work plan.

### 1.3 SUBMISSION OF PLANS AND DOCUMENTATION

All License Agreement applications shall be accompanied by ten complete sets of all project construction plans, specifications and computations covering the proposed occupancy. The construction plans, specifications and computations shall be signed and sealed by a Registered Professional Engineer licensed in the state in which the work is to be performed. If the plans, specifications and computations (including those submitted by contractors or suppliers) are not signed and sealed, they will be given no further consideration.

All proposed pipeline occupancy submissions to Amtrak shall be accompanied by two full size sets and eight half size sets (11" x 17") of plans. The half size plans are to be folded to an 8 1/2" x 11" size, with a 1 1/2"

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margin on the left hand side and a 1" margin on the top, so that they can be secured at the upper left hand corner and still be unfolded to full size without being removed from the file. After folding, the title block or any other identification of the plans shall be visible at the lower right hand corner without the necessity of unfolding. Each plan shall bear an individual identifying number and an original issue date, together with subsequent revision dates. Revisions shall be clearly identified on the plans so that it is readily apparent as to what revisions were made and when. All plan sheets are to be folded individually and, where more than one plan is involved, the plan sheets shall be assembled into complete sets before submission to Amtrak. Upon completion of the project, as-built plans shall also be provided in an Adobe Acrobat CD ROM format.

Failure of the Applicant to comply with these requirements may be sufficient cause for rejection of the application.

Plans shall be drawn to scale, and a bar scale shall be provided. As a minimum, the following information shall be included:

1. Plan view of proposed pipeline in relation to all Amtrak facilities and facilities immediately adjacent to Amtrak, including, but not limited to, tracks, buildings, signals, pole lines, catenary pole foundations and guy anchors, other utilities and all other facilities that may affect or influence the pipeline design and construction. The right-of-way property line shall be clearly delineated (see Sketch 1).
2. Location of centerline of pipe (in feet) from the nearest railroad milepost or centerline of a railroad bridge (giving bridge milepost number). In all cases, the names of the municipality and the county in which the proposed facilities are located must be shown.
3. Profile of ground at centerline of pipe (from field survey) showing the relationship of the pipe and casing to ground level, tracks and other facilities (see Sketch 2). For longitudinal occupations, the profile of adjacent track or tracks must be shown (see Sketch 3). The location and description of benchmarks used in the field survey shall be given.
4. If the pipeline is in a public highway, the limits of the right-of-way for the highway shall be clearly indicated with dimensions from the centerline of the highway (see Sketches 1 & 4).
5. The angle of crossings in relation to the centerline of tracks.
6. Location and description of valves or control stations of the pipeline, or junction boxes and splice points for cable conduits, shall be clearly shown on the plans.
7. The Pipeline Crossing Data Sheet must be completed and shown on the plans submitted for approval (see Sketch 6).
8. Location and description of all appurtenances, manholes and other accesses shall be shown on the plans.

The plans must be specific as to:

1. Method of construction and installation.
2. Size and material of casing pipe, including any insulation or coatings proposed.
3. Size and material of carrier pipe, including any insulation or coatings proposed.

Location and dimensions of jacking, boring, or tunneling pits and of longitudinal pipeline trenches shall be shown, along with details of their sheeting and shoring. For usual soil conditions, if the bottom of the excavated pit nearest the adjacent track intersects a line drawn on a slope of 1½ horizontal to 1 vertical from a the bottom corner of a tie on the adjacent track, a temporary support of excavation system designed by a Registered Professional Engineer licensed in the State in which the work is to be performed shall be submitted for approval. For special soil conditions, a temporary support of excavation may be required for distances further from centerline of adjacent track. All temporary sheeting and shoring must comply with Amtrak Engineering Practice EP3014, Section 02261A, Requirements for Temporary Sheeting and Shoring to Support Amtrak Tracks. In any event, the face of the pit shall be no less than 25' from adjacent track, unless otherwise approved by Amtrak. During construction, jacking, boring or tunneling, pits shall be fenced, lighted, and otherwise protected as directed by Amtrak designated field representative.

If required, a dewatering plan shall be included in the submission. The dewatering plan shall include the location and dimensions of system components, structural capacity of pits, etc., and all pertinent collection and discharge data.

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When computer calculations are included with design calculations, the following minimum documentation shall be furnished:

1. A synopsis of the computer program(s), stating briefly: required input, method of solution, approximations used, specifications or codes used, cases considered, output generated, extent of previous usage or certification of program(s) and the name of the author of the program(s).
2. Identification by number, indexing and cross referencing of all calculation sheets, including supplemental "long-hand" calculations sheets.
3. Fully identified, dimensioned and annotated diagram of each member of the structure being considered.
4. Clear identification and printing of all input and output values, including intermediate values, if such values are necessary for orderly review.
5. Identification of the processing unit, input/output devices, storage requirements, etc., if such supplemental information is significant and necessary for evaluation of the submittal.

Once Amtrak approves an application and the License Agreement issued, no variance from the plans, specifications, methods of construction, etc. will be considered or permitted without resubmission of plans to and receipt of approval from Amtrak.

#### 1.4 PERMIT APPROVAL – NOTIFICATION TO PROCEED

**Notification to Proceed with Construction:** After approval of the engineering plans, computations and specifications, and the execution of the License Agreement, the Applicant's project can be undertaken. The Applicant will notify Amtrak a minimum of 21 working days prior to the desired start of construction (see Amtrak Engineering Practice EP3014, Section 01141A, Safety and Protection of Railroad Traffic and Property). The Applicant is responsible for notifying and coordinating the work with all utility owners.

#### 1.5 MODIFICATION OF EXISTING FACILITIES

Any replacement or modification of an existing carrier pipe and/or casing shall be considered a new installation subject to the requirements of these specifications. The owner of all pipelines and other occupancies shall notify in writing, Amtrak of any intention to replace or modify existing facilities.

#### 1.6 ABANDONED PIPELINES AND/OR FACILITIES

The owner of all pipelines and other occupancies shall notify in writing, Amtrak of the intention to abandon. The owner will be continually billed for the occupancy until such written notice is received.

Upon abandonment, the carrier pipe shall be removed and the casing shall be completely filled with cement grout, compacted sand or other materials approved by Amtrak, using methods approved by Amtrak. If it is impracticable to remove the carrier pipe, then the carrier must be filled along with the annular space between the casing and the carrier.

Facilities other than pipelines will be removed or altered at abandonment to the satisfaction of Amtrak.

#### 1.7 CONFLICT OF SPECIFICATIONS

Where laws or orders of public authority prescribe a higher degree of protection than specified herein, then the higher degree so prescribed shall be deemed a part of these specifications. Any such requirements shall be clearly referenced in the application.

#### 1.8 DEFINITIONS

**AASHTO** – American Association of State Highway and Transportation Officials

**Amtrak** – National Railroad Passenger Corporation, and/or the duly authorized representative.

**ANSI** – American National Standards Institute

**API** – American Petroleum Institute

**Applicant** – Individuals, Owners, Corporations, and Municipalities desiring occupancy of Amtrak property by a pipeline.

**AREMA** – American Railway Engineering and Maintenance-of-Way Association



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**ASTM** – American Society for Testing and Materials

**Boring** – Pushing a pipe through fill material, with a boring auger rotating within the pipe to remove the soil.

**Carrier Pipe** – Pipe containing primary fluid or cable through occupancy area.

**Casing Pipe** – Protective encasement for a carrier pipe whose function is both structural and for containment of carrier fluids within the occupancy area, and/or dispersion of carrier fluids beyond the occupancy area.

**Cooper E-80** – Live load for each track based on four 80 kips axle load with 5' axle spacing.

**Horizontal Directional Drilling (Directional Boring)** – method of controlled drilling beneath existing facilities using a pilot hole bore.

**Jack Boring** – method of jacking a pilot rod beneath existing facilities between a launching pit and a receiving pit.

**Longitudinal Occupancy** – The installation and maintenance of pipelines that do not cross tracks, along and adjacent to tracks and within Amtrak property, right-of-way and facilities.

**CLSM** – Controlled Low Strength Material

**MSDS** – Material Safety Data Sheet

**NEC** – National Electric Code

**NESC** – National Electric and Safety Code

**License Agreement** – Agreement between Amtrak and applicant to allow applicant to construct and maintain pipelines under, over, across or longitudinally along Amtrak property, right-of-way and facilities.

**Open-Cut Trenching** – Surface excavation methods to allow the installation of pipelines.

**OSHA** – Occupational Safety and Health Administration.

**Pits (Launch/Receiving)** – Excavations at each end of a work area to allow jacking, boring or tunneling operations beneath existing site conditions.

**Right of Entry Permit** – Permit allowing applicant to enter Amtrak property solely for the purpose of obtaining information required for the design and engineering of a proposed License Agreement.

**Transverse Occupancy** – The installation and maintenance of pipelines on Amtrak property, right-of-way and facilities, where such pipelines cross tracks.

**Tremie Grouting** – A method in which concrete placed underwater through a pipeline (tremie pipe) to form a seal between the subsurface and water levels.

**Tunneling** – Method of boring with or without the use of placing liner plates behind a tunneling shield of tunneling machine, thus forming a casing for the installation of a carrier pipe under existing conditions

## 1.9 PUBLICATION STANDARDS

**AWS** – American Welding Society, Inc., 550 NW 42<sup>nd</sup> Avenue, Miami, FL 33126-0567

**ANSI** – American National Standards Institute, Inc., 11 West 42<sup>nd</sup> Street, New York, NY 10036

**ASTM** – American Society for Testing and Material, 100 Bar Harbor Drive, West Conshohocken, PA 19428-2959

**AREMA** – American Railway Engineering and Maintenance-of-Way Association, 8201 Corporate Drive, Suite 1125, Landover, MD 20785

**AWWA** – American Water Works Association, Inc., 1401 New York Avenue N.W., Suite 640, Washington, DC 20005

**OSHA** – Occupational, Safety and Health Administration, Superintendent of Documents, U.S. Printing Office, Washington, DC 20402

**NACE** – National Association of Corrosion Engineers, P.O. Box 201009, Houston, TX 77216-1009

If other than American Railway Engineering and Maintenance-of-Way Association (AREMA), American Society for Testing and Materials (ASTM), and American National Standards (ANSI)

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specifications are referred to for design, materials or workmanship on the plans and specifications for the work, then copies of the applicable sections of such other specifications shall accompany the plans and specifications for the work.

PIPELINE OCCUPANCY

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Rev 2 06/23/14**PART 2 – TECHNICAL REQUIREMENTS****2.1 LOCATION OF PIPELINE ON THE RIGHT-OF-WAY**

Pipelines laid longitudinally on Amtrak Right-of-Way shall be located as far as practicable from any tracks or other important structures and as close to the Amtrak property line as possible. Longitudinal pipelines must not be located within drainage ditches located on the right-of-way.

Pipelines shall be located, where practicable, to cross tracks at approximate right angles thereto, but generally no less than 45°.

Pipelines shall not be located within the limits of a turnout (switch) when crossing the track. The limits of the turnout extend from the second tie before the point of the switch to the first tie beyond the last long timber.

Pipelines shall not be located within the limits of a highway crossing at grade. If it is shown that no other location is possible, the Applicant will be responsible for reimbursing Amtrak for all costs associated with the removal and reconstruction of the grade crossing.

Pipelines and casings shall be suitably insulated from underground conduits or direct burial cables carrying electric wires on Amtrak property, in accordance with ANSI and NESC standards.

Pipelines shall not be placed within a culvert, under railroad bridges, nor closer than 45' to any portion of any railroad bridge, building or other important structure, except in special cases, and then by special design, as approved by Amtrak.

**2.2 CARRIER PIPE**

All proposed pipes, ditches and other structures carrying surface drainage on Amtrak property and/or crossing under Amtrak tracks shall be designed to carry the run-off from a 100 year storm. Computations indicating this design and suitable topographic plans, prepared by a Registered Professional Engineer licensed in the State in which the work is being performed shall be submitted to Amtrak for approval. If the drainage is to discharge into an existing drainage channel on Amtrak Right-of-Way and/or under Amtrak tracks, the computations should include the hydraulic analysis of any existing structures. Submitted with the computations should be formal approval of the proposed design by the appropriate governmental agency.

Carrier pipes within a casing shall be designed as if they are not encased.

All pipes shall be designed for the external and internal loads to which they will be subjected. The dead load of earth shall be considered 120 pounds per cubic foot. Railroad live loading shall be Cooper's E-80 with 50% added for impact. The following shall be the minimum requirements for carrier pipes:

1. Reinforced concrete pipe – ASTM C76, Class V, Wall C
2. Ductile Iron Pipe – ANSI A21.51, Class 56
3. Corrugated Metal Pipe – AREMA Manual, Chapter 1, Part 4.
4. Cast Iron Pipe – for culverts and gravity sewers – ASTM A-716 Extra Heavy.
5. Steel Pipe – ASTM A53, Type B or S, Grade A or B
6. Polyethylene – for cable, wire or fiber optic lines – Special approval required for pipe in excess of 6" OD. ASTM D 3350 – Standard Specification for Polyethylene Plastic Pipe and Fittings Materials, and ASTM D2513 – Standard Specification for Thermoplastic Gas Pressure Pipe, Tube and Fittings or AWWA C 901/C 906 – Standards for Polyethylene (PE) Pressure Pipe and Tubing for Water Service.
7. Others – as approved by Amtrak.

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Pipelines carrying oil, liquefied petroleum gas, natural or manufactured gas and other flammable products shall conform to the requirements of the current ANSI B 31.4 with Addenda "*Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohol's*"; ANSI B 31.8 "*Gas Transmission and Distribution Piping Systems*"; and other applicable ANSI Codes except that the maximum allowable stresses for design of steel pipe shall not exceed the following percentages of the specified minimum yield strength (multiplied by the longitudinal joint factor) of the pipe as defined in the ANSI Codes:

8. Steel pipe within a casing under Amtrak tracks, across Amtrak right-of-way, and longitudinally on Amtrak right-of-way (the following percentages apply to hoop stress):
  - a. Seventy-two percent for installation of oil pipelines.
  - b. Fifty percent for pipelines carrying liquefied petroleum gas and other flammable liquids with low flash point.
  - c. Sixty percent for installation of gas pipelines.

### 2.3 CASING PIPE

Pipelines under or along Amtrak tracks and across Amtrak right-of-way shall be encased in a larger pipe or conduit called the casing pipe.

Casing pipe will be required for all pipelines carrying oil, gas, petroleum products, or other flammable or highly volatile substances under pressure, and all non-flammable substances which, from their nature or pressure, as determined by Amtrak, might cause damage if escaping on, under, over, or near Amtrak property.

For non-pressure sewer or drainage crossings, where the installation is approved by Amtrak, the casing pipe may be omitted when the carrier pipe strength is capable of withstanding railroad loading hereinafter specified.

The casing pipe shall be designed in accordance with criteria on Section 2.4. Casing pipe shall be installed so as to provide an even bearing pressure throughout its length. Casing pipe laid transverse to the railroad shall slope to one end.

#### Protection at ends of casings:

1. Casings for carriers of flammable substances shall be suitably sealed to the outside of the carrier pipe. Details of seals shall be shown on the plans.
2. Casings for carriers of non-flammable substances shall have both ends of the casing blocked up in such a way as to prevent the entrance of foreign material, but allowing leakage to be safely detected in the event of a carrier break.
3. Where ends of casings are at or above ground surface and above high water level, they may be left open, provided drainage is afforded in such a manner that leakage will be conducted away from railroad tracks and structures.

#### Vents:

1. All sealed casings shall be adequately vented. Special attention shall be given to sealed casings for flammable substances in accordance with ANSI Standards. Vent pipes shall be of sufficient diameter, but in no case less than 2" in diameter, and shall be attached near each end of the casing and project through the ground surface at right-of-way lines or not less than 45' (measured at right angles) from centerline of nearest track.
2. Vent pipes shall extend not less than 4' above the ground surface. Top of vent pipe shall have a down-turned elbow, properly screened, or a relief valve. Vents in locations subject to high water shall be extended above the maximum elevation of high water and shall be supported and protected in a manner approved by Amtrak.
3. Vent pipes shall be at least 4' vertically from aerial electric wires or greater if required by NESC and ANSI Standards.
4. When the pipeline is in a public highway, street-type vents shall be installed.

If additional tracks are constructed in the future, the casing shall be extended correspondingly at the expense of the Applicant.

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Rev 2 06/23/14**2.4 DESIGN CRITERIA**

Pipes may be rigid or flexible, as permitted by their specific use. The design criteria follows, and shall be in accordance with the current AREMA Manual for Railway Engineering.

The inside diameter of the casing pipe shall be such as to allow the carrier pipe to be subsequently removed without disturbing the casing or the roadbed. For carrier pipe less than 6" in diameter, the inside diameter of a steel casing pipe shall be at least 2" greater than the largest outside diameter of the carrier pipe, joints, or couplings; for carrier pipe 6" and over in diameter, the inside diameter of a steel casing pipe shall be at least 4" greater than the largest outside diameter of the carrier pipe, joints, or couplings.

Casing pipe under Amtrak tracks and across Amtrak Right-of-Way shall extend the greater of the following distances measured at right angles to centerline of tracks:

1. Across the entire width of Amtrak Right-of-Way.
2. 3' beyond ditch line.
3. 2' beyond toe of slope.
4. A minimum distance of 25' each side from centerline of outside track when casing is sealed at both ends.
5. A minimum distance of 45' from centerline of outside track when casing is open at both ends.

Where installation of the casing pipe is proposed by means of open cut, the designer should determine the effects upon the casing due to change in weight of the new compacted fills and potential for lateral spreading of the embankment and account for these effects in the design. Where segmental casing pipe segments are used, temporary or permanent tension rods may be required by the Engineer.

The values shown in Table 1 shall be used for the live load vertical pressure on a buried structure for the various heights of cover.

**TABLE 1 (MODIFIED)**  
(AREMA, CHAPTER 1, PART 4, TABLE 4-39)  
PRESSURE FROM COOPER E-80 LIVE LOAD, INCLUDING IMPACT, FOR VARIOUS HEIGHTS OF COVER

Height of Cover (feet)	Live Load Pressure (lb/sq.ft.)
5.5	2400
8	1600
10	1100
12	800
15	600
20	300
30	100

Note: If height of cover, from bottom of cross tie to top of structure, is over 30', use dead load pressure only.

Steel casing pipe shall have a minimum wall thickness as shown in Table 2 (next page), unless computations indicate that a thicker wall is required. Computations showing the adequacy of casing pipe wall thickness shall be furnished as part of the submittal.

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(AREMA, CHAPTER 1, PART 5, TABLE 5-1)

Pipe Diameter	Coated or Cathodically Protected	Uncoated and Unprotected
Nominal Pipe Size (inches)	Nominal Wall Thickness (inches)	Nominal Wall Thickness (inches)
12½ and under	0.188	0.188
14	0.188	0.250
16	0.219	0.281
18	0.250	0.312
20 and 22	0.281	0.344
24	0.312	0.375
26	0.344	0.406
28	0.375	0.438
30	0.406	0.469
32	0.438	0.500
34 and 36	0.469	0.531
38	0.500	0.562
40	0.531	0.594
42	0.562	0.625
44 and 46	0.594	0.656
48	0.625	0.688
50	0.656	0.719
52	0.688	0.750
54	0.719	0.781
56 and 58	0.750	0.812
60	0.781	0.844
62	0.812	0.875
64	0.844	0.906
66 and 68	0.875	0.938
70	0.906	0.969
72	0.938	1.000

Steel pipe shall have minimum yield strength of 35,000 psi. The ASTM or API specification and grade for the pipe are to be shown on the Pipe Data Sheet.

Corrugated metal pipe or corrugated structural plate pipe may be used for casing, provided the pressure in the carrier pipe is less than 100 psi, and only when placed by the open cut method. Jacking or boring through railroad embankment for corrugated pipe is not permitted. Pipe shall be bituminous coated and shall conform to the current AREMA Manual for Railway Engineering, Chapter 1, Part 4.

Tunnel liner plates shall be galvanized and bituminous coated and shall conform to the current, at time Application is made, AREMA Manual for Railway Engineering, Chapter 1, Part 4. In no event shall the liner plate thickness be less than 0.105".

If the tunnel liner plates are used only to maintain a tunneled opening until the carrier pipe is installed, and the annular space between the carrier pipe and the tunnel liner is completely filled with cement grout within a

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reasonably short time after completion of the tunnel, then the tunnel liner plates need not be galvanized and coated.

Reinforced concrete pipe may be used for a casing. For a cover depth of 14' or less, reinforced concrete pipe shall conform to the current ASTM C76, Class V, Wall C. It may be used in open cut methods of installation, or when suitably designed for jacking methods. For depth of cover greater than 14', the designer shall prepare an engineering analysis in accordance with the current, at time of Application, AREMA Manual for Railway Engineering, Chapter 8, Part 10. For elliptical or arch pipe, where reinforced concrete pipe with supporting strength of the pipe (D) equal to 3,000 pounds per linear foot is not available, a separate engineering analysis shall be submitted.

For flexible casing pipe, a minimum vertical deflection of the casing pipe of 3 percent of its diameter plus 1/4" shall be provided so that no loads from the roadbed, track, traffic or casing pipe itself are transmitted to the carrier pipe. When insulators are used on the carrier pipe, the inside diameter of flexible casing pipe shall be at least 2" greater than the outside diameter, including insulation, of the carrier pipe for pipe less than 8" in diameter; at least 3 1/4" greater for pipe 8" to 16" inclusive in diameter; and at least 4 1/2" greater for pipe 18" and over in diameter.

When steel casing pipe is used, the joints shall be fully closed by welding or mechanical means to ensure tightness. The closure shall develop the full strength of the casing pipe. Closure details shall be shown on the plans.

## 2.5 SIGNS

All pipelines (except those in streets where it would not be practical to do so) shall be prominently marked at Right-of-Way lines (on both sides of track for under crossings) by durable, weatherproof signs located on the edge of Right-of-Way over the centerline of the pipe. Signs shall show the following:

1. Name and address of Owner
2. Contents of Pipe
3. Pressure in Pipe
4. Depth of pipe below grade at point of sign
5. Emergency telephone in event of pipe rupture

The material, size of lettering and the installation method of the sign shall be as approved by Amtrak. For pipelines running longitudinally on Amtrak property, signs shall be placed over the pipe (or offset and appropriately marked) at all changes in direction of the pipeline. Such signs should also be located so that when standing at one sign the next adjacent sign in either direction is visible. The owner shall maintain all signs on Amtrak Right-of-Way as long as the Occupancy Permit is in effect. Any entry on to Amtrak property shall be made in accordance with all provisions of the Right of Entry Permit.

## 2.6 EMERGENCY SHUT-OFF VALVES

Accessible emergency shut-off valves shall be installed on each side of the railroad at locations selected by Amtrak. Where pipelines are provided with automatic control stations and within distances approved by Amtrak, no additional valves will be required. Description of location of those facilities shall be part of the Application.

## 2.7 DEPTH OF PIPELINE INSTALLATION

Pipe under Amtrak tracks and across Amtrak Right-of-Way shall be not less than 5 1/4' from bottom of tie to top of casing at its closest point. On other portions of Right-of-Way where casing is not directly beneath any track, the depth from ground surface or from bottom of ditches to top of casing shall be not less than 4', unless otherwise specified herein.

## 2.8 CATHODIC PROTECTION

Cathodic protection shall be applied to all pipelines and casings carrying flammable substances in accordance with ANSI Standards.

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Where casing and/or carrier pipe is cathodically protected by other than anodes, Amtrak shall be notified and a suitable test shall be made and witnessed by Amtrak to insure that all structures and facilities are adequately protected from the cathodic current in accordance with the recommendation of Reports of Correlating Committee on Cathodic Protection, current issue by the National Association of Corrosion Engineers.

## 2.9 SOIL INVESTIGATIONS

For all pipe crossings, soil borings or other soil investigations approved by Amtrak shall be made to determine the nature of the underlying material (see Part 1, Section 1.2 for procedure to enter Amtrak property). Boring location plans need to be approved by Amtrak in advance of taking of the borings.

Borings shall be made on each side of the tracks, on the centerline of the pipe crossings, and as close to the tracks as practicable.

Soil borings shall be made in accordance with the current, at time of Application, AREMA Manual for Railway Engineering, Chapter 8, Part 22. Soils shall be investigated by the split-spoon and/or thin walled tube method, and rock shall be investigated by the coring method, as appropriate. The location of the carrying pipe and/or casing shall be superimposed on the Boring Location Plan before submission to Amtrak.

Soil boring logs shall clearly indicate all of the following:

1. Boring number as shown on Boring Location Plan.
2. Elevation of ground at boring, using the same NGVD (National Geodetic Vertical Datum) or NAVD (North American Vertical Datum) as the pipeline construction plans. The location of the carrier pipe and/or casing pipe shall be superimposed on the boring logs before submission to Amtrak.
3. Description or soil classification of each soil sample encountered shall be made in accordance with the Unified Soils Classification System. Classification and description of rock shall include type, local designation, joint or fracture frequency, foliation and, joint dip, surface degree of weathering and any other pertinent observations concerning the drilling and recovery.
4. Elevations or depth from surface for each change in strata.
5. Identification of depth where samples were taken or attempted and percentage of recovery.
6. Location of ground water at time of sampling and, if available, subsequent readings shall be reported. Observed conditions, such as depth of hole or casing, drill fluid, recent precipitation, surface elevation of nearby bodies of water and time permitted for the stabilized level to occur shall be noted.
7. Natural dry density in pounds per cubic foot for all strata.
8. Unconfined compressive strength in tons per square foot for all cohesive strata.
9. Natural water content (percent), liquid limit (percent) and plastic limit (percent) for all cohesive soils.
10. Standard Penetration Test N Value in blows per foot (or inches/blow), for each sample obtained or unsuccessful attempt.
11. Samples shall be retained for review by Amtrak.
12. Failed boring attempts shall be logged and reported.
13. All borings and attempts shall be tremie grouted with non-shrink grout or other approved material. The quantity of grout material used shall be measured and reported.

Soil boring logs shall be accompanied with a plan drawn to scale showing the location of borings in relation to the tracks and the proposed pipe location, the elevation of ground surface at each boring, and the elevation of the base of rail of the tracks. Elevations shall be shown to the nearest 0.1 foot.



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Rev 2 06/23/14**PART 3 – CONSTRUCTION****3.1 CONSTRUCTION INSPECTION REQUIREMENTS**

The Applicant shall provide full time on-site inspection by a Resident Engineer during the installation of temporary and permanent facilities approved by Amtrak. This inspection shall be under the supervision of a Registered Professional Engineer licensed in the State in which the work is being performed. The Professional Engineer shall certify that the facilities were installed in accordance with these specifications and the approved plans. The on-site Resident Engineer shall coordinate the activities of the contractor with the Amtrak Project Engineer. All work shall be performed in accordance with Amtrak Engineering Practice EP3014 Maintenance and Protection of Railroad Traffic during Contractor Operations.

**3.2 INSTALLATION METHODS****Open Cut or Braced Trench**

1. Installation by open cut or braced trench methods shall comply with the current, at time of Application, AREMA Manual for Railway Engineering, Chapter 1, Part 4. At least 60 days may be required for Amtrak review and approval of open cut or braced trench methods.
2. Where Amtrak has approved the open cut method, pipe shall be installed on a Class B bed of compacted graded aggregate. Sand backfill shall be used to fill around the sides and on top of the pipe. A colored warning tape shall be placed a minimum of 12" above the top of the pipe. Additional backfill shall be well-graded, clean granular soil having less than 20 percent by dry weight passing No. 200 US STD sieve. Maximum aggregate size shall be ½". Backfill shall be placed in loose 8" layers and compacted to at least 95 percent of its maximum density at within 2% of the optimum moisture content as determined in accordance with current ASTM D1557 (AASHTO T180).
3. Prior to the start of an open cut installation, the contractor shall have all materials on site, including emergency stand-by handling equipment.

**Jacking**

1. Jacking of casing pipe shall be in accordance with the current AREMA Manual for Railway Engineering, Chapter 1, Part 4. This operation shall be continuous once started, and shall be conducted without hand-mining ahead of the pipe and without the use of any type of boring, auguring, or drilling equipment. Ordinarily 36-inch diameter pipe is the minimum size that should be used. Bracing and backstops shall be designed and jacks of sufficient rating shall be used so that the jacking can be progressed without stoppage (except for adding lengths of pipe) until the leading edge of the pipe has reached the receiving pit or is at least 25' from the centerline of the last track.
2. When jacking reinforced concrete pipe, grout holes, tapped for no smaller than 1½" pipe, shall be cast into pipe at manufacture. Grout holes shall be spaced at approximately 3' around the circumference and 4' longitudinally with a minimum of three grout holes around the circumference. Immediately upon completion of jacking operations, the installation shall be pressure grouted.

**Horizontal Directional Drilling / Directional Boring**

1. Due to the unique circumstances and conditions encountered along the railroad Right-of-Way (ROW), each Horizontal Directional Drilling (HDD) request will be reviewed and approved at Amtrak's sole discretion on a case by case basis.
2. The applicant utilizing the HDD method of installation shall meet all the requirements found in EP 3005, Section 02082A, Horizontal Directional Drilling / Directional Boring. If HDD is deemed unacceptable by Amtrak, the applicant may consider other installation techniques contained within EP 3005, Section 02081A, Pipeline Occupancy, for the installation of the pipeline or utility crossing.

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#### Tunneling with Liner Plate

1. Tunneling operations shall be conducted as approved by Amtrak. Care shall be exercised in trimming the surface of the excavated section in order that the steel liner plates fit snugly against undisturbed material.
2. Excavation shall not be advanced ahead of the previously installed liner plates any more than is necessary for the installation of the succeeding liner plate. The vertical face of the excavation shall be supported as necessary to prevent sloughing.
3. At any interruption of the tunneling operation, the heading shall be completely bulkheaded.
4. Unless otherwise approved by Amtrak the tunneling shall be conducted continuously on a 24-hour basis, until the tunnel liners extend at least equal to 25' beyond the centerline of the last track.
5. A uniform mixture of 1:6 cement grout shall be placed under pressure behind the liner plates to fill any voids existing between the liner plates and the undisturbed material. Grout holes tapped for no smaller than  $\frac{1}{4}$ " pipe, spaced at approximately 3' around the circumference of the tunnel liner shall be provided in every third ring. Grouting shall start at the lowest hole in each grout panel and proceed upwards simultaneously on both sides of the tunnel. A threaded plug shall be installed in each grout hole as the grouting is completed at that hole.
6. Grouting shall be kept as close to the heading as possible, using grout stops behind the liner plates if necessary. Grouting shall proceed as directed by Amtrak, but in no event shall more than six linear of tunnel be progressed beyond the grouting.

#### Tunneling Shields

1. All pipes 60" and larger in outside diameter shall be placed with the use of a tunneling shield unless otherwise approved by Amtrak. Pipes of smaller diameter may also require a shield when, at the sole discretion of Amtrak, soil or other conditions indicate its need.
2. The shield shall be of steel construction designed to support railroad track loading as specified herein, in addition to other loadings it must sustain. The advancing face shall be provided with a hood, extending no less than 20 inches beyond the face and extending around no less than the upper 240 degrees of the total circumference. It shall be of sufficient length to permit the installation of at least one complete ring of liner plates within the shield before it is advanced for the installation of the next ring of liner plates. It shall conform to and not exceed the outside dimensions of the pipe being placed by more than one inch at any point on the periphery unless otherwise approved by Amtrak.
3. The shield shall be adequately braced and provided with necessary appurtenances for completely bulk heading the face with horizontal breast boards and arranged so that the excavation can be benched as may be necessary. Excavation shall not be advanced beyond the edge of the hood, except in rock.
4. Manufacturer's shop detail plans and manufacturer's computations showing the ability of the tunnel liner plates to resist the jacking stresses shall be submitted to Amtrak for approval.
5. The detail shield plans and design calculations prepared by a Registered Professional Engineer licensed in the state in which the work is being performed shall be submitted to Amtrak for approval. No work shall proceed until such approval is obtained.

#### Boring

1. This method consists of pushing the pipe into the fill with a boring auger rotating within the pipe to remove the soil. When augers or similar devices, are used for pipe emplacement, the front of the pipe shall be provided with mechanical arrangements or devices that will positively prevent the auger and cutting head from leading the pipe so that there will be no unsupported excavation ahead of the pipe. The auger and cutting head arrangement shall be removable from within the pipe in the event an obstruction is encountered. The over-cut by the cutting head shall not exceed the outside diameter of the pipe by more than one half inch. The face of cutting head shall be arranged to prevent the free flow of soft or poor material. The use of water or other liquids to facilitate casing emplacement and spoil removal is prohibited. Plans

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and descriptions of the arrangement to be used shall be submitted to Amtrak for approval and no work shall proceed until such approval is obtained.

2. Any method which employs simultaneous boring and jacking or drilling and jacking for pipes over 8" in diameter which does not have the above approved arrangement will not be permitted. For pipes 8" and less in diameter, auguring or boring without this arrangement may be considered for use only as approved by Amtrak.

### 3.3 CONSTRUCTION OPERATIONS

All construction operations shall be conducted so as not to interfere with, interrupt, or endanger the operation of trains or damage, destroy, or endanger the integrity of railroad facilities. All work on and near Amtrak property shall be conducted in accordance with Amtrak safety rules and regulations. The contractor shall secure and comply with the Amtrak safety rules and shall give written acknowledgment to Amtrak that they have been received, read, and understood by the contractor and his employees. Construction operations will be subject to Amtrak inspection at any and all times.

If an obstruction is encountered during installation to stop the forward action of the pipe and it becomes evident that it is impossible to advance the pipe, operations will cease and the pipe shall be abandoned in place and filled completely with grout.

Bored or jacked installations shall have a bored hole essentially the same as the outside diameter of the pipe plus the thickness of the protective coating. If voids should develop or if the bored hole diameter is greater than the outside diameter of the pipe (plus coating) by more than approximately 1 inch, grouting or other methods approved by Amtrak shall be employed to fill such voids.

Pressure grouting of the soils or freezing of the soils before or during jacking, boring, or tunneling may be required at the discretion of Amtrak to stabilize the soils, control ground water, prevent loss of material and prevent settlement or displacement of embankment and/or tracks. Grout shall be cement, chemical or other special injection material selected to accomplish the necessary stabilization.

The material to be used and the method of injection shall be prepared by a Registered Professional Engineer licensed in the state in which the work is being performed, or by an experienced and qualified company specializing in this work and submitted for approval to Amtrak before the start of work. Proof of experience and competency shall accompany the submission. Material Safety Data sheet shall be provided for all materials.

When the presence of surface, ground and/or artesian water is known or expected to be encountered, pumps of sufficient capacity to handle the flow shall be maintained at the site by the contractor, and upon approval of Amtrak, the contractor shall operate them. Pumps in operation shall be constantly attended on a 24-hour basis, until, in the sole judgment of Amtrak, the operation can be safely halted. When dewatering, close observation by optical survey, or other instrumentation as required, to verify the adequacy of work, shall be maintained to detect any settlement or displacement of railroad embankment, tracks and facilities. A detailed plan of water control for work including instrumentation shall be submitted by the Applicant for approval by Amtrak.

All cranes, lifts, or other equipment that will be operated in the vicinity of the Railroad's electrification and power transmission facilities shall be operated and electrically grounded as required by EP3014 section 01141A and shall comply with OSHA Safety and Health Standards, Page 175, Subpart N1926.950. OSHA 2207, Revised 1983, or as provided by the High Voltage Proximity Act.

At all times when the work is being progressed, a field supervisor for the work with no less than 12 months experience in the operation of the equipment being used shall be present. If boring, drilling, or similar machines are being used, the machine operator also shall have no less than 12 months experience in the operation of the equipment being used.

Blasting will not usually be permitted under or on Amtrak Right-of-Way. If the use of blasting is proposed, technical justification of its necessity must be submitted by review and approval. If blasting is approved, it must be performed in accordance with EP3003.

Equipment or personnel working closer than 15 feet to the centerline of an adjacent track shall be considered as fouling that track. Insofar as possible, all operations shall be conducted no less than this distance. Operations closer than 15' to the centerline of a track shall be conducted only with the permission of, and as directed by, a duly qualified Amtrak employee present at the worksite. Special arrangements must be made at

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least 21 working days in advance of the work, where fouling of track or structures is required for access. These operations require the prior approval of Amtrak.

Crossing of tracks at grade by equipment and personnel is prohibited, except by prior arrangement with, and as directed by Amtrak.

#### Support of Excavation Adjacent to Track.

##### 1. Launching and Receiving Pits

- a. The location and dimensions of all pits or excavations shall be shown on the plans. The distance from centerline of adjacent track to face of pit or excavation shall be clearly labeled. The elevation of the bottom of the pit or excavation must be shown on the profile.
- b. The face of all pits shall be located at a minimum of 25' from the centerline of adjacent track, measured at right angles to track, unless otherwise approved by Amtrak.
- c. If the bottom of the pit excavation intersects the theoretical railroad embankment line (see EP3014, Section 02261A, Requirements for Temporary Sheet piling and Shoring to Support Amtrak Tracks, Sketch 1), interlocking steel sheet piling, driven prior to excavation, must be used to protect the track stability. The use of trench boxes or similar devices is not acceptable in this area.
- d. Design plans and computations for the pits, signed and sealed by a Registered Professional Engineer licensed in the State in which the work is being performed, must be submitted by the Applicant at the time of application or by the contractor prior to the start of construction. If the pit design is to be submitted by the contractor, the project specification must require the contractor to obtain Amtrak's approval prior to beginning any work on or which may affect Amtrak's property.
- e. The sheeting shall be designed to support all lateral forces caused by the earth, railroad and other surcharge loads.
- f. After construction and backfilling, all sheet piling that is not removed within 10' of centerline of adjacent track must be cut off per EP3014, Section 02261A, Requirements for Temporary Sheet piling and Shoring to support Amtrak tracks, paragraph 3.1.F.
- g. All excavated areas are to be illuminated (flashing warning lights not permitted) fenced and otherwise protected as directed by Amtrak.

#### 3.4 SUPPORT OF TRACKS

When the jacking, drilling, tunneling or boring method of installation is used, and depending upon the size and location of the crossings, temporary track supporting structures shall be installed. The requirement for these temporary structures may be deleted only with the approval of Amtrak.

Unless otherwise agreed, all work involving rail, ties and other track material will be performed by Amtrak. The Applicant shall reimburse Amtrak for all costs associated with the installation and removal of track supports.

When excavation for a pipeline or other structure will be within the theoretical railroad embankment line (see EP3014, Section 02261A, Requirements for Temporary Sheet piling and Shoring to Support Amtrak Tracks, Sketch 1) of an adjacent track, interlocking steel sheet piling will be required to protect the track.

Prior to the start of construction, the applicant must deliver a stockpile (minimum 10 tons) of approved railroad ballast to an area designated by Amtrak at the project site.

#### 3.5 PIPELINES IN ROADWAYS UNDER BRIDGES

Pipelines to be installed under bridges that carry Amtrak tracks above a roadway shall be designed and constructed in conformance with all applicable Sections of this specification. The casing pipe, when required, may be designed for the applicable highway loading (see Sketch 4).

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Rev 2 06/23/14**3.6 PIPELINES ON BRIDGES**

Pipelines carrying flammable substances or non-flammable substances that by their nature might cause damage if escaping on or near railroad facilities or personnel shall not be installed on bridges over railroad tracks or bridges carrying railroad tracks.

In special cases when it can be demonstrated to Amtrak's satisfaction that such an installation is necessary and that no practicable alternative is available, Amtrak may permit the installation and only by special design approved by Amtrak (see Sketch 5).

Pipelines on bridges shall be so located as to minimize the possibility of damage from vehicles, railroad equipment, vandalism and other external causes. They shall be encased in a casing pipe. Where appropriate, permanent barriers shall be constructed at each end of the bridge to prevent trespassers from crossing the bridge via the pipe casing.

**3.7 BONDING AND GROUNDING OF PIPELINES ON BRIDGES IN ELECTRIFIED TERRITORY**

Carrier pipe shall be enclosed in a metal casing that is isolated from carrier pipe by approved insulators having a dielectric value of not less than 25 kV that provide an air gap between carrier pipe and casing of not less than 2 inches, in accordance with ANSI or NESC Standards.

Carrier pipe supporting hangers, mountings or cradles shall provide an insulation value of not less than 25 kV and provide an air gap of not less than 2 inches between casing and any portion of mounting assembly.

Casing shall be bonded to Amtrak's return conductor at each end through bridge steel or direct when bridge members are of non-conductive material conforming to Amtrak Standards.

The casing and installation equipment shall be bonded and grounded to an earth ground of not more than 25 ohms resistance to ground for construction. The applicant shall monitor adequacy of the ground.

**3.8 DRAINAGE**

Occupancies shall be designed and their construction shall be accomplished so that adequate and uninterrupted drainage of Amtrak Right-of-Way is maintained. If, in the course of construction it may be necessary to block a ditch, pipe or other drainage facility, temporary pipes, ditches or other drainage facilities shall be installed to maintain adequate drainage as approved by Amtrak. Upon completion of the work, the temporary facilities shall be removed and the permanent facilities restored.

Where disturbance of the ground may result in contamination of the ballast or this contamination occurs as result of a wash out, the Applicant shall be responsible for costs to restore the track and structure. Temporary soil erosion measures for protecting the track shall be submitted as part of the construction plan and approved by Amtrak.

Under no circumstances should additional flow be routed onto Amtrak Right-of-Way, either during construction or upon completion.

**3.9 INSPECTION AND TESTING REQUIREMENTS FOR HAZARDOUS MATERIALS**

For pipelines carrying flammable or hazardous materials, ANSI Codes B31.8 and B31.4, current at time of constructing the pipeline, shall govern the inspection and testing of the facility on Amtrak property except that proof-testing of strength of carrier pipe shall be in accordance with the requirements of ANSI Codes B31.8 for location Classes 2, 3, or 4 or ANSI Code B31.4, as applicable, for all pipelines carrying oil, liquefied petroleum gas, natural or manufactured gas and other flammable substances.

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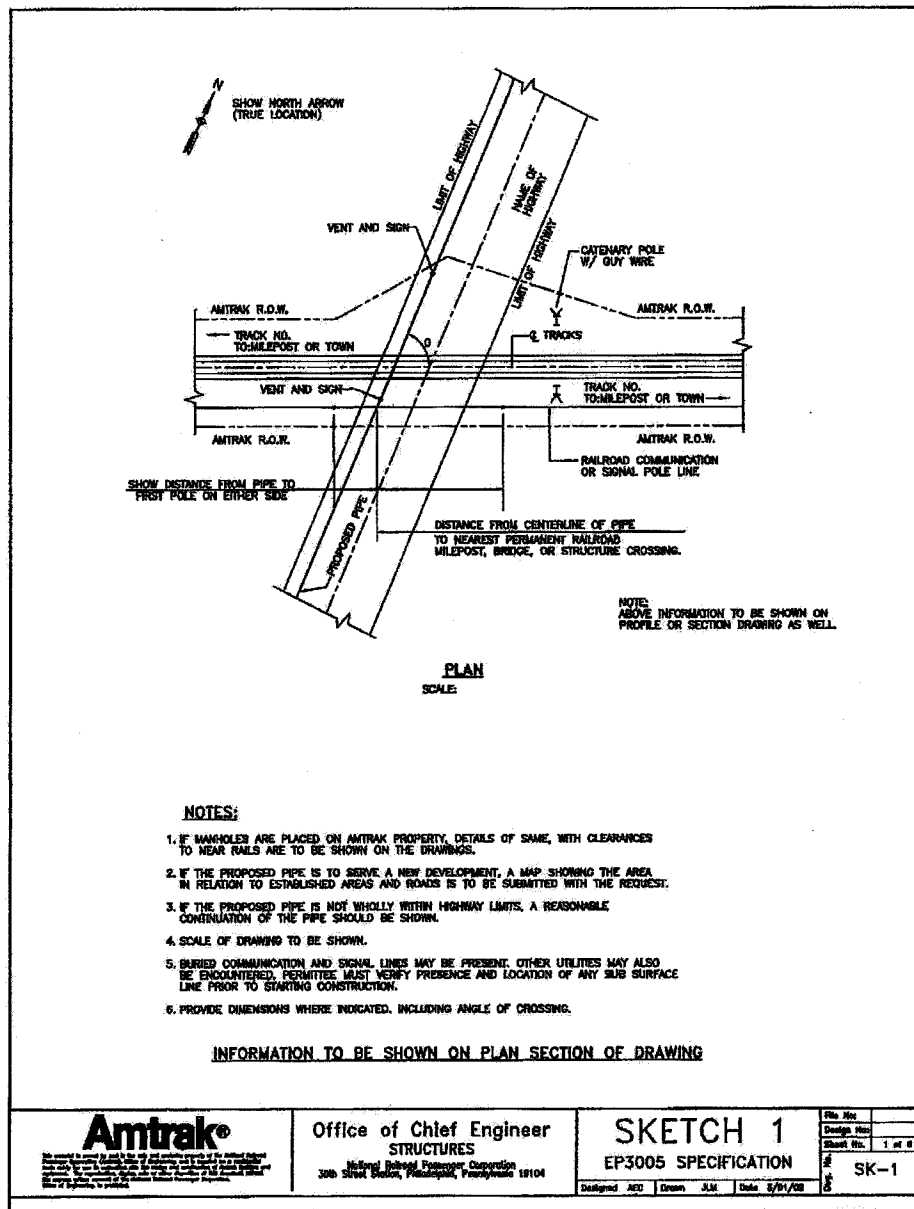
## **PART 4 – INFORMATION SKETCHES**

### **4.1 The following Information Sketches are attached:**

- Sketch 1 – Information to be shown on Plan Section of drawing.
- Sketch 2 – Information to be shown on Profile Section of drawing.
- Sketch 3 – Longitudinal Occupancy.
- Sketch 4 – Pipeline in Roadway Under Railroad Bridge
- Sketch 5 – Details for Bonding and Grounding of Pipelines
- Sketch 6 – Pipe Crossing Data Sheet

PIPELINE OCCUPANCY

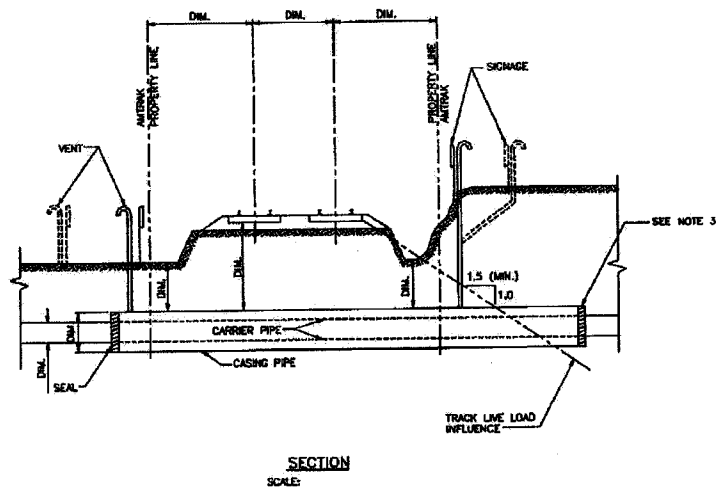
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PIPELINE OCCUPANCY

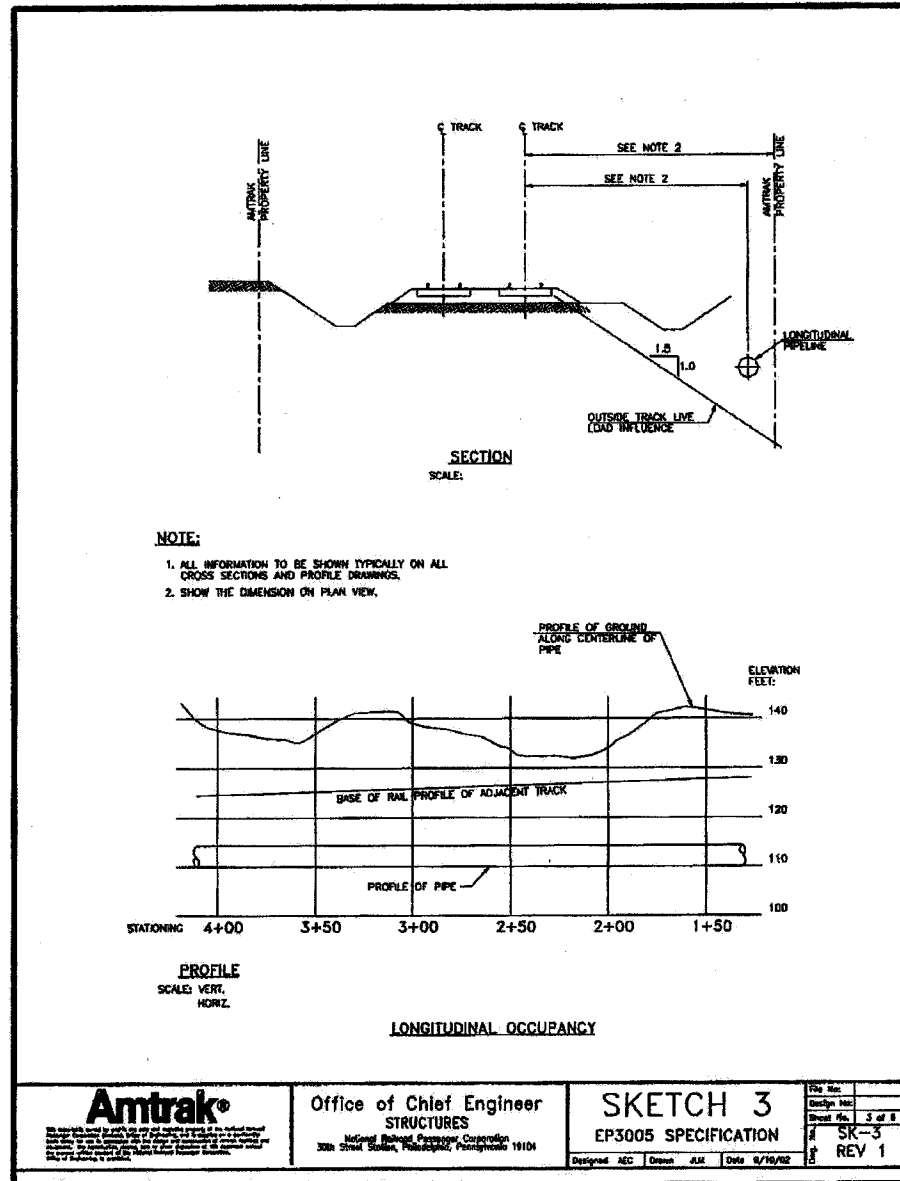
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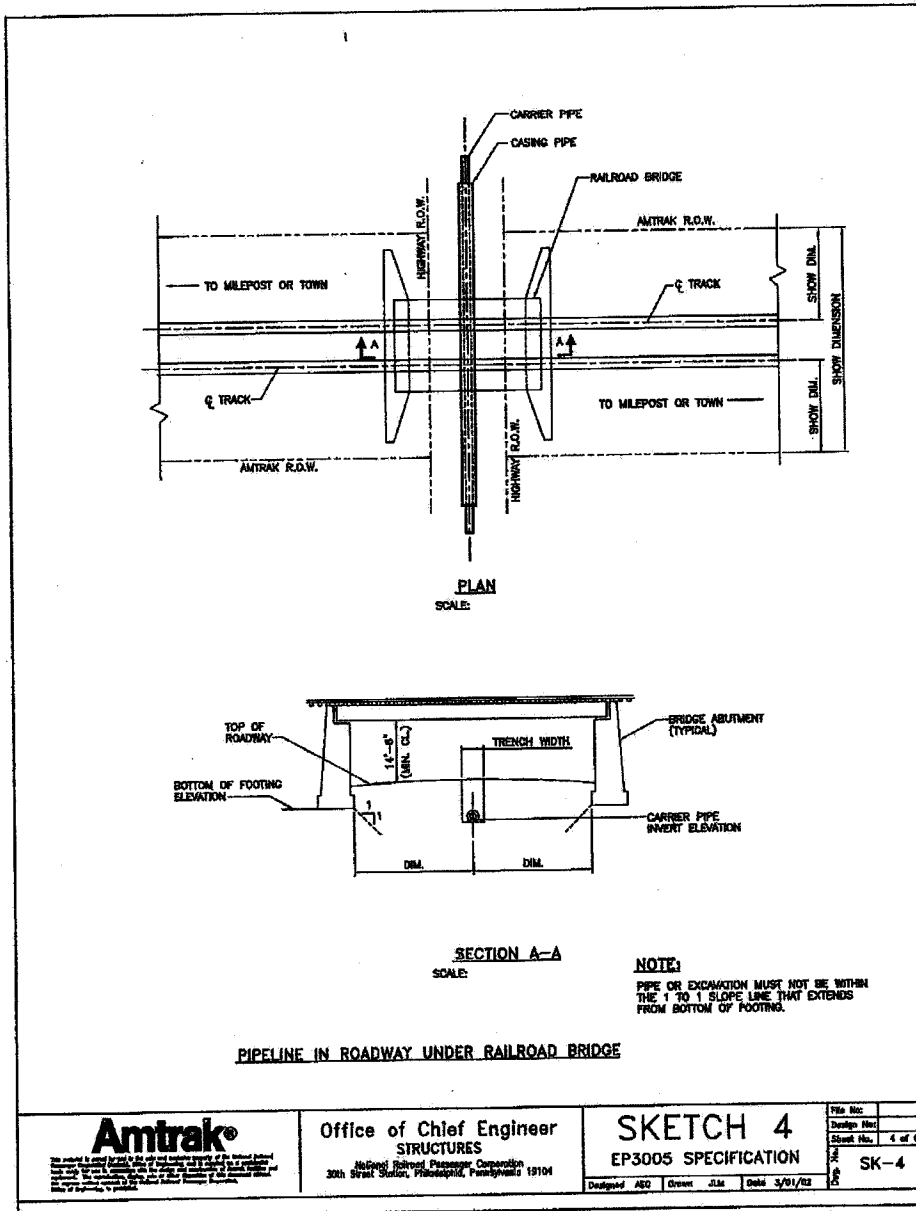
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PIPELINE OCCUPANCY

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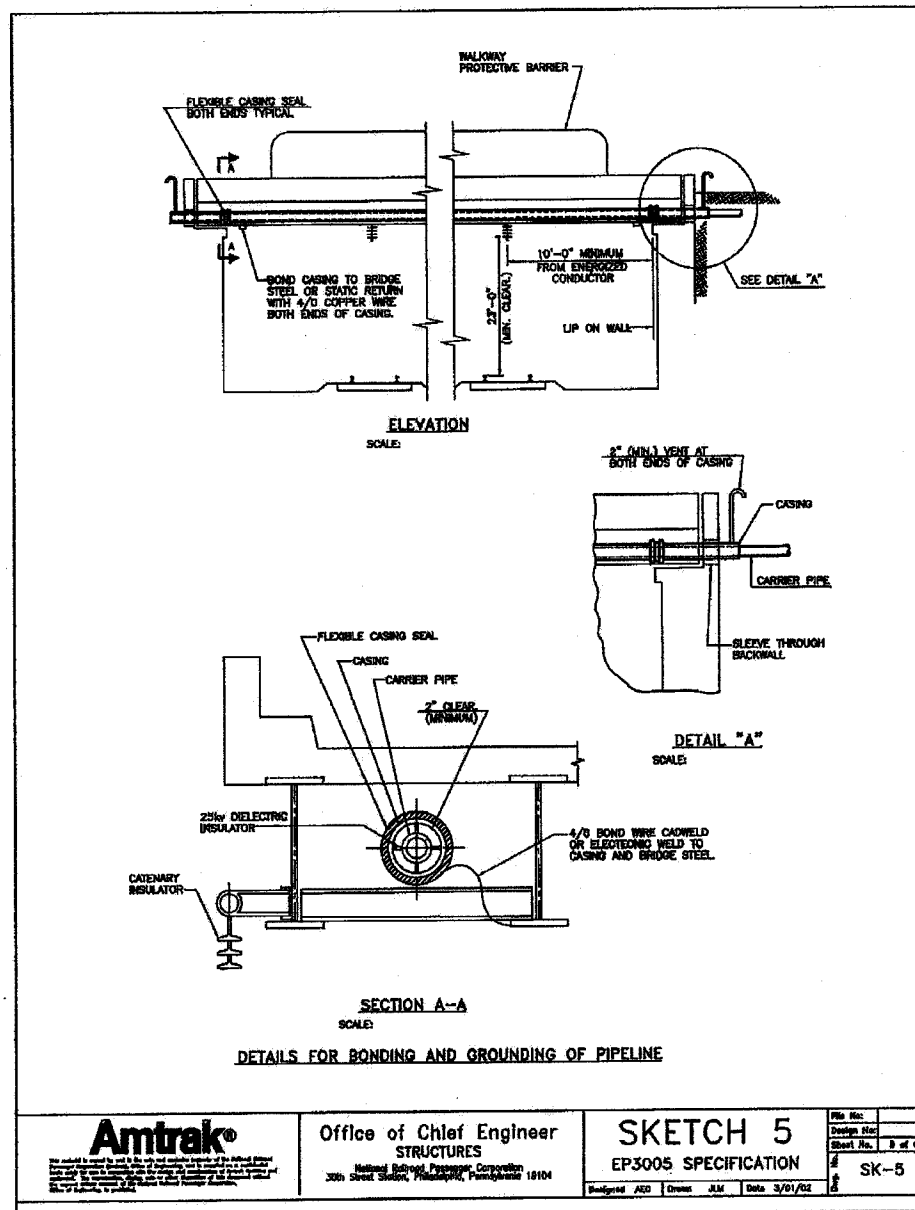
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PIPELINE OCCUPANCY

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Rev 2 06/23/14PIPE CROSSING DATA SHEET

IN ADDITION TO PLAN AND PROFILE OF CROSSING, DRAWINGS SUBMITTED FOR AMTRAK APPROVAL SHALL CONTAIN THE FOLLOWING INFORMATION:

	<u>CARRIER PIPE</u>	<u>CASING PIPE</u>
CONTENTS TO BE HANDLED	_____	_____
NORMAL OPERATING PRESSURE	_____	_____
NOMINAL SIZE OF PIPE	_____	_____
OUTSIDE DIAMETER	_____	_____
INSIDE DIAMETER	_____	_____
WALL THICKNESS	_____	_____
WEIGHT PER FOOT	_____	_____
MATERIAL	_____	_____
PROCESS OF MANUFACTURE	_____	_____
SPECIFICATION	_____	_____
GRADE OR CLASS	_____	_____
TEST PRESSURE	_____	_____
TYPE OF JOINT	_____	_____
TYPE OF COATING	_____	_____
DETAILS OF CATHODIC PROTECTION	_____	_____
DETAILS OF SEAL OR PROTECTION AT ENDS OF CASING	_____	_____
METHOD OF INSTALLATION	_____	_____
CHARACTER OF SUBSURFACE MATERIAL AT THE CROSSING LOCATION _____ (UNIFIED SOIL CLASS)		
APPROXIMATE ELEVATION OF GROUND WATER LEVEL _____ FEET		
SOURCE OF INFORMATION OF SUBSURFACE CONDITIONS (BORING, TEST PITS OR OTHER )		

NOTE:

ANY SOIL INVESTIGATION MADE ON RAILROAD PROPERTY OR ADJACENT TO TRACKS SHALL BE CARRIED ON UNDER THE SUPERVISION OF AMTRAK.



Office of Chief Engineer  
STRUCTURES  
National Railroad Passenger Corporation  
390 Street Station, Philadelphia, Pennsylvania 19104

SKETCH 6  
EP3005 SPECIFICATION

File No.	
Design No.	
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PIPELINE OCCUPANCY

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# **EP 3005 – ADDITIONAL REQUIREMENTS FOR HORIZONTAL DIRECTIONAL DRILLING (HDD) / DIRECTIONAL BORING – SPECIFICATION 02082A**

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## PART 1 - GENERAL

### 1.1 SCOPE

This engineering practice supplements EP3005 – PIPELINE OCCUPANCY, and describes items to be included in the design and installation of buried pipelines using the Directional Boring/Horizontal Directional Drilling (HDD) method adjacent and proximate to Amtrak tracks.

### 1.2 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

### 1.3 DEFINITIONS

For all definitions, refer to EP3005 – PIPELINE OCCUPANCY, Section 02081A Pipeline Occupancy.

### 1.4 SUBMISSION REQUIREMENTS

In addition to the plans and documentation specified in EP3005, Section 02081A, Pipeline Occupancy, the Applicant shall submit the following preliminary information with the request for consideration of this type of installation:

1. Application form.
2. Pre-bore survey grid line with angles and depths defined.
3. Actual planned depth of pipe under each railroad track. The plan and profile views must show the entire bore, including the sending and receiving pits, regardless of the railroad right-of-way limits.
4. Construction procedure, including a general description and the manufacturer's catalog information of equipment to be used.
5. Minimum allowable pipe bend radius vs. installation radius.
6. Specifications and capacities of the bore machine. This includes:
  - a. Maximum & intended capacities
  - b. Maximum & intended drilling RPM
  - c. Maximum & intended drilling PSI
  - d. Maximum & intended GPM
7. Slurry mix design appropriate to the anticipated geological conditions. Material list including bentonite and bentonite additives proposed for the project along with Material Safety Data Sheets (MSDS) for all materials used on the site, and water source for drilling operations.
8. A defined slurry recovery method. Disposal on Amtrak property or within Amtrak drainage ditches/facilities is prohibited.
9. Statement of expected soil conditions and statement of all drill heads on site for expected and unexpected soil conditions.
10. Submit calculations showing the theoretical settlement for the proposed installation is within safety limits (less than half the maximum allowable settlement) for the FRA class

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of track as established by the Amtrak Track Department. See *Sketch 1 – Calculation of Theoretical Settlement* for approved method.

11. Statement that once the bore enters Amtrak property, the work will be continuous until the drilling is complete and the pipe is pulled into place.
12. Statement that the bore will be tracked constantly, with the location and depth marked every 10 feet.
13. Qualifications of drilling contractor, including specific instances of previous successful experience in drilling under railroad and other sensitive surface facilities.

If Amtrak determines this method of installation is acceptable, final design plans and specifications are to be prepared and submitted for approval.

The Applicant shall revise and resubmit plans and calculations as many times as necessary, until a complete and correct site-specific work plan for directional boring/HDD has been approved.

## PART 2 - PRODUCTS (Not Used)

## PART 3 - CONSTRUCTION

Due to the unique circumstances and conditions encountered along the railroad Right-of-Way (ROW), each HDD request will be reviewed at Amtrak's sole discretion on a case by case basis. The applicant utilizing the HDD method of installation shall meet all the requirements found in EP 3005, Section 02082A, Horizontal Directional Drilling / Directional Boring. If HDD is deemed unacceptable by Amtrak, the applicant may consider other installation techniques contained within EP 3005, Section 02081A, Pipeline Occupancy, for the installation of the pipeline or utility crossing.

Contractors installing buried pipelines using the directional boring/horizontal directional drilling (HDD) method shall conform to the following:

1. **USE OF HDD:** This method consists of setting up specialized drilling equipment on existing grade and boring a small diameter pilot hole on the desired vertical and horizontal alignment, using a mechanical cutting head with a high-pressure fluid (bentonite slurry) to remove the cuttings. The drill string is advanced with the bentonite slurry pumped through the drill string to the cutting head and then forced back along the outside of the drill string, carrying the cuttings back to the surface for removal. When the cutting head reaches the far side of the crossing, it is removed and a reamer is attached to the lead end of the drill string. The pipeline is attached to the reamer and the pilot hole is then back reamed while the pipeline is pulled into place.
2. For pipelines conveying gas or liquid substances, only steel pipe may be installed under track(s) and/or Amtrak right-of-way utilizing HDD.
3. For wireline installations, including fiber optic cable, HDPE pipe may be installed as the outermost pipe. Bundling is prohibited. All inner ducts must have an outer casing pipe. If the commodity to be conveyed permits the use of HDPE pipe, it must be grade SDR 11 or thicker wall.
4. Bore size shall not be any greater than is necessary.

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Maximum Reamed Diameter ( $d_r$ ) by Product Diameter ( $d_p$ )	
$d_p$	$d_r$
< 8" (< 200 mm)	$d_p + 4"$ (100 mm)
8" - 24" (200 - 600 mm)	$d_p \times 1.5$
> 24" (> 600 mm)	$d_p + 12"$ (300 mm)

Bennett, David, and Samuel T. Ariaratnam. Horizontal Directional Drilling Good Practices Guidelines. Third ed. HDD Consortium, 2008.

5. The launching and receiving pits, if used, must be situated outside of the railroad influence zone.
6. The Contractor shall provide Amtrak with a detailed schedule of proposed construction operations, detailing each step of the proposed construction operations in proximity to Amtrak tracks, so that Amtrak may review and approve the proposed operations, and may properly inspect and monitor operations.
  - a. The Contractor must submit a Boring Plan that describes the anticipated rig capacity, the proposed equipment, and the method for advancing the borehole through expected soil conditions, angles, depth, and exact location of the exit ditch, the pilot hole diameter, the proposed reaming plan, including the diameter of pre-reams/back-reams and diameter of the final reamed bore hole, and the contingency equipment and plans for dealing with soil conditions that a soil engineering could reasonably expect to be encountered at the proposed HDD installation site. The contractor needs to address the condition when obstructions are encountered and what will be the remedial actions taken to stabilize the bore hole in order to prevent settlement and contamination of the track structure. The Boring Plan will also need to address the anticipated hours of operation during the HDD bore hole drilling and installation process, the minimum number of personnel, and their responsibilities on-duty and on-site during all HDD drilling operations. Consideration for working hours must be given to minimize risk to railroad operations during drilling operations.
  - b. The Contractor must refer to Part 5 of this document to review the "Frac-Out Contingency Plan" (sometimes referred to as Fracture Mitigation or Inadvertent Return of Materials Plan) established by Amtrak's Track Department, which details the method of monitoring quantity and capturing the return of drilling fluids with particular attention to variation from proposed plan (i.e. volumes, pressure, or consistency), responsibilities of the Contractor Project Engineer, and the proper field response to a "frac-out" or inadvertent return of materials occurrence.
    - 1) Although utmost care must be taken against inadvertent return of materials, if it does occur, the drilling operations should cease immediately and the bore hole stabilized to prevent further contamination and settlement of the track structure. Amtrak forces will complete the clean-up and repair of the contaminated track structure at the sole cost of the applicant.
  - c. During the pilot bore operations the drill head must be continuously monitored while crossing railroad property. The contractor shall establish a Survey Grid Line and provide a program of monitoring and documenting the actual location of the bore hole during drilling operations. If the location of the drill head is "lost" during the pilot bore drilling operations, the contractor will immediately cease operations, stabilize the bore hole, and endeavor to re-establish the drill head position before resuming any drilling.



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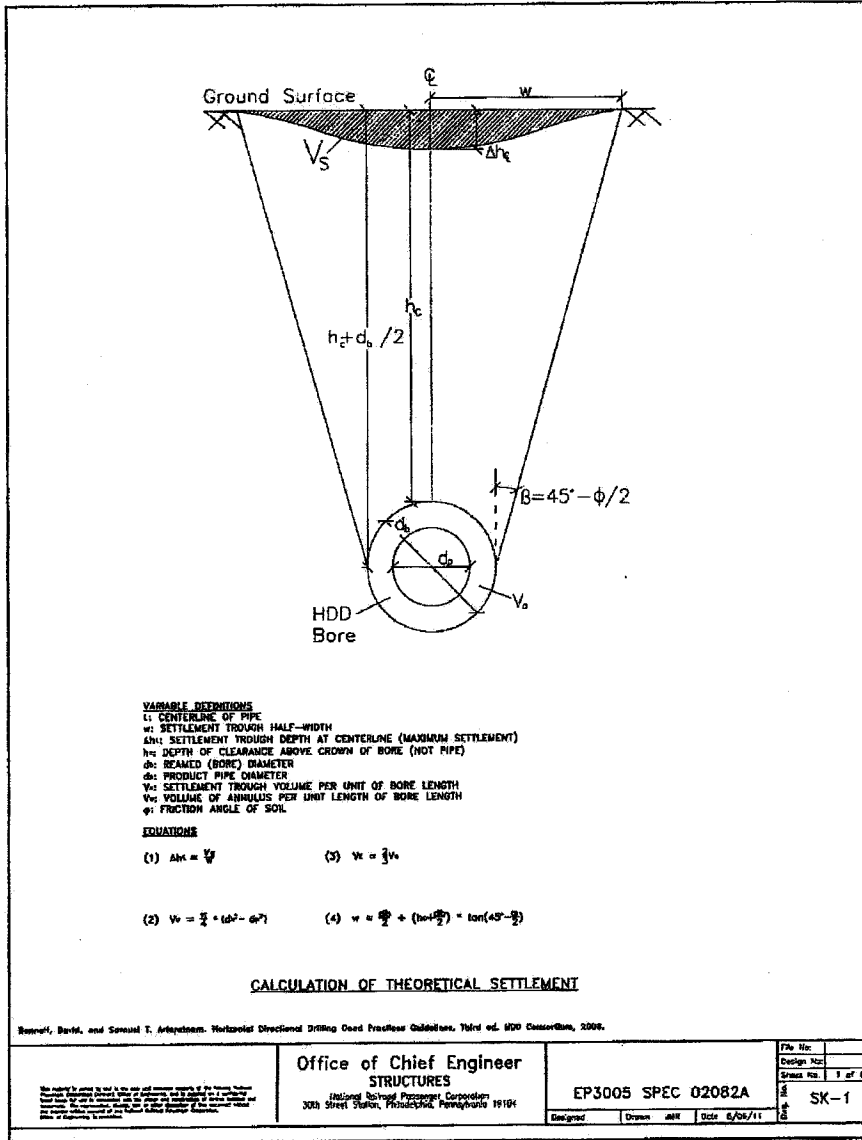
7. The ground and track must be monitored for movement during the drilling, reaming, and pullback processes. The inspection shall be carried out by a Resident Engineer provided by the Applicant as described in EP3005, Section 02081A, Horizontal Directional Drilling / Directional Boring.
8. No demobilization may occur until the casing pipe is in place or bore is abandoned and stabilized.

#### **PART 4 - INFORMATION SKETCHES**

The following Information Sketches are attached:  
Sketch 1 – Calculation of Theoretical Settlement

*Reminder: HDD is not a standard approved installation method on Amtrak right-of-way, and will require advanced engineering review and approval.*

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HORIZONTAL DIRECTIONAL DRILLING (HDD) / DIRECTIONAL BORING

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## PART 5 - ADDITIONAL TECHNICAL INFORMATION

### AMTRAK TRACK DEPARTMENT FRAC-OUT CONTINGENCY PLAN (FCP)

#### 5.1 INTRODUCTION AND PURPOSE

A frac-out is the condition where drilling fluid is released through either fractured bedrock or soil into the surrounding rock or soil and travels toward the surface fouling subballast and ballast in the railroad roadbed. Drilling operations have a potential to release drilling fluids into the surface environment through frac-outs.

Because drilling fluids consist largely of a bentonite clay-water mixture, they are not classified as toxic or hazardous substances as defined by EPA's 40 CFR, Part 261. However, if the drilling fluids are released into the water bodies, the bentonite has the potential to adversely impact fish and invertebrates. Therefore, they must be contained and disposed of properly.

Although drilling fluid seepage associated with a frac-out is most likely to occur near the bore entry and exit points where the drill head is shallow, frac-outs can occur in any location along the bore. This Frac-out Contingency Plan (FCP) establishes operational procedures and responsibilities for the prevention, containment, and clean-up of frac-outs associated with proposed drilling utility projects. All personnel and Subcontractors responsible for the work must adhere to this plan during the drilling process.

The specific objectives of this plan are the following:

1. Minimize the potential for a frac-out associated with drilling activities;
2. Provide for timely detection of frac-outs;
3. Protect the environmentally sensitive riverbed and associated riparian vegetation;
4. Ensure an organized, timely, and "minimum-impact" response in the event of a frac-out and release of drilling bentonite; and
5. Ensure that all appropriate notifications are made immediately to the Amtrak Project Manager, the on-site contractor, and all on-site personnel.

#### 5.2 DESCRIPTION OF WORK

Drilling operations will be halted by the drill rig operators immediately upon detection of a drop in the drilling pressure or other evidence of a frac-out. The cleanup or containment of all spills shall begin immediately and in accordance with procedures identified in this plan. The Contractor shall appoint a representative herein referred to as "The Contractor Project Engineer" to handle responsibility of implementing and enforcing the FCP. The Contractor Project Engineer shall be notified immediately of any spills by the on-site Drilling Foreman or Drilling Supervisor and shall be consulted by Amtrak's Environmental Group regarding cleanup procedures. The Contractor Project Engineer should be aware that other agencies may be involved in the cleanup procedures.

In the event of a frac-out, the Contractor Project Engineer will conduct an evaluation of the situation, recommend the type and level of response warranted including the level of notification required, and direct recommended mitigation actions based on the emergency guidelines and required actions discussed below:

1. Drilling will stop immediately for at least the period of time needed for both a thorough evaluation and recommendation by the Contractor Project Engineer;

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2. Work must not take place without Amtrak authorization;
3. The bore stem will be pulled back to relieve pressure on the frac-out;
4. The Contractor Project Engineer will be notified by the on-site Contractor Drilling Foreman or Supervisor that a frac-out has occurred. The Contractor Project Engineer must ensure that the Amtrak Project Engineer, all on-site personnel, and Amtrak's Environmental Group are notified and that adequate response actions are taken under the consultation of Amtrak's Environmental Group;
5. If the frac-out is minor, easily contained, has not reached the surface, and is not threatening sensitive resources, a leak-stopping compound shall be used to block the frac-out. If the use of a leak-stopping compound is not fully successful or the problem cannot be stopped within the allotted time or track outage, the borehole must be grouted in place and abandoned. Abandonment of the bore will only be required when all efforts to control the frac-out within the existing bore have failed. At that point, Amtrak's EP 3005 Section 02081A "Pipeline Occupancy Specifications" must be followed. The appropriate mix and method of grouting the borehole must be used so as to not contribute to the problem;
6. A spill kit shall be on site and used if a small frac-out has reached the surface and can be handled without directing and containing the spill through berms, swales, or other methods;
7. If the frac-out has reached the surface and is within 25 feet of the centerline of the nearest track, all material contaminated with bentonite shall be removed by hand by Amtrak forces at the project's expense to a depth of at least the bottom of the subballast in the roadbed and to a width of at least 2 feet outside of the roadbed. However, for frac-outs that are entirely outside of a line that is 25 feet from the centerline of the nearest track, the Contractor must remove the material contaminated with bentonite in a similar manner and also at the project's expense. The method of removal must assure that roadbed drainage is not impeded and that the drainage is not altered to result in unfavorable conditions that cause erosion, roadbed instability, or standing water. Although removal of material contaminated with bentonite within 25 feet of the centerline of the nearest track is restricted to Amtrak forces within 25 feet of the centerline of the nearest track, containment and disposal of the material contaminated with bentonite is always the responsibility of the Contractor. For frac-outs within 25 feet of the centerline of the nearest track, the Contractor Project Engineer must direct all Contractor activities to take place at least 25 feet away from the centerline of the nearest track whenever it is possible to do so. Removal, containment, and disposal must be done as required by law at the project's expense. A dike or berm may be constructed around the frac-out to entrap released drilling fluid if necessary so that the spill does not spread further and does not reach water bodies either directly or indirectly through drainage. Clean material shall be placed and the area returned to pre-project contours. The Contractor Project Engineer must direct all activities performed by the Contractor described above in this paragraph;
8. If a frac-out occurs and has reached the surface and becomes widespread, the Contractor Project Engineer shall authorize a readily accessible vacuum truck and bulldozer stored either on-site or within 10 minutes off-site to be mobilized. Containment materials such as straw bales shall be on-site and readily available prior to and during all operations. The vacuum truck may be positioned at either end of the line of the drill so that the frac-out can be reached by crews on foot or may be pulled by a bulldozer so that contaminated material can be vacuumed; and
9. All mitigation procedures must not pose additional threats to sensitive resources.

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### 5.3 CONTRACTOR PROJECT ENGINEER RESPONSIBILITIES

The Contractor Project Engineer has overall responsibility for implementing the FCP. The Contractor Project Engineer shall ensure that all workers are properly trained and familiar with the necessary procedures for response to a frac-out prior to commencement of drilling. For more details on training, see below. The Contractor Project Engineer shall ensure that he or she will be notified immediately by the on-site Drilling Foreman or Drilling Supervisor when a frac-out is detected. The Contractor Project Engineer will immediately notify the Amtrak Project Engineer. The Contractor Project Engineer will be responsible for ensuring that the site personnel are aware of the frac-out. With consultation with Amtrak's Environmental Group, the Contractor Project Engineer will be responsible for coordinating personnel, response procedures, clean-up procedures, disposal of recovered material, and timely reporting of the incident as described in Paragraph "g" above. Although Amtrak's Environmental Group will handle regulatory agency notification, the Contractor Project Engineer must delegate personnel experienced in the removal, transport, and disposal of drilling fluid. In addition, the Contractor Project Engineer shall ensure that all waste materials are properly containerized, labeled, and removed from the site and brought to an approved disposal facility. The Contractor Project Engineer must ensure that the material is properly recycled in an approved manner. The Contractor Project Engineer must provide all necessary follow-up response actions in coordination with the appropriate agency representatives as determined by Amtrak's Environmental Group. The Contractor Project Engineer will coordinate the mobilization of readily available equipment stored at off-site locations (e.g. vacuum trucks) on an as-needed basis. Because all cleanup activities will be done at the expense of the Contractor even if Amtrak forces provide the cleanup, the Contractor Project Engineer must ensure that all cleanup activities and time is documented and consistent with Amtrak records.

The Contractor Project Engineer shall be familiar with all aspects of the drilling activity, the contents of this FCP, and the conditions for approval under which the activity is permitted to take place. The Contractor Project Engineer shall have the authority to stop work and commit the resources (personnel and equipment) necessary to implement this plan. The Contractor Project Engineer shall assure that a copy of this plan is available on-site and accessible to all construction personnel.

Equipment – The Contractor Project Engineer shall ensure the following:

1. All equipment and vehicles are checked and maintained daily to prevent leaks of hazardous material;
2. Spill kits and spill containment materials are available on-site at all times and that the equipment is in good working order;
3. Equipment required to contain and clean up a frac-out release will either be available at the work site or readily available in an off-site location within 15 minutes of the bore site; and
4. If equipment is required to be operated near a riverbed, absorbent pads and plastic sheeting for placement beneath motorized equipment shall be used to protect the riverbed from engine fluids.

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Training – Prior to the start of construction, the Contractor Project Engineer shall ensure that the crew members receive training in the following:

1. The provisions of the Frac-out Contingency Plan, equipment maintenance, and site specific permit and monitoring requirements;
2. Inspection procedures for release prevention and containment equipment and materials;
3. Contractor/Crew member responsibility in the event of a release;
4. Operation of release prevention and control equipment and the location of release control materials, as necessary and appropriate; and
5. Protocols for communication with agency representatives who may be on-site during the cleanup effort.

#### 5.4 DRILLING PROCEDURES

The following procedures shall be followed each day prior to the start of work:

1. The Frac-out Contingency Plan (FCP) shall be available on-site during all construction;
2. The Contractor Project Engineer shall be on-site at any time that drilling is occurring or is scheduled to occur;
3. The Contractor Project Engineer shall ensure that a Job Briefing Meeting is held at the start of drilling to review the appropriate procedures to be followed in case of a frac-out. Questions shall be answered and clarification given on any point over which the drilling crew or other project staff has concerns.

Drilling pressures shall be closely monitored so they do not exceed those needed to penetrate the formation. Pressure levels shall be monitored constantly by the operator. Pressure levels shall be set at a minimum level to prevent frac-outs. During the pilot bore, maintain the drilled annulus. Cutters and reamers will be pulled back into previously drilled sections after each new joint of pipe is added.

Exit and entry pits shall be enclosed by silt fences and straw. A spill kit shall be on-site and used if a frac-out occurs. A vacuum truck shall be readily available either on-site or within 10 minutes of the drilling site prior to and during all drilling operations. Containment materials (straw, silt fencing, sand bags, frac-out spill kits, etc.) shall be staged on-site at locations where they are readily available and easily mobilized for immediate use in the event of an accidental release of drilling fluid (frac-out). If necessary, barriers (straw bales or sedimentation fences) between the bore site and the edge of the water source shall be constructed prior to drilling to prevent released bentonite material from reaching the water.

Once the drill rig is in place and drilling begins, the drill operator shall stop work whenever either the pressure in the drill rig drops or there is a lack of returns in the entrance pit. At this time the Contractor Project Engineer and the drill rig operator(s) shall work to coordinate the likely location of the frac-out. The location of the frac-out shall be recorded and include notes such as the measures taken to address the concern.

Water containing drilling fluid, silt, bentonite, or other pollutants derived from the equipment washing or other activities shall not be allowed to enter a lake, flowing stream, wetland, or any other water body. The bentonite used in the drilling process shall be either disposed of at an approved disposal facility or recycled in an approved manner. Other construction materials and wastes shall be recycled or disposed of as appropriate.

Systemwide  
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## 5.5 RESPONSE CLOSE-OUT PROCEDURES

When the release has been contained and the area affected has been cleaned in accordance with this FCP and to satisfaction of the on-site Amtrak representative, response close-out activities will be conducted at the direction of the Contractor Project Engineer and shall include the following:

1. The recovered drilling fluid will either be recycled or hauled to an approved facility for disposal. No recovered drilling fluids will be discharged into streams, storm drains, or any other water source;
2. All frac-out excavation and clean-up sites will be returned to pre-project contours using the clean material necessary; and
3. All containment measures (fiber rolls, straw bales, etc.) will be removed unless otherwise specified by the Contractor Project Engineer.

## 5.6 CONSTRUCTION RE-START

For small releases not requiring external notification, drilling may continue if the following occurs:

1. 100 percent containment is achieved through the use of a leak-stopping compound;
2. If the on-site Amtrak representative authorizes the continuation of drilling; and
3. The clean-up crew remains at the frac-out location throughout the construction period.

For releases requiring external notification and/or other agencies, construction activities will not restart without prior approval from the Amtrak Project Engineer.

## 5.7 NOTIFICATION

In the event of a frac-out that reaches a water source, the Contractor Project Engineer will notify the Amtrak Project Engineer so that the appropriate resource agencies can be notified through Amtrak's Environmental Group. All agency notifications will occur within 24 hours and proper documentation will be accomplished in a timely and complete manner. If deemed necessary by the Amtrak Environmental Group, the necessary agency information and contacts will be provided to the Contractor.

## 5.8 COMMUNICATING WITH REGULATORY AGENCY PERSONNEL

All employees and subcontractors will follow the following protocols when regulatory agency personnel arrive on site:

1. Regulatory agency personnel will be required to comply with appropriate safety rules;
2. Only the Amtrak Project Engineer is to coordinate communication with regulatory agency personnel. If deemed necessary by the Amtrak Environmental Group, the necessary agency information and contacts will be provided to the Contractor; and
3. All communication records (emails, etc.) must be copied to Amtrak.

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## **5.9 DOCUMENTATION**

The Contractor Project Engineer shall record the frac-out event in his or her daily log. The log report will include the following:

1. Details on the release event including:
  - a. An estimate of the amount of bentonite released;
  - b. The location, date, and time of the release;
  - c. How the release occurred;
  - d. The type of activity that was occurring around the area of the frac-out;
  - e. Description of any sensitive areas and their location to the frac-out;
  - f. Description of the methods used to clean up or secure the site;
  - g. A listing of the current permits obtained for the project
  - h. The size of the area impacted; and
  - i. The success of cleanup action.

## **5.10 PROJECT COMPLETION AND CLEAN-UP**

1. All materials and any rubbish/construction debris shall be removed from the railroad property at the end of each workday.
2. Sump pits at bore entry and exits will be filled with clean material and returned to preexisting grade; and
3. All protective measures (fiber rolls, straw bales, silt fences, etc.) will be removed unless otherwise specified by the Amtrak Project Engineer.





**ELEVATION**  
**SCALE: 1" = 10'-0"**

**ELEVATION**  
**SCALE: 1" = 10'-0"**



**OFFICE OF  
V.P., Chief Engineer  
Engineering**

[illegible]

Figure 1 shows a four-bar linkage mechanism. The links are labeled with their lengths: 10", 9", 18", and 20". The joints are revolute joints. A scale bar indicates 1" = 10°.

<p><b>E.T. STANDARD</b></p> <p><b>ELECTRIFIED TERRITORY O.A. BRIDGES</b></p> <p><b>TYPICAL PROTECTION BARRIER</b></p>		<p><b>ET-1446-D</b></p>	
<p>Project: <b>140</b></p> <p>Sheet: <b>101</b></p>	<p>Contract: <b>BA11</b></p> <p>Date: <b>09-27-78</b></p>	<p>File No.: <b>ET-1446-D</b></p> <p>Sheet No.: <b>1 of 2</b></p>	<p> </p>

### GENERAL NOTES:

- [illegible]

## **APPENDIX B: CSXT REQUIREMENTS**

- a) The City shall not be required to procure any insurance with respect to work being performed by the City's employees for the Project. The City shall require its Consultants and Contractors to procure insurance for all work being performed by the Consultant or Contractor for the Project, as set forth in the then current Permit to be executed by the Consultant or Contractor.
- b) In the event that the Company performs any force account work under the terms of this Agreement, then the Company shall carry force account insurance in an amount not less than One Million Dollars (\$1,000,000), as determined by the Company. The Company reserves the right to change its practice and self-insure at a rate comparable to those charged by commercial carriers. Documentation detailing comparable common carrier rates will be provided to the City and shall be consistent with the rates the Company charges other governmental entities requiring access to its property.
- c) Before commencing the work, the Company shall furnish to the Commissioner a certificate or certificates of insurance in a form satisfactory to the Commissioner, showing that the Company has complied with this Article, which certificate or certificates shall provide that the policy shall not be changed or canceled until thirty (30) days written notice has been given to the Commissioner. Company may comply with the provisions of this Article by providing equivalent protection through a self-insurance program. Should the Company elect this option, the Company shall provide written notice to the Commissioner to that effect prior to the commencement of work.
- d) In case the Company shall, with the consent of the City, make contracts for any part of the work or facilities covered by this Agreement, it is hereby agreed that said subcontractor, at no cost to the City or Company, shall procure and maintain, until the work covered by said contract has been completed to the satisfaction of the City and Company, Workers Compensation insurance for the benefit of such employees engaged therein as is required to be insured by the provision of the Worker's Compensation Law of the State of New York.
- e) Each of the City's Contractors or Consultants who performs design, inspection or engineering functions in support of the Project shall provide and maintain in force during the course of the Project, at no cost to the Company, professional liability insurance covering the liability for any and all errors or omissions committed by the Consultant, or by agents or employees of the Consultant, in the performance of the Project design, regardless of the type of damages. The coverage shall be maintained until such time as the design and construction is completed and for at least three years following completion of all operations to be performed. Such contractors and consultants shall maintain a policy with limits of liability of not less than Two Million Dollars (\$2,000,000) per claim (but such limit may be modified by Company to fit a specific Project). The City must require its Consultants performing design or engineering functions to provide the Company with written proof of the insurance coverages required by the Company for the specific Project.

Each policy shall provide: (a) a policy retroactive date that coincides with or precedes the Consultants' start of work (including subsequent policies purchased as renewals or replacements); (b) that if the insurance is terminated for any reason, the Consultants and/or the City agree to purchase an extended reporting provision of at least three (3) years to report claims arising from work that is being performed; and (c) for reporting of circumstances or incidents that might give rise to future claims.

### **CONSTRUCTION REQUIREMENTS**

When performing work on, over or adjacent to CSX Transportation (CSXT) right-of-way or operations, the Contractor must abide by the current CSXT Special Provisions and the following additional requirements.

1. All construction related correspondence will be directed to Bergmann Associates, acting as the Construction Monitoring Representative (CMR) on behalf of CSXT, with the following contact and address:

Michael Cooper  
Project Manager  
Bergmann Associates  
10-B Madison Avenue Ext.  
Albany, NY 12203  
(518) 862-0325

Upon receipt of notification, the CMR will direct the Contractor to the local CSXT construction contact for the project.

2. The Contractor shall submit, including, but not limited to, the following construction procedures and documents. The Contractor shall obtain written acceptance from CSXT or their representative before proceeding with construction.
  - a. Means and Methods – the Contractor shall develop a detailed submission indicating the progression of work with specific times when tasks will be performed during the project. This submission will include a walkthrough at which time CSXT personnel will be present. Work will not be permitted to commence until the Contractor has provided CSXT with a satisfactory plan that the project will be undertaken without scheduling, performance or safety related issues. Provide a listing of the anticipated equipment to be used, the location of all equipment to be used and insure a contingency plan of action is in place should a primary piece of equipment malfunction. All work in the vicinity of CSXT property that has the potential of affecting CSXT train operations must be submitted and approved by CSXT prior to work being performed. This submission will also include a detailed narrative discussing the coordination of project safety issues between the sponsor, Contractor, CSXT and the CMR. The narrative shall address project level coordination and day to day, specific work operations including equipment operations and temporary works.
  - b. Erection Plans – Submittals must include detailed plans and procedures for all erection activities. The submission shall indicate the location and capacity of any proposed cranes, the estimated lifting loads and the connection devices (i.e. slings, shackles, etc.). All lifting equipment and connection devices shall have capacity for 150% of the actual lifting load. The factor of safety provided by the manufacturer in the lifting capacity charts shall not be considered in the 150% requirement. A registered Professional Engineer in the State of New York must seal all erection plans, calculations and procedures.

- c. Excavation and Shoring Procedures and Track Monitoring Procedures are required to be submitted to CSXT or the CMR in accordance with the CSXT Construction Submission Criteria. The CSXT Construction Submission Criteria should be referred to and complied with prior to the preparation of submissions, as it contains specific requirements that could impact the Contractor's material selection and methods or operations for work near the railroad. ***Revisions to the procedures may not be field approved. Any deviation(s) from a previously accepted plan including will require a formal submission of the procedure for review and acceptance prior to performing any work.*** A Professional Engineer in the State of New York must sign and seal the plans.
- d. Sheeting and Shoring Plans – If excavation within the live load influence zone (a 1.5H to 1V slope line starting at 1.5 feet below top of rail and 12' from the centerline of track) is necessary, the contractor shall submit three (3) sets of detailed drawings and one (1) set of calculations in accordance with CSXT Design & Construction Standard Specifications. Shoring shall be designed to resist a vertical live load surcharge of 1,882 lbs. per square foot, in addition to active earth pressure. The surcharge shall be assumed to act on a continuous strip, 8'-6" wide. Lateral pressures due to surcharge shall be computed using the strip load formula shown in AREMA Manual for Railway Engineering, Chapter 8, Part 20. Allowable stresses in materials shall be in accordance with AREMA Manual for Railway Engineering, Chapter 7, 8, and 15. A Registered Professional Engineer in the State of New York must seal all sheeting and shoring plans.
- e. Ballast Protection – A ballast protection system may be required at the sole discretion of CSXT depending on the contractor's proposed methods to perform the work. The system shall use filter fabric and indicate the anchorage system. The ballast protection is to extend a minimum of 25' beyond the proposed limit of work or greater as determined by CSXT and be continuously maintained to prevent all contaminants from entering the ballast section of all tracks for the entire duration of the project.
- f. Construction Schedule – Submit a detailed construction schedule for the duration of the project clearly indicating the time periods while working on and around CSXT right-of-way. As the work progresses, this schedule shall be updated and resubmitted as necessary to reflect changes in work sequence, duration and method, etc.

Insurance – Submit all necessary insurance information in accordance with the current CSXT Insurance Requirements listed in "Attachment A" for approval. The complete insurance policies should be submitted by email to [insurancedocuments@csx.com](mailto:insurancedocuments@csx.com) with a copy sent to the CMR. The body of the email shall include the following information:

CSXT PUBLIC PROJECT: New York, Bronx County, New York; Construction of Starlight Park adjacent to CSXT, MP QVA-21.20 to QVA-25.52, Albany Division, Hudson Subdivision, OP# NY0615

The Contractor shall provide their name and contact information in all correspondence.

The insurance policies will be required to be in place and approved prior to any work commencing on or that could potentially impact CSXT right-of-way.

- g. Emergency Action Plan – Submit an emergency action plan indicating the location of the site, contact numbers, access to the site, instructions for emergency response and location of nearest hospitals. This plan should cover all items required in the event of an emergency at the site including fire suppression. Coordinate the Emergency Action Plan with the safety related discussion of the Means and Methods submission discussed above. The plan should also include a method to provide this information to each project worker for each day on site.
3. Up to thirty (30) days will be required to review all construction submissions. Up to an additional thirty (30) days will be required to review any subsequent submissions returned not approved.
4. No storm water from the project may discharge onto the CSXT right-of-way at any time during construction.
5. The Contractor must ensure that proper erosion control is implemented on and adjacent to CSXT right-of-way during construction. The Contractor may be required to submit a detailed erosion control plan for review and acceptance by CSXT or the CMR prior to performing any work.
6. The Contractor must not use CSXT right-of-way for storage of materials or equipment during construction. The CSXT right-of-way must remain clear for railroad use at all times. Equipment may not be positioned to block the railroad access road, track area, or any part of the CSXT right-of-way without CSXT approval.
7. The Contractor will be required to abide by the provisions of the CSXT Construction Agreement. Periodically, throughout the project duration, the Contractor will be required to meet, discuss and, if necessary, take immediate action at the discretion of CSXT personnel and/or the CMR to comply with provisions of that agreement and these specifications.
8. This project will require extensive use of CSXT Flagmen to protect train operations from project activity in the area of the tracks. While CSXT cannot guarantee the availability of flagmen at all requested times, every accommodation will be extended to the Contractor when forces are available. Flagging requests should be made to Michael Cooper, Bergmann Associates (518) 862-0325 at least thirty (30) days in advance. Termination or cancellation of a flagman requires ten (10) days notice to avoid incurring costs.
9. All crane and equipment operations that could potentially impact CSXT right-of-way must be coordinated with the CSXT Flagman.
10. For sheeting/shoring within eighteen (18') feet of centerline of track, the live load influence zone, and in slopes, the contractor shall use sheet pile. No sheet pile in slopes or within eighteen (18') feet of centerline of track shall be removed. Sheet piles shall be

cutoff three (3') feet below the ground line after backfilling to that point. The remaining three (3') shall be backfilled immediately after cutoff.

11. Contractor access will be limited to the immediate project area only. The CSXT right-of-way may not be used for contractor access to the project site and no temporary at-grade crossings will be allowed.
12. The Contractor or the Agency shall be responsible to have painted on the structure the DOT Number assigned to the grade separation. This number shall be affixed at a location on either side of the CSXT tracks or property and in a manner such that it can be readily discerned and visible from track level. The font size of the DOT numbers and letters should be at least four inches (4 ") tall and shall be black on a light-colored background or white on a dark-colored background of the grade separation component.\
13. At project completion, submit a set of "As-Built" plans for the proposed bridge construction and any work performed on the CSXT right-of-way. Please forward the plans to:

Mr. Ed Sparks  
Assistant Chief Engineer Structures  
CSX Transportation  
500 Water Street, J350  
Jacksonville, FL 32202

# APPENDIX

CSX Transportation

## CONSTRUCTION SUBMISSION CRITERIA

Public Projects Group  
Jacksonville, FL  
Date Issued: February 23, 2015



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**INTRODUCTION**

The intent of this document is to guide outside agencies and their Contractors when performing work on, over, or with potential to impact CSXT property (ROW). Work plans shall be submitted for review to the designated CSXT Engineering Representative for all work which presents the potential to affect CSXT property or operations; this document shall serve as a guide in preparing these work plans. All work shall be performed in a manner that does not adversely impact CSXT operations or safety; as such, the requirements of this document shall be strictly adhered to, in addition to all other applicable standards associated with the construction. Applicable standards include, but are not limited to, CSXT Standards and Special Provisions, CSXT Insurance Requirements, CSXT Pipeline Occupancy Criteria, as well as the governing local, county, state and federal requirements. It shall be noted that this document and all other CSXT standards are subject to change without notice, and future revisions will be made available at the CSXT website: [www.csx.com](http://www.csx.com).

**I. DEFINITIONS**

1. *Agency* – The project sponsor (i.e., State DOT, Local Agencies, Private Developer, etc.)
2. *AREMA* – American Railway Engineering and Maintenance-of-Way Association – the North American railroad industry standards group. The use of this term shall be in specific reference to the AREMA Manual for Railway Engineering.
3. *Construction Submission* – The Agency or its representative shall submit six (6) sets of plans, supporting calculations, and detailed means and methods procedures for the specific proposed activity. All plans, specifications, and supporting calculations shall be signed/sealed by a Professional Engineer as defined below.
4. *Controlled Demolition* – Removal of an existing structure or subcomponents in a manner that positively prevents any debris or material from falling, impacting, or otherwise affecting CSXT employees, equipment or property. Provisions shall be made to ensure that there is no impairment of railroad operations or CSXT's ability to access its property at all times.
5. *Contractor* – The Agency's representative retained to perform the project work.
6. *Engineer* – CSXT Engineering Representative or a GEC authorized to act on the behalf of CSXT.
7. *Flagman* – A qualified CSXT employee with the sole responsibility to direct or restrict movement of trains, at or through a specific location, to provide protection for workers.
8. *GEC* – General Engineering Consultant who has been authorized to act on the behalf of CSXT.
9. *Horizontal Clearance* – Distance measured perpendicularly from centerline of any track to the nearest obstruction at any elevation between TOR and the maximum vertical clearance of the track.
10. *Professional Engineer* – An engineer who is licensed in State or Commonwealth in which the project is to occur. All plans, specifications, and supporting calculations shall be prepared by the Licensed Professional Engineer and shall bear his/her seal and signature.
11. *Potential to Foul* – Work having the possibility of impacting CSXT property or operations; defined as one or more of the following:
  - a. Any activity where access onto CSXT property is required.
  - b. Any activity where work is being performed on CSXT ROW.
  - c. Any excavation work adjacent to CSXT tracks or facilities, within the Theoretical Railroad Live Load Influence Zone, or where the active earth pressure zone extends within the CSXT property limits.
  - d. The use of any equipment where, if tipped and laid flat in any direction (360 degrees) about its center pin, can encroach within twenty five feet (25'-0") of the nearest track centerline. This is based upon the proposed location of

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the equipment during use, and may be a function of the equipment boom length. Note that hoisting equipment with the potential to foul must satisfy the 150% factor of safety requirement for lifting capacities.

- e. Any work where the scatter of debris, or other materials has the potential to encroach within twenty five feet (25'-0") of the nearest track centerline.
  - f. Any work where significant vibration forces may be induced upon the track structure or existing structures located under, over, or adjacent to the track structure.
  - g. Any other work which poses the potential to disrupt rail operations, threaten the safety of railroad employees, or otherwise negatively impact railroad property, as determined by CSXT.
12. *ROW – Right of Way*; Refers to CSXT Right-of-Way as well as all CSXT property and facilities. This includes all aerial space within the property limits, and any underground facilities.
13. *Submission Review Period* - a minimum of thirty (30) days in advance of start of work. Up to thirty (30) days will be required for the initial review response. Up to an additional thirty (30) days may be required to review any/all subsequent submissions or resubmission.
14. *Theoretical Railroad Live Load Influence Zone* – A 1½ horizontal to 1 vertical theoretical slope line starting 18 inches (1'-6") below top of tie elevation and twelve feet (12'-0") from the centerline of the nearest track.
15. *TOR – Top of Rail*. This is the base point for clearance measurements. It refers to the crown (top) of the steel rail; the point where train wheels bear on the steel rails.
16. *Track Structure* – All load bearing elements which support the train. This includes, but is not limited to, the rail, ties, appurtenances, ballast, sub-ballast, embankment, retaining walls, and bridge structures.
17. *Vertical Clearance* – Distance measured from TOR to the lowest obstruction within six feet (6'-0") of the track centerline, in either direction.

## II. GENERAL SUBMISSION REQUIREMENTS

A. A construction work plan is required to be submitted by the Agency or its Contractor, for review and acceptance, prior to accessing or performing any work with Potential to Foul.

B. The Agency or its representative shall submit six (6) sets of plans, specifications, supporting calculations, and detailed means and methods procedures for the specific proposed work activity.

C. Construction submissions shall include all information relevant to the work activity, and shall clearly and concisely explain the nature of the work, how it is being performed, and what measures are being taken to ensure that railroad property and operations are continuously maintained.

D. All construction plans shall include a map of the work site, depicting the CSXT tracks, the CSXT right of way, proposed means of access, proposed locations for equipment and material staging (dimensioned from nearest track centerline), as well as all other relevant project information. An elevation drawing may also be necessary in order to depict clearances or other components of the work.

E. Please note that CSXT will not provide pricing to individual contractors involved in bidding projects. Bidding contractors shall request information from the agency and not CSXT.

F. The Contractor shall install a geotextile fabric ballast protection system to prevent construction or demolition debris and fines from fouling ballast. The geotextile ballast protection system shall be installed and maintained by the Contractor to the satisfaction of the Engineer.

G. The Engineer shall be kept aware of the construction schedule. The Contractor shall provide timely communication to the Engineer when scheduling the work such that the Engineer may be present during the work. The Contractor's schedule shall not dictate the work plan review schedule, and flagging shall not be scheduled prior to receipt of an accepted work plan.

H. At any time during construction activities, the Engineer may require revisions to the previously approved procedures to address weather, site conditions or other circumstances that may create a potential hazard to rail operations or CSXT facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the Engineer's satisfaction. CSXT and its GEC shall not be responsible for any additional costs or time claims associated with such revisions.

I. Blasting will not be permitted to demolish a structure over or within CSXT's right-of-way. When blasting off of CSXT property but with Potential to Foul, vibration monitoring, track settlement surveying, and/or other protective measures may be required as determined by the Engineer.

J. Blasting is not permitted adjacent to CSXT right-of-way without written approval from the Chief Engineer, CSXT.

K. Mechanical and chemical means of rock removal must be explored before blasting is considered. If written permission for the use of explosives is granted, the Agency or Contractor must submit a work plan satisfying the following requirements:

1. Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of the Agency or Contractor.
2. Electronic detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way train radios.
3. No blasting shall be done without the presence of an authorized representative of CSXT. Advance notice to the Engineer is required to arrange for the presence of an authorized CSXT representative and any flagging that CSXT may require.
4. Agency or Contractor must have at the project site adequate equipment, labor and materials, and allow sufficient time, to clean up debris resulting from the blasting and correct any misalignment of tracks or other damage to CSXT property resulting from the blasting. Any corrective measures required must be performed as directed by the Engineer at the Agency's or Contractor's expense without any delay to trains. If Agency's or Contractor's actions result in the delay of any trains including passenger trains, the Agency or Contractor shall bear the entire cost thereof.
5. The Agency or Contractor may not store explosives on CSXT property.
6. At any time during blasting activities, the Engineer may require revisions to the previously approved procedures to address weather, site conditions or other circumstances that may create a potential hazard to rail operations or CSXT facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the Engineer's satisfaction. CSXT and its GEC shall not be responsible for any additional costs or time claims associated with such revisions.

### III. HOISTING OPERATIONS

A. All proposed hoisting operations with Potential to Foul shall be submitted in accordance with the following:

1. A plan view drawing shall depict the work site, the CSXT track(s), the proposed location(s) of the lifting equipment, as well as the proposed locations for picking, any intermediate staging, and setting the load(s). All locations shall be dimensioned from centerline of the nearest track. Crane locations shall also be dimensioned from a stationary point at the work site for field confirmation.
2. Computations showing the anticipated weight of all picks. Computations shall be made based upon the field-verified plans of the existing structure. Pick weights shall account for the weight of concrete rubble or other materials attached to the component being removed; this includes the weight of subsequent rigging devices/components. Rigging components shall be sized for the subsequent pick weight.
3. All lifting equipment, rigging devices, and other load bearing elements shall have a rated (safe lifting) capacity that is greater than or equal to 150% of the load it is carrying, as a factor of safety. Supporting calculations shall be furnished to verify the minimum capacity requirement is maintained for the duration of the hoisting operation.

4. Dynamic hoisting operations are prohibited when carrying a load with the Potential to Foul. Cranes or other lifting equipment shall remain stationary during lifting. (i.e., no moving picks).
5. For lifting equipment, the manufacturer's capacity charts, including crane, counterweight, maximum boom angle, and boom nomenclature is to be submitted.
6. A schematic rigging diagram must be provided to clearly call out each rigging component from crane hook to the material being hoisted. Copies of catalog or information sheets shall be provided to verify rigging weights and capacities.
7. For built-up rigging devices, the contractor shall submit the following:
  - i. Details of the device, calling out material types, sizes, connections and other properties.
  - ii. Load test certification documents and/or design computations bearing the seal and signature of a Professional Engineer. Load test shall be performed in the configuration of its intended use as part of the subject demolition procedure.
  - iii. Copies of the latest inspection reports of the rigging device. The device shall be inspected within one (1) calendar year of the proposed date for use.
8. A detail shall be provided showing the crane outrigger setup, including dimensions from adjacent slopes or facilities. The detail shall indicate requirements for bearing surface preparation, including material requirements and compaction efforts. As a minimum, outriggers and/or tracks shall bear on mats, positioned on level material with adequate bearing capacity.
9. A complete written narrative that describes the sequence of events, indicating the order of lifts and any repositioning or re-hitching of the crane(s).

#### IV. DEMOLITION PROCEDURE

- A. The Agency or its Contractor shall submit a detailed procedure for a controlled demolition of any structure on, over, or adjacent to the ROW. The controlled demolition procedure must be approved by the Engineer prior to beginning work on the project.
- B. Existing Condition of structure being demolished:
  1. The Contractor shall submit as-built plans for the structure(s) being demolished.
  2. If as-built plans are unavailable, the Contractor shall perform an investigation of the structure, including any foundations, substructures, etc. The field measurements are to be made under the supervision of the Professional Engineer submitting the demolition procedure. Findings shall be submitted as part of the demolition means and methods submittal for review by the Engineer.
  3. Any proposed method for temporary stabilization of the structure during the demolition shall be based on the existing plans or investigative findings, and submitted as part of the demolition means and methods for review by the Engineer.
- C. Demolition work plans shall include a schematic plan depicting the proposed locations of the following, at various stages of the demolition:
  1. All cranes and equipment, calling out the operating radii.
  2. All proposed access and staging locations with all dimensions referenced from the center line of the nearest track.
  3. Proposed locations for stockpiling material or locations for truck loading.
  4. The location, with relevant dimensions, of all tracks, other railroad facilities; wires, poles, adjacent structures, or buried utilities that could be affected, showing that the proposed lifts are clear of these obstructions.
  5. Note that no crane or equipment may be set on the CSXT rails or track structure and no material may be dropped on CSXT property.
- D. Demolition submittal shall also include the following information:
  1. All hoisting details, as dictated by Section III of this document.
  2. A time schedule for each of the various stages must be shown as well as a schedule for the entire lifting procedure. The proposed time frames for all critical subtasks (i.e., torch/saw cutting various portions of the superstructure or

- substructure, dismantling splices, installing temporary bracing, etc.) shall be furnished so that the potential impact(s) to CSXT operations may be assessed and eliminated or minimized.
3. The names and experience of the key Contractor personnel involved in the operation shall be included in the Contractor's means and methods submission.
  4. Design and supporting calculations shall be prepared, signed, and sealed by the Professional Engineer for items including the temporary support of components or intermediate stages shall be submitted for review. A guardrail will be required to be installed in a track in the proximity of temporary bents or shoring towers, when located within twelve feet (12'-0") from the centerline of the track. The guardrail will be installed by CSXT forces, at the expense of the Agency or its contractor.
- E. Girders or girder systems shall be stable at all times during demolition. Temporary bracing shall be provided at the piers, abutments, or other locations to resist overturning and/or buckling of the member(s). The agency shall submit a design and details of the proposed temporary bracing system, for review by the Engineer. Lateral wind forces for the temporary conditions shall be considered in accordance with AREMA, Chapter 8, Section 28.6.2. The minimum lateral wind pressure shall be fifteen pounds per square foot (15 psf).
- F. Existing, obsolete, bridge piers shall be removed to a minimum of three feet (3'-0") below the finished grade, final ditch line invert, or as directed by the Engineer.
- G. A minimum quantity of twenty five (25) tons of CSXT approved granite track ballast may be required to be furnished and stockpiled on site by the Contractor, or as directed by the Engineer.
- H. The use of acetylene gas is prohibited for use on or over CSXT property. Torch cutting shall be performed utilizing other materials such as propane.
- I. CSXT's tracks, signals, structures, and other facilities shall be protected from damage during demolition of existing structure or replacement of deck slab.
- J. Demolition Debris Shield
1. On-track or ground-level debris shields (such as crane mats) are prohibited for use by CSXT.
  2. Demolition Debris Shield shall be installed prior to the demolition of the bridge deck or other relevant portions of the structure. The demolition debris shield shall be erected from the underside of the bridge over the track area to catch all falling debris. The debris shield shall not be the primary means of debris containment.
    - i. The demolition debris shield design and supporting calculations, all signed/sealed by a Professional Engineer, shall be submitted for review and acceptance.
    - ii. The demolition debris shield shall have a minimum design load of 50 pounds per square foot (50 psf) plus the weight of the equipment, debris, personnel, and all other loads.
    - iii. The Contractor shall verify the maximum particle size and quantity of the demolition debris generated during the procedure does not exceed the shield design loads. Shield design shall account for loads induced by particle impact; however the demolition procedure shall be such that impact forces are minimized. The debris shield shall not be the primary means of debris containment.
    - iv. The Contractor shall include installation/removal means and methods for the demolition debris shield as part of the proposed Controlled Demolition procedure submission.
    - v. The demolition debris shield shall provide twenty three feet (23'-0") minimum vertical clearance, or maintain the existing vertical clearance if the existing clearance is less than twenty three feet (23'-0").
    - vi. Horizontal clearance to the centerline of the track should not be reduced unless approved by the Engineer.
    - vii. The Contractor shall clean the demolition debris shield daily or more frequently as dictated either by the approved design parameters or as directed by the Engineer.
- K. Vertical Demolition Debris Shield
1. This type of shield may be required for substructure removals in close proximity to CSXT track and other facilities, as determined by the Engineer.
  2. The Agency or its Contractor shall submit detailed plans with detailed calculations, prepared, signed, and sealed by a Professional Engineer, of the protection shield.

## V. ERECTION PROCEDURE

- A. The Agency or its Contractor shall submit a detailed procedure for erection of a structure with Potential to Foul. The erection procedure must be approved by the Engineer prior to beginning work on the project.
- B. Erection work plans shall include a schematic plan depicting the following, at all stages of the construction:
  1. All proposed locations of all cranes and equipment, calling out the operating radii.
  2. All proposed access and staging locations with all dimensions referenced from the center line of the nearest track.
  3. All proposed locations for stockpiling material or locations for truck loading.
  4. The location, with relevant dimensions, of all tracks, other railroad facilities; wires, poles, adjacent structures, or buried utilities that could be affected, showing that the proposed lifts are clear of these obstructions.
- C. No crane or equipment may be set on the CSXT rails or track structure and no material may be dropped on CSXT property.
- D. For erection of a structure over the tracks, the following information shall be submitted for review and acceptance by the Engineer, at least thirty (30) days prior to erection:
  1. As-built beam seat elevations – field surveyed upon completion of pier/abutment construction.
  2. Current Top of Rail (TOR) elevations – field measured at the time of as-built elevation collection.
  3. Computations verifying the anticipated minimum vertical clearance in the final condition which accounts for all deflection and camber, based upon the current TOR and as-built beam seat elevations. The anticipated minimum vertical clearance shall be greater than or equal to that which is indicated by the approved plans. Vertical clearance (see definitions) is measured from TOR to the lowest point on the overhead structure at any point within six feet (6'-0") from centerline of the track. Calculations shall be signed and sealed by a Professional Engineer.
- E. Girders or girder systems shall be stable at all times during erection. No crane may unhook prior to stabilizing the beam or girder.
  1. Lateral wind forces for the temporary conditions shall be considered in accordance with AREMA, Chapter 8, Section 28.6.2. The minimum lateral wind pressure shall be fifteen pounds per square foot (15 psf).
  2. Temporary bracing shall be provided at the piers, abutments, or other locations to resist overturning and/or buckling of the member(s). The agency shall submit a design and details of the proposed temporary bracing system, for review by the Engineer.
  3. Temporary bracing shall not be removed until sufficient lateral bracing or diaphragm members have been installed to establish a stable condition. Supporting calculations, furnished by the Professional Engineer, shall confirm the stable condition.
- F. Erection procedure submissions shall also include the following information:
  1. All hoisting details, as dictated by Section III of this document.
  2. A time schedule for each of the various stages must be shown as well as a schedule for the entire lifting procedure. The proposed time frames for all critical subtasks (i.e., performing aerial splices, installing temporary bracing, installation of diaphragm members, etc.) shall be furnished so that the potential impact(s) to CSXT operations may be assessed and eliminated or minimized.
  3. The names and experience of the key Contractor personnel involved in the operation shall be included in the Contractor's means and methods submission.
  4. A guardrail will be required to be installed in a track in the proximity of temporary bents or shoring towers, when located within twelve feet (12'-0") from the centerline of the track. The guardrail will be installed by CSXT forces, at the expense of the Agency or its Contractor.
  5. Design and supporting calculations prepared by the Professional Engineer for items including the temporary support of components or intermediate stages shall be submitted for review.

## VI. TEMPORARY EXCAVATION AND SHORING

- A. The Agency or its Contractor shall submit a detailed design and procedure for the installation of a sheeting/shoring system adjacent to the tracks. Shoring protection shall be provided when excavating with Potential to Foul, or as otherwise determined by CSXT. Shoring shall be provided in accordance with the AREMA, except as noted below.
- B. Shoring may not be required if all of the following conditions are satisfied:
  1. The excavation does not encroach within the Theoretical Live Load Influence Zone. Please refer to Figure 1.
  2. The track structure is situated on level ground, or in a cut section, and on stable soil.
  3. The excavation does not adversely impact the stability of a CSXT facility (i.e. signal bungalow, drainage facility,

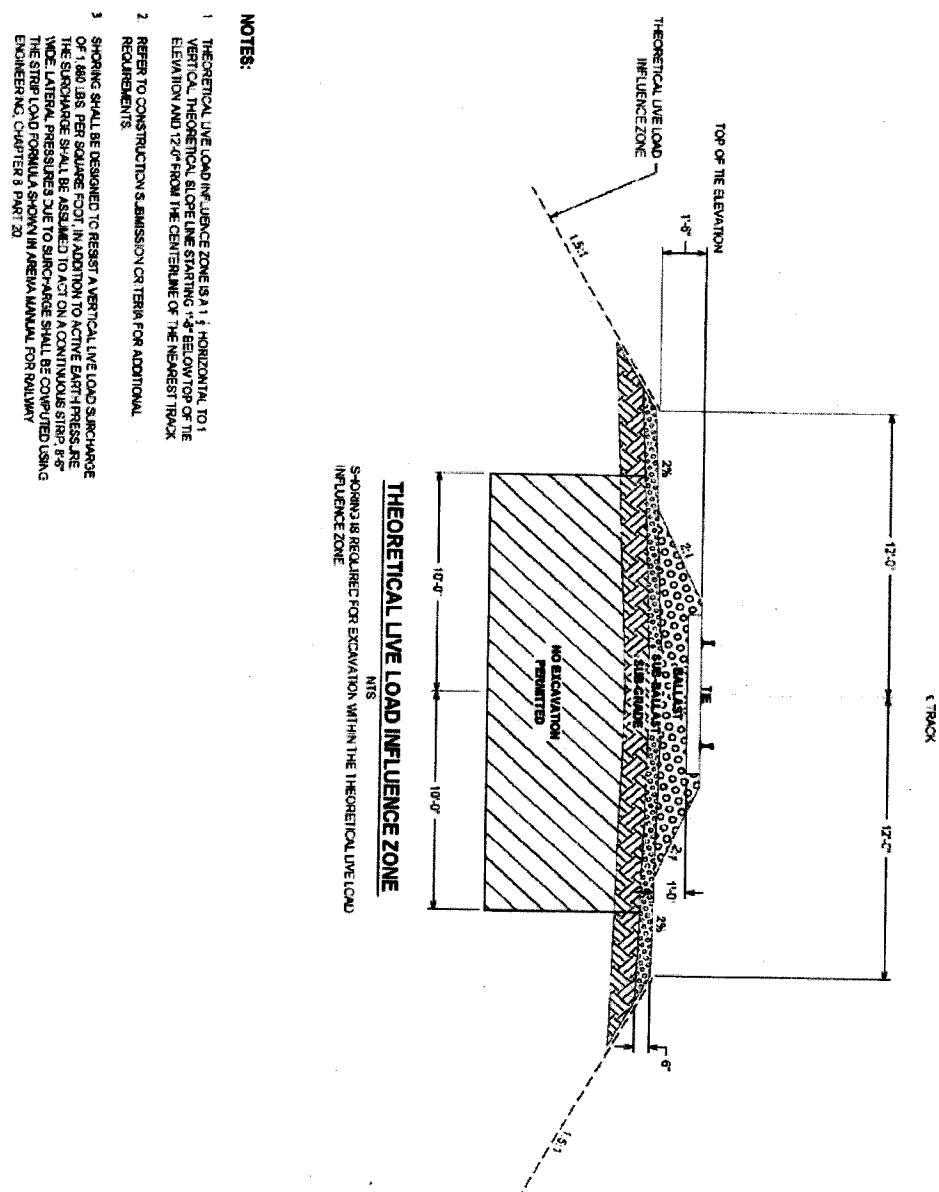
- undergrade bridge, building, etc), or the stability of any structure on, over, or adjacent to CSXT property with potential to foul.
4. Shoring is not required by any governing federal, state, local or other construction code.
- C. Shoring is required when excavating the toe of an embankment. Excavation of any embankment which supports an active CSXT track structure without shoring will not be permitted.
- D. Trench boxes are not an acceptable means of shoring. Trench boxes are prohibited for use on CSXT property or within the Theoretical Railroad Live Load Influence Zone.
- E. Shoring shall be a cofferdam-type, which completely encloses the excavation. However, where justified by site or work conditions, partial cofferdams with open sides away from the track may be permissible, as determined by the Engineer.
- F. Cofferdams shall be constructed using interlocking steel sheet piles, or when approved by the Engineer, steel soldier piles with timber lagging. Wales and struts shall be included when dictated by the design.
- G. The use of tiebacks can be permissible for temporary shoring systems, when conditions warrant. Tiebacks shall have a minimum clear cover of 6'-0", measured from the bottom of the rail. Upon completion of the work, tiebacks shall be grouted, cut off, and remain in place.
- H. All shoring systems on, or adjacent to CSXT right-of-way, shall be equipped with railings or other fall protection, compliant with the governing federal, state or local requirements. Area around pits shall be graded to eliminate all potential tripping hazards.
- I. Interlocking steel sheet piles shall be used for shoring systems qualifying one or more of the following conditions:
1. Within 18'-0" of the nearest track centerline
  2. Within the live load influence zone
  3. Within slopes supporting the track structure
  4. As otherwise deemed necessary by the Engineer.
- J. Sheet piles qualifying for one or more of the requirements listed in Section VI.1 (above) of this document shall not be removed. Sheet piles shall be left in place and cut off a minimum of 3'-0" below the finished grade, the ditch line invert, or as otherwise directed by the Engineer. The ground shall be backfilled and compacted immediately after sheet pile is cut off.
- K. The following design considerations shall be considered when preparing the shoring design package:
1. Shoring shall be designed to resist a vertical live load surcharge of 1,880 lbs. per square foot, in addition to active earth pressure. The surcharge shall be assumed to act on a continuous strip, eight feet six inches (8'-6") wide. Lateral pressures due to surcharge shall be computed using the strip load formula shown in *AREMA Manual for Railway Engineering*, Chapter 8, Part 20.
  2. Allowable stresses in materials shall be in accordance with AREMA Chapter 7, 8, and 15.3.
  3. A minimum horizontal clearance of ten feet (10'-0") from centerline of the track to face of nearest point of shoring shall be maintained, provided a twelve feet (12'-0") roadbed is maintained with a temporary walkway and handrail system.
  4. For temporary shoring systems with Potential to Foul, piles shall be plumb under full dead load. Maximum deflection at the top of wall, under full live load, shall be as follows:
    - i. One-half (1/2) inch for walls within twelve feet (12'-0") of track centerline (Measured from centerline of the nearest track to the nearest point of the supporting structure).
    - ii. One (1) inch for walls located greater than twelve feet (12'-0") from track centerline
- L. Shoring work plans shall be submitted in accordance with Section II of this document, as well as the following additional requirements:
1. The work plan shall include detailed drawings of the shoring systems calling out the sizes of all structural members, details of all connections. Both plan and elevation drawings shall be provided, calling out dimensions from the face of shoring relative to the nearest track centerline. The elevation drawing shall also show the height of shoring, and track elevation in relation to bottom of excavation.
  2. Full design calculations for the shoring system shall be furnished.
  3. A procedure for cutting off the sheet pile, backfilling and restoring the embankment.

**VII. TRACK MONITORING**

- A. When work being performed has the potential to disrupt the track structure, a work plan must be submitted detailing a track monitoring program which will serve to monitor and detect both horizontal and vertical movement of the CSXT track and roadbed.
- B. The program shall specify the survey locations, the distance between the location points, and frequency of monitoring before, during, and after construction. CSXT reserves the right to modify the survey locations and monitoring frequency as necessary during the project.
- C. The survey data shall be collected in accordance with the approved frequency and immediately furnished to the Engineer for analysis.
- D. If any movement has occurred as determined by the Engineer, CSXT will be immediately notified. CSXT, at its sole discretion, shall have the right to immediately require all contractor operations to be ceased, have the excavated area immediately backfilled and/or determine what corrective action is required. Any corrective action required by CSXT or performed by CSXT including the monitoring of corrective action of the contractor will be at project expense.



FIGURE 1: Theoretical Live Load Influence Zone





## Insurance Requirements for Public Projects

### I. Insurance Policies:

Agency and Contractor, if and to the extent that either is performing work on or about CSXT's property, shall procure and maintain the following insurance policies:

1. Commercial General Liability (CGL) coverage at their sole cost and expense with limits of not less than \$5,000,000 in combined single limits for bodily injury and/or property damage per occurrence, and such policies shall name CSXT as an additional insured.
2. Statutory Worker's Compensation and Employers Liability Insurance with limits of not less than \$1,000,000, which insurance must contain a waiver of subrogation against CSXT and its affiliates [if permitted by state law].
3. Commercial Automobile Liability insurance with limits of not less than \$1,000,000 combined single limit for bodily injury and/or property damage per occurrence, and such policies shall name CSXT as an additional insured.
4. Railroad Protective Liability (RPL) insurance with limits of not less than \$5,000,000 combined single limit for bodily injury and/or property damage per occurrence and an aggregate annual limit of \$10,000,000, which insurance shall satisfy the following additional requirements:
  - a. The Railroad Protective Liability Insurance Policy must be on the ISO/RIMA Form of Railroad Protective Insurance - Insurance Services Office (ISO) Form CG 00 35.
  - b. CSX Transportation must be the named insured on the Railroad Protective Liability Insurance Policy. The named insured's address should be listed as:
 

CSX Transportation, Inc.  
500 Water Street, C-907  
Jacksonville, FL 32202
  - c. The name and address of the Contractor and of the Project Sponsor/Involved Governmental Agency must be shown on the Declarations page.
  - d. A description of operations and location must appear on the Declarations page and must match the Project description.
  - e. Terrorism Risk Insurance Act (TRIA) coverage must be included.
  - f. Authorized endorsements must include:
    - (i). Pollution Exclusion Amendment - CG 28 31, unless using form CG 00 35 version 96 and later
  - g. Authorized endorsements may include:
    - (i). Broad Form Nuclear Exclusion - IL 00 21
    - (ii). Notice of Non-renewal or cancellation
    - (iii). Required State Cancellation Endorsement
    - (iv). Quick Reference or Index - CL/IL 240

- h. Authorized endorsements may not include:
  - (i). A Pollution Exclusion Endorsement except CG 28 31
  - (ii). An Endorsement that excludes TRIA coverage
  - (iii). An Endorsement that limits or excludes Professional Liability coverage
  - (iv). A Non-Cumulation of Liability or Pyramiding of Limits Endorsement
  - (v). A Known Injury Endorsement
  - (vi). A Sole Agent Endorsement
  - (vii). A Punitive or Exemplary Damages Exclusion
  - (viii). A "Common Policy Conditions" Endorsement
  - (ix). Policies that contain any type of deductible
  - (x). Any endorsement that is not named in Section 4 (f) or (g) above that CSXT deems unacceptable
- 5. All insurance companies must be A. M. Best rated A- and Class VII or better
- 6. Such additional or different insurance as CSXT may require

## **II. Additional Terms**

- 1. Contractor must submit the complete Railroad Protective Liability policy, Certificates of Insurance and all notices and correspondence regarding the insurance policies in an electronic format to:

[insurancedocuments@csx.com](mailto:insurancedocuments@csx.com)

Neither Agency nor Contractor may begin work on or about CSXT property until written approval of the required insurance has been received from CSXT or CSXT's Insurance Compliance vendor, Ebix.

# APPENDIX

## CSX Transportation

### CSXT SPECIAL PROVISIONS

Public Projects Group  
Jacksonville, FL  
Date Issued: May 9, 2011

## CSXT SPECIAL PROVISIONS

**AUTHORITY OF CSXT ENGINEER**

The CSXT Representative shall have final authority in all matters affecting the safe maintenance of CSXT operations and CSXT property, and his or her approval shall be obtained by the Agency or its Contractor for methods of construction to avoid interference with CSXT operations and CSXT property and all other matters contemplated by the Agreement and these Special Provisions.

**II. INTERFERENCE WITH CSXT OPERATIONS**

A. Agency or its Contractor shall arrange and conduct its work so that there will be no interference with CSXT operations, including train, signal, telephone and telegraphic services, or damage to CSXT's property, or to poles, wires, and other facilities of tenants on CSXT's Property or right-of-way. Agency or its Contractor shall store materials so as to prevent trespassers from causing damage to trains, or CSXT Property. Whenever Work is likely to affect the operations or safety of trains, the method of doing such Work shall first be submitted to the CSXT Representative for approval, but such approval shall not relieve Agency or its Contractor from liability in connection with such Work.

B. If conditions arising from or in connection with the Project require that immediate and unusual provisions be made to protect train operation or CSXT's property, Agency or its Contractor shall make such provision. If the CSXT Representative determines that such provision is insufficient, CSXT may, at the expense of Agency or its Contractor, require or provide such provision as may be deemed necessary, or cause the Work to cease immediately.

**III. NOTICE OF STARTING WORK.** Agency or its Contractor shall not commence any work on CSXT Property or rights of-way until it has complied with the following conditions:

A. Notify CSXT in writing of the date that it intends to commence Work on the Project. Such notice must be received by CSXT at least ten business days in advance of the date Agency or its Contractor proposes to begin Work on CSXT property. The notice must refer to this Agreement by date. If flagging service is required, such notice shall be submitted at least thirty (30) business days in advance of the date scheduled to commence the Work.

B. Obtain authorization from the CSXT Representative to begin Work on CSXT property, such authorization to include an outline of specific conditions with which it must comply.

C. Obtain from CSXT the names, addresses and telephone numbers of CSXT's personnel who must receive notice under provisions in the Agreement. Where more than one individual is designated, the area of responsibility of each shall be specified.

**IV. WORK FOR THE BENEFIT OF THE CONTRACTOR**

A. No temporary or permanent changes to wire lines or other facilities (other than third party fiber optic cable transmission systems) on CSXT property that are considered necessary to the Work are anticipated or shown on the Plans. If any such changes are, or become, necessary in the opinion of CSXT or Agency, such changes will be covered by appropriate revisions to the Plans and by preparation of a force account estimate. Such force account estimate may be initiated by either CSXT or Agency, but must be approved by both CSXT and Agency. Agency or Contractor shall be responsible for arranging for the relocation of the third party fiber optic cable transmission systems, at no cost or expense to CSXT.

B. Should Agency or Contractor desire any changes in addition to the above, then it shall make separate arrangements with CSXT for such changes to be accomplished at the Agency or Contractor's expense.

**V. HAUL ACROSS RAILROAD**

A. If Agency or Contractor desires access across CSXT property or tracks at other than an existing and open public road crossing in or incident to construction of the Project, the Agency or Contractor must first obtain the permission of CSXT and shall execute a license agreement or right of entry satisfactory to CSXT, wherein Agency or Contractor agrees to bear all costs and liabilities related to such access.

B. Agency and Contractor shall not cross CSXT's property and tracks with vehicles or equipment of any kind or character, except at such crossing or crossings as may be permitted pursuant to this section.

#### **VI. COOPERATION AND DELAYS**

- A. Agency or Contractor shall arrange a schedule with CSXT for accomplishing stage construction involving work by CSXT. In arranging its schedule, Agency or Contractor shall ascertain, from CSXT, the lead time required for assembling crews and materials and shall make due allowance therefor.
- B. Agency or Contractor may not charge any costs or submit any claims against CSXT for hindrance or delay caused by railroad traffic; work done by CSXT or other delay incident to or necessary for safe maintenance of railroad traffic; or for any delays due to compliance with these Special Provisions.
- C. Agency and Contractor shall cooperate with others participating in the construction of the Project to the end that all work may be carried on to the best advantage.
- D. Agency and Contractor understand and agree that CSXT does not assume any responsibility for work performed by others in connection the Project. Agency and Contractor further understand and agree that they shall have no claim whatsoever against CSXT for any inconvenience, delay or additional cost incurred by Agency or Contractor on account of operations by others.

#### **VII. STORAGE OF MATERIALS AND EQUIPMENT**

Agency and Contractor shall not store their materials or equipment on CSXT's property or where they may potentially interfere with CSXT's operations, unless Agency or Contractor has received CSXT Representative's prior written permission. Agency and Contractor understand and agree that CSXT will not be liable for any damage to such materials and equipment from any cause and that CSXT may move, or require Agency or Contractor to move, such material and equipment at Agency's or Contractor's sole expense. To minimize the possibility of damage to the railroad tracks resulting from the unauthorized use of equipment, all grading or other construction equipment that is left parked near the tracks unattended by watchmen shall be immobilized to the extent feasible so that it cannot be moved by unauthorized persons.

#### **VIII. CONSTRUCTION PROCEDURES**

##### **A. General**

- 1. Construction work on CSXT property shall be subject to CSXT's inspection and approval.
- 2. Construction work on CSXT property shall be in accord with CSXT's written outline of specific conditions and with these Special Provisions.
- 3. Contractor shall observe the terms and rules of the CSXT Safe Way manual, which Agency and Contractor shall be required to obtain from CSXT, and in accord with any other instructions furnished by CSXT or CSXT's Representative.

##### **B. Blasting**

- 1. Agency or Contractor shall obtain CSXT Representative's and Agency Representative's prior written approval for use of explosives on or adjacent to CSXT property. If permission for use of explosives is granted, Agency or Contractor must comply with the following:
  - a. Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of Agency or Contractor.
  - b. Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way train radios.
  - c. No blasting shall be done without the presence of an authorized representative of CSXT. At least 30 days' advance notice to CSXT Representative is required to arrange for the presence of an authorized CSXT representative and any flagging that CSXT may require.

d. Agency or Contractor must have at the Project site adequate equipment, labor and materials, and allow sufficient time, to (i) clean up (at Agency's expense) debris resulting from the blasting without any delay to trains; and (ii) correct (at Agency's expense) any track misalignment or other damage to CSXT's property resulting from the blasting, as directed by CSXT Representative, without delay to trains. If Agency's or Contractor's actions result in delay of any trains, including Amtrak passenger trains, Agency shall bear the entire cost thereof.

e. Agency and Contractor shall not store explosives on CSXT property.

2. CSXT Representative will:

a. Determine the approximate location of trains and advise Agency or Contractor of the approximate amount of time available for the blasting operation and clean-up.

b. Have the authority to order discontinuance of blasting if, in his or her opinion, blasting is too hazardous or is not in accord with these Special Provisions.

**IX. MAINTENANCE OF DITCHES ADJACENT TO CSXT TRACKS**

Agency or Contractor shall maintain all ditches and drainage structures free of silt or other obstructions that may result from their operations. Agency or Contractor shall provide erosion control measures during construction and use methods that accord with applicable state standard specifications for road and bridge construction, including either (1) silt fence; (2) hay or straw barrier; (3) berm or temporary ditches; (4) sediment basin; (5) aggregate checks; and (6) channel lining. All such maintenance and repair of damages due to Agency's or Contractor's operations shall be performed at Agency's expense.

**X. FLAGGING / INSPECTION SERVICE**

A. CSXT has sole authority to determine the need for flagging required to protect its operations and property. In general, flagging protection will be required whenever Agency or Contractor or their equipment are, or are likely to be, working within fifty (50) feet of live track or other track clearances specified by CSXT, or over tracks.

B. Agency shall reimburse CSXT directly for all costs of flagging that is required on account of construction within CSXT property shown in the Plans, or that is covered by an approved plan revision, supplemental agreement or change order.

C. Agency or Contractor shall give a minimum of 30 days' advance notice to CSXT Representative for anticipated need for flagging service. No work shall be undertaken until the flag person(s) is/are at the job site. If it is necessary for CSXT to advertise a flagging job for bid, it may take up to 90-days to obtain this service, and CSXT shall not be liable for the cost of delays attributable to obtaining such service.

D. CSXT shall have the right to assign an individual to the site of the Project to perform inspection service whenever, in the opinion of CSXT Representative, such inspection may be necessary. Agency shall reimburse CSXT for the costs incurred by CSXT for such inspection service. Inspection service shall not relieve Agency or Contractor from liability for its Work.

E. CSXT shall render invoices for, and Agency shall pay for, the actual pay rate of the flagpersons and inspectors used, plus standard additives, whether that amount is above or below the rate provided in the Estimate. If the rate of pay that is to be used for inspector or flagging service is changed before the work is started or during the progress of the work, whether by law or agreement between CSXT and its employees, or if the tax rates on labor are changed, bills will be rendered by CSXT and paid by Agency using the new rates. Agency and Contractor shall perform their operations that require flagging protection or inspection service in such a manner and sequence that the cost of such will be as economical as possible.

**XI. UTILITY FACILITIES ON CSXT PROPERTY**

Agency shall arrange, upon approval from CSXT, to have any utility facilities on or over CSXT Property changed as may be necessary to provide clearances for the proposed trackage.

**XII. CLEAN-UP**

Agency or Contractor, upon completion of the Project, shall remove from CSXT's Property any temporary grade crossings, any temporary erosion control measures used to control drainage, all machinery, equipment, surplus materials, falsework, rubbish, or temporary buildings belonging to Agency or Contractor. Agency or Contractor, upon completion of the Project, shall leave CSXT Property in neat condition, satisfactory to CSXT Representative.

**XIII. FAILURE TO COMPLY**

If Agency or Contractor violate or fail to comply with any of the requirements of these Special Provisions, (a) CSXT may require Agency and/or Contractor to vacate CSXT Property; and (b) CSXT may withhold monies due Agency and/or Contractor; (c) CSXT may require Agency to withhold monies due Contractor; and (d) CSXT may cure such failure and the Agency shall reimburse CSXT for the cost of curing such failure.



**APPENDIX C: NYSDEC PERMIT AND FACILITY INFORMATION**

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

Division of Environmental Permits, Region 2  
47-40 21st Street, Long Island City, NY 11101  
P: (718) 482-4997 | F: (718) 482-4975  
www.dec.ny.gov

October 4, 2016

Therese Braddick  
Deputy Commissioner  
NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION  
OLMSTEAD CENTER  
FLUSHING MEADOWS-CORONA PARK  
117-02 ROOSEVELT AVE  
FLUSHING, NY 11368

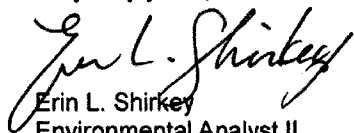
Re: **NOTICE OF PERMIT ISSUANCE**  
**NYSDEC Permit ID# 2-6007-00265/00011 (TW)/00012(WQC)/00013(EF)**  
**Tidal Wetlands - Under Article 25**  
**6 NYCRR 608 Water Quality Certification - Under Section 401 - Clean Water Act**  
**Excavation & Fill in Navigable Waters - Under Article 15, Title 5**  
**NYC PARKS-STARLIGHT PARK**  
**SHERIDAN EXPWY ROW, WESTCHESTER AVE TO E174 ST**  
**BRONX, NY**

Dear Ms. Braddick:

Enclosed is your permit for the above referenced project. It is effective beginning October 4, 2016 and expires on December 31, 2025. Please read all permit conditions carefully. All permit documents must be available upon request by Department staff and must be distributed to and understood by personnel responsible for the proper operation of the project and compliance with the permit requirements. Any violation of these permit conditions constitutes a violation of the Environmental Conservation Law.

Please note Natural Resource Permit Conditions Nos. 3, 4, 6, 7, 21 and 30 which require your submission of additional documentation to the Department to comply with this Permit. Any questions concerning this matter should be directed to myself in the Division of Environmental Permits at p.(718) 482-4972.

Very truly yours,



Erin L. Shirkey  
Environmental Analyst II  
Division of Environmental Permits

ecc: NYCDDC, J. Jean-Louis  
NYSDOT, J. Lau  
RBA Group, J. Menzer  
MHP/RPA/File



Department of  
Environmental  
Conservation

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
Facility DEC ID 2-6007-00265



## PERMIT

### Under the Environmental Conservation Law (ECL)

#### Permittee and Facility Information

**Permit Issued To:**  
NYC DEPT OF PARKS & RECREATION  
830 5TH AVE  
  
NEW YORK, NY 10021-7001

**Facility:**  
NYC PARKS-STARLIGHT PARK  
SHERIDAN EXPWY ROW, WESTCHESTER  
AVE TO E174 ST  
BRONX, NY

**Facility Permit Contact:**  
THERESE BRADDICK  
NYC DEPT OF PARKS & RECREATION -  
OLMSTEAD CTR  
117-02 ROOSEVELT AVE  
FLUSHING, NY 11368  
(718) 760-6602

**Facility Application Contact:**  
JEAN M JEAN-LOUIS  
NYC Department of Design & Construction  
  
30-30 Thompson Ave  
Long Island City, NY 11101  
(718) 391-3134

**Facility Location:** in BRONX COUNTY Village: Bronx County

**Facility Principal Reference Point:** NYTM-E: 594.266 NYTM-N: 4520.857  
Latitude: 40°49'60.0" Longitude: 73°52'55.1"

**Project Location:** Starlight Park from Westchester Avenue to E.174th St., Bronx, NY

**Authorized Activity:** This permit authorizes improvements and reconstruction to Starlight Park to form connections to the Bronx River Greenway to the North and Concrete Plant Park to the South. The improvements will be a multi-use landscaped bikeway and walkway approximately 0.5 miles long, extending along the Bronx River (WIN#ER-3, Part 935-18, Class I, Standard I) from Westchester Avenue to E.174th St. in the Bronx. The application includes the construction of pathways, two foot bridges to span across the Bronx River, new green spaces and native plantings, dredging, wetlands enhancements and restoration along the Bronx River within State regulated Tidal Wetlands and within the Tidal Wetland adjacent area.

#### Permit Authorizations

##### Tidal Wetlands - Under Article 25

Permit ID 2-6007-00265/00011

New Permit

Effective Date: 10/4/2016

Expiration Date: 12/31/2025

##### Water Quality Certification - Under Section 401 - Clean Water Act

Permit ID 2-6007-00265/00012

New Permit

Effective Date: 10/4/2016

Expiration Date: 12/31/2025

##### Excavation & Fill in Navigable Waters - Under Article 15, Title 5

Permit ID 2-6007-00265/00013

New Permit

Effective Date: 10/4/2016

Expiration Date: 12/31/2025

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
Facility DEC ID 2-6007-00265



**NYSDEC Approval**

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: STEPHEN A WATTS, Regional Permit Administrator

Address: NYSDEC Region 2 Headquarters  
47-40 21st St  
Long Island City, NY 11101 -5401

Authorized Signature: \_\_\_\_\_

Date 10/04/2016

**Distribution List**

JEAN M JEAN-LOUIS  
THERESE BRADDICK  
Marine Resources

**Permit Components**

NATURAL RESOURCE PERMIT CONDITIONS

WATER QUALITY CERTIFICATION SPECIFIC CONDITION

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

**Permit Attachments**

Permit Sign  
Notice of Intent to Commence Work  
Notice of Completion of Work

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
Facility DEC ID 2-6007-00265



**NATURAL RESOURCE PERMIT CONDITIONS - Apply to the Following  
Permits: TIDAL WETLANDS; WATER QUALITY CERTIFICATION;  
EXCAVATION & FILL IN NAVIGABLE WATERS**

1. **Conformance With Plans** All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or applicant's agent as part of the permit application. Such approved plans were prepared by RBA Group for NYCDDC and NYCDPR included in the Joint Application submission dated August 22, 2016 received by NYSDEC on August 26, 2016.
2. **Conformance with Plans - Addenda** In addition to any plans referenced in the Condition titled "Conformance with Plans," the activities authorized by this permit must be in strict conformance with the following approved plans and/or submissions made as part of the permit application:
  - A. Plans titled "Construction of Starlight Park- Phase II Borough of the Bronx" Sheets 1-5, 9-15, 23-29, 32-41, and 52-68 prepared by RBA Group dated July 7, 2016 and received by NYSDEC on August 26, 2016.
  - B. Plans titled "Construction of Starlight Park- Phase II Borough of the Bronx" Sheets 6-8 prepared by RBA Group dated July 5, 2016 and received by NYSDEC on August 26, 2016.
  - C. Plans titled "Construction of Starlight Park- Phase II Borough of the Bronx" Sheets 16-22 and 49-51 prepared by RBA Group dated September 17, 2015 and received by NYSDEC on August 26, 2016.
  - D. Plans titled "Construction of Starlight Park- Phase II Borough of the Bronx" Sheets 30, 31, and 42-48 prepared by RBA Group dated July 31, 2015 and received by NYSDEC on August 26, 2016.
3. **Notice of Intent to Commence Work** At least five (5) days prior to the start of work, Permittee must complete and submit the attached "Notice of Intent to Commence Work" form to the NYSDEC Bureau of Marine Resources, 47-40 21st Street, Long Island City, New York 11101 (Attention: Justin Falls).
4. **Notice of Completion of Work** Within ten (10) days of the completion of work, Permittee must complete and submit the attached Notice of Completion of Work form to NYSDEC Bureau of Marine Resources, 47-40 21st Street, Long Island City, New York 11101 (Attention: Justin Falls).
5. **Post Permit Sign** The permit sign enclosed with this permit shall be posted in a conspicuous location on the worksite and adequately protected from the weather.
6. **Placement of Dredged Material** Information on the final placement location of the licensed facility must be received at least thirty (30) days prior to the commencement of dredging. Information should include:
  - A. The name and address of the licensed facility for disposal of dredged material.
  - B. The name, email, and phone number of the contact person for the placement site.
  - C. A letter of approval from the placement location stating that it is willing and able to accept the dredged material.

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- D. A copy of the facility permits and/or other authorizations that enable the placement site to accept the subject dredged material.
- E. No onsite reuse is permitted unless the Permittee obtains authorization in writing from the Department.

**7. Delivery and Placement of Bridge Structures** Information on the final delivery method and placement of bridge components/sections of the bridge structure(s) must be received at least ninety (90) days prior to delivery of materials to reconfirm the delivery and installation method.

**8. Minimize Adverse Impacts to Wetlands, Wildlife, Water** All work must be accomplished in a manner which minimizes adverse impacts to freshwater wetlands, wildlife, water quality, and natural resources.

**9. Precautions Against Contamination of Waters** All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.

**10. Concrete or Leachate Must Not Escape** During construction, concrete or leachate will not escape or be discharged, nor will washings from transit mix trucks, mixers, or other devices enter any water body, including wetlands or protected buffer areas.

**11. Removal of Debris and Excess Material** Any debris or excess material from construction of this project will be completely removed from the adjacent area (upland) and removed to an approved upland area for disposal. No debris is permitted in tidal wetlands or tidal wetlands adjacent area or protected buffer areas.

**12. Erosion/Sediment Control** All areas of soil disturbance resulting from this project will be stabilized immediately following project completion or prior to permit expiration, whichever comes first. The approved methodologies are as follows:

- A. Stabilization of the entire disturbed area with appropriate vegetation (grasses, etc.).
- B. Stabilized as per specifications identified on approved plans.
- C. Temporarily stabilized with straw or hay mulch or jute matting or other similar natural fiber matting within 1 week of final grading. Temporary stabilization will be maintained until a mature vegetative cover is established.

**13. Disturbed Soils** All disturbed areas where soil will be temporarily exposed or stockpiled for longer than one (1) week will be contained by a continuous line of staked hay bales/silt curtain (or other NYSDEC approved method) placed on the seaward side between the fill and wetland or protected buffer area. Tarps are authorized to supplement these approved methods.

**14. Fill Material** All fill will consist of "clean" sand, gravel, or soil. The use of material such as asphalt, slag, fly-ash, recycled concrete aggregate (RCA), broken concrete, or demolition debris is strictly prohibited.

**15. No Excavating Beach for Fill** Excavation of the beach for the purpose of obtaining fill or stone materials is prohibited.



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Facility DEC ID 2-6007-00265

**16. No Discharge into Tidal Wetlands** There will be no discharge of runoff or other effluent over or through any bulkhead or shoreline stabilization structure or into any tidal wetland or tidal wetlands adjacent area (unless specifically authorized herein).

**17. Best Management Practices** Best management practices will be employed to prevent the loss of construction materials, debris and sediments from entering the wetlands or waterways. Such practices may include, but are not limited to construction fencing, staked hay bales, silt fencing, floating platforms, netting, containment booms.

**18. Complete Construction Before Backfilling** Construction of all peripheral riprap berms, cofferdams, rock revetment, gabions, bulkheads, etc., shall be completed prior to placement of any fill material behind such structures.

**19. Demolition and Construction Debris** Should any demolition or construction debris fall into the waterway or enter the tidal wetlands, it must be removed immediately.

**20. Disposal of Demolition and Construction Debris** All demolition and construction debris must be properly disposed of at a licensed facility.

**21. Planting Survival** All plants, as shown on Mitigation drawings of this permit (Wetland Mitigation Plan -1, Wetland Mitigation Plan -2, Wetland Mitigation Sections -1, and Wetland Mitigation Sections -2), must be monitored for a minimum of five (5) years following the initial planting to ensure an 85% survival rate. If plant survival is less than 85%, dead plants are to be replaced. The Permittee shall notify the NYSDEC, 47-40 21st Street, Long Island City, NY 11101 (Attention: Habitat Manager), in writing, when planting activities are completed. The planting area must be evaluated annually, and a report must be submitted to the NYSDEC, 47-40 21st Street, Long Island City, NY 11101 (Attention: Habitat Manager) by November 15th of each consecutive growing season following initial planting, as to the condition of the plants and the actions taken in the planting area. Both the initial notification and following five (5) growing season reports should include plant species, number of plants, and photographs of the planting area.

**22. Dredging Operation** During the dredging operation, the Permittee or the Permittee's agent will prevent spillage of sediment during excavation and haulage. Dredging will be accomplished with a clam shell or other closed "bucket" equipment. The use of a dragline for dredging is strictly prohibited.

**23. Excavated Sediments** Excavated sediments must be placed directly into the approved disposal site or conveyance vehicle. The sidecasting (double dipping) or temporary storage of excavated material is strictly prohibited.

**24. Disposal of Excavated Material** All dredged material will be disposed on an approved upland site and be retained so as to not reenter any water body, tidal wetland, or protected buffer area.

**25. Barge Overflow** Barge overflow is prohibited.

**26. Decanting** The Permittee will be allowed to decant the dredged water off the barge so long as all of the conditions below are met:

- A. All dredge material is allowed to settle for at least 24 hours prior to decanting.
- B. The barge water is clear of turbidity.
- C. Decanting of the barge shall be conducted in a manner that precludes adding substantial

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suspended solids, turbidity or sheens to the receiving water body. During pumping of the decant water, great care shall be taken to avoid re-suspending or pumping previously settled sediment.

**27. No Terrestrial Equipment in the Water** The tires or tracks of land based heavy equipment is not permitted to operate below the mean high water line.

**28. Vessel Clearance** Any barge or vessel used to stage or conduct this work must maintain clearance from the mud line during all tidal cycles.

**29. No Interference With Navigation** There shall be no unreasonable interference with navigation by the work herein authorized.

**30. Post Construction Photographs** Post-construction photographs of the work area must be submitted to the NYSDEC Bureau of Marine Resources, 47-40 21st Street, Long Island City, New York 11101 (Attention: Justin Falls) within 30 days of the completion of work.

**31. Prior Approval of Changes** If the Permittee desires to make any changes in construction techniques, species to be planted, the site plan, any mitigation plan, scheduling or staging of construction, or any other aspect of this project, the Permittee shall submit a written request to the Regional Permit Administrator to make such proposed changes and shall not make such changes unless authorized in writing by the Department.

**32. Failure to Meet Permit Conditions** Failure of the permittee to meet all the conditions of this permit is grounds for an order to immediately cease the permitted activity at the project site.

**33. State May Order Removal or Alteration of Work** If future operations by the State of New York require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Department of Environmental Conservation it shall cause unreasonable obstruction to the free navigation of said waters or flood flows or endanger the health, safety or welfare of the people of the State, or cause loss or destruction of the natural resources of the State, the owner may be ordered by the Department to remove or alter the structural work, obstructions, or hazards caused thereby without expense to the State, and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners, shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable and flood capacity of the watercourse. No claim shall be made against the State of New York on account of any such removal or alteration.

**34. State May Require Site Restoration** If upon the expiration or revocation of this permit, the project hereby authorized has not been completed, the applicant shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may lawfully require, remove all or any portion of the uncompleted structure or fill and restore the site to its former condition. No claim shall be made against the State of New York on account of any such removal or alteration.

**35. State Not Liable for Damage** The State of New York shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the State for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
Facility DEC ID 2-6007-00265



### WATER QUALITY CERTIFICATION SPECIFIC CONDITIONS

**1. Water Quality Certification** The authorized project, as conditioned pursuant to the Certificate, complies with Section 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act, as amended and as implemented by the limitations, standards, and criteria of state statutory and regulatory requirements set forth in 6 NYCRR Section 608.9(a). The authorized project, as conditioned, will also comply with applicable New York State water quality standards, including but not limited to effluent limitations, best usages and thermal discharge criteria, as applicable, as set forth in 6 NYCRR Parts 701, 702, 703, and 704.

### GENERAL CONDITIONS - Apply to ALL Authorized Permits:

**1. Facility Inspection by The Department** The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

**2. Relationship of this Permit to Other Department Orders and Determinations** Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

**3. Applications For Permit Renewals, Modifications or Transfers** The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator  
NYSDEC Region 2 Headquarters  
47-40 21st St  
Long Island City, NY11101 -5401

**4. Submission of Renewal Application** The permittee must submit a renewal application at least 30 days before permit expiration for the following permit authorizations: Excavation & Fill in Navigable Waters, Tidal Wetlands, Water Quality Certification.

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Facility DEC ID 2-6007-00265

**5. Permit Modifications, Suspensions and Revocations by the Department** The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

- a. materially false or inaccurate statements in the permit application or supporting papers;
- b. failure by the permittee to comply with any terms or conditions of the permit;
- c. exceeding the scope of the project as described in the permit application;
- d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

**6. Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

<b>NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS</b>
--

**Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification**

The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

**Item B: Permittee's Contractors to Comply with Permit**

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

**Item C: Permittee Responsible for Obtaining Other Required Permits**

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
Facility DEC ID 2-6007-00265



**Item D: No Right to Trespass or Interfere with Riparian Rights**

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

**NOTICE OF INTENT TO COMMENCE WORK**

Date: \_\_\_\_\_

NYSDEC Natural Resources  
Attn. Natural Resources Supervisor  
N.Y.S.D.E.C Region 2 Office  
47-40 21st Street  
Long Island City, N.Y. 11101

Re: NYSDEC Permit No. 2-6007-00265/00011 (TW)/00012(WQC)/00013(EF)  
NYC PARKS-STARLIGHT PARK  
SHERIDAN EXPWY ROW, WESTCHESTER AVE TO E174 ST  
BRONX, NY

Dear NYSDEC Natural Resources Supervisor:

In accordance with Natural Resource Condition 3 of the referenced permit, I hereby serve notice to commence work on \_\_\_\_\_, 20\_\_\_\_.

This is also to certify that, having read this entire permit, I am fully aware of and understand the general and natural resource conditions therein, and agree to comply with all such conditions further understand that prior to undertaking any modification to the subject work, I must seek and receive written approval of the NYSDEC Regional Permit Administrator.

\_\_\_\_\_  
Signature of Permittee

\_\_\_\_\_  
Signature of Contractor

\_\_\_\_\_  
Name of Permittee (please print)

\_\_\_\_\_  
Name of Contractor (please print)

\_\_\_\_\_  
Street Address of Contractor

\_\_\_\_\_  
City, State, & Zip Code of Contractor

\_\_\_\_\_  
Telephone Number of Contractor

**WARNING**

The permittee and his contractor (if any) are required to follow all permit conditions. Violations of the permit may lead to legal action, including the imposition of substantial monetary fines and corrective work.

cc: Environmental Permits  
Marine Resources

NOTICE OF COMPLETION OF WORK

Date: \_\_\_\_\_

NYSDEC Natural Resources  
Attn. Natural Resources Supervisor  
N.Y.S.D.E.C Region 2 Office  
47-40 21st Street  
Long Island City, N.Y. 11101

Re: NYSDEC Permit No. 2-6007-00265/00011 (TW)/00012(WQC)/00013(EF)  
NYC PARKS-STARLIGHT PARK  
SHERIDAN EXPWY ROW, WESTCHESTER AVE TO E174 ST  
BRONX, NY

Dear NYSDEC Natural Resources Supervisor:

In accordance with Natural Resource Condition 4 of the referenced permit, I hereby serve notice that the work allowed by the above referenced permit has been completed as of \_\_\_\_\_, 20\_\_\_\_, consistent with the requirements of the above referenced permit.

\_\_\_\_\_  
Signature of Permittee

\_\_\_\_\_  
Signature of Contractor

\_\_\_\_\_  
Name of Permittee (please print)

\_\_\_\_\_  
Name of Contractor (please print)

\_\_\_\_\_  
Street Address of Contractor

\_\_\_\_\_  
City, State, & Zip Code of Contractor

\_\_\_\_\_  
Telephone Number of Contractor

cc: Environmental Permits  
Marine Resources

New York State  
Department of Environmental Conservation

# NOTICE

The Department of Environmental Conservation (DEC) has issued permit(s) pursuant to the Environmental Conservation Law for work being conducted at this site. For further information regarding the nature and extent of work approved and any Departmental conditions on it, contact the Regional Permit Administrator listed below. Please refer to the permit number shown when contacting the DEC.

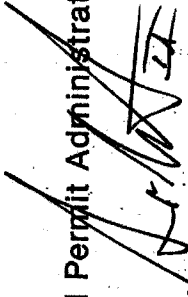
Regional Permit Administrator

2-6007-00265/00011 (TW)/00012(WQC)/00013(EF)

Permit Number \_\_\_\_\_

12/31/2025

Expiration Date \_\_\_\_\_

  
Stephen A. Watts III  
47-40 21<sup>st</sup> Street  
LIC, NY 11101  
(718) 482-4997

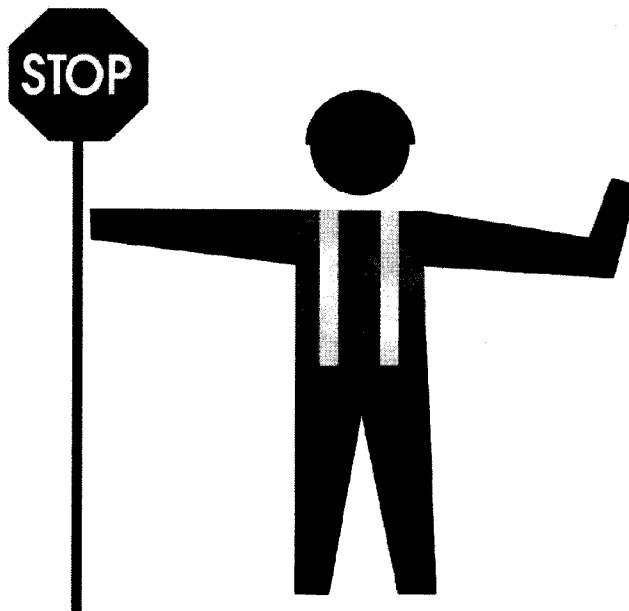
NOTE: This notice is **NOT** a permit

## **APPENDIX D: WORK ZONE TRAFFIC CONTROL**



**NEW YORK STATE  
DEPARTMENT OF TRANSPORTATION**

# **WORK ZONE TRAFFIC CONTROL**



**OFFICE OF TRAFFIC SAFETY AND MOBILITY  
Revised Feb 2015**



## Introduction

### Work Zone Traffic Control

The purpose of work zone traffic control is to provide a safe work area for workers within the roadway, while facilitating the safe and orderly flow of all road users (motorists, bicyclists and pedestrians including persons with disabilities in accordance with the Americans with Disabilities Act of 1990) through the work zone.

This manual is intended to provide New York State Department of Transportation (NYSDOT) employees, utility companies, municipalities, and contractors who are involved with the design, set-up and maintenance of highway work zones, or anyone working within the state right-of-way, with the basic principles and elements constituting a safe work zone. The information presented in this manual is based on the requirements set forth in the National Manual of Uniform Traffic Control Devices and the NYS Supplement, review of work zone manuals from a selection of state and federal agencies, and discussions with members of the NYSDOT Work Zone Traffic Control Committee.

This manual includes basic information on work zone traffic control, including a description of traffic control devices, illustrations of acceptable, commonly used devices, and the proper flagger attire and methods. Color diagrams (typical applications) depicting typical traffic control set-ups for two-lane and multilane highways are intended to show the minimum requirements for a safe work zone set-up. Traffic control or protection can be enhanced for situations that may require additional measures such as high traffic or pedestrian volume, high speeds, restricted sight distance, poor or confusing alignment.

This is a "living document" that will evolve as recommendations are received from the Regions. Work zone traffic control diagrams will be added, and deleted, as necessary, and all will be posted on the NYSDOT internet site ([Work Zone Traffic Control Manual](#)).

Please address any questions, comments, and/or recommendations regarding this manual to **Charles Riedel 518.457.2185** or **MD Haque 518.457.7784**.  
**Office of Traffic Safety & Mobility, NYSDOT.**

## Fundamental Principles

The principles listed below provide a guiding philosophy of good temporary traffic control and enhance the safety of motorists, pedestrians and workers within and near temporary traffic control zones.

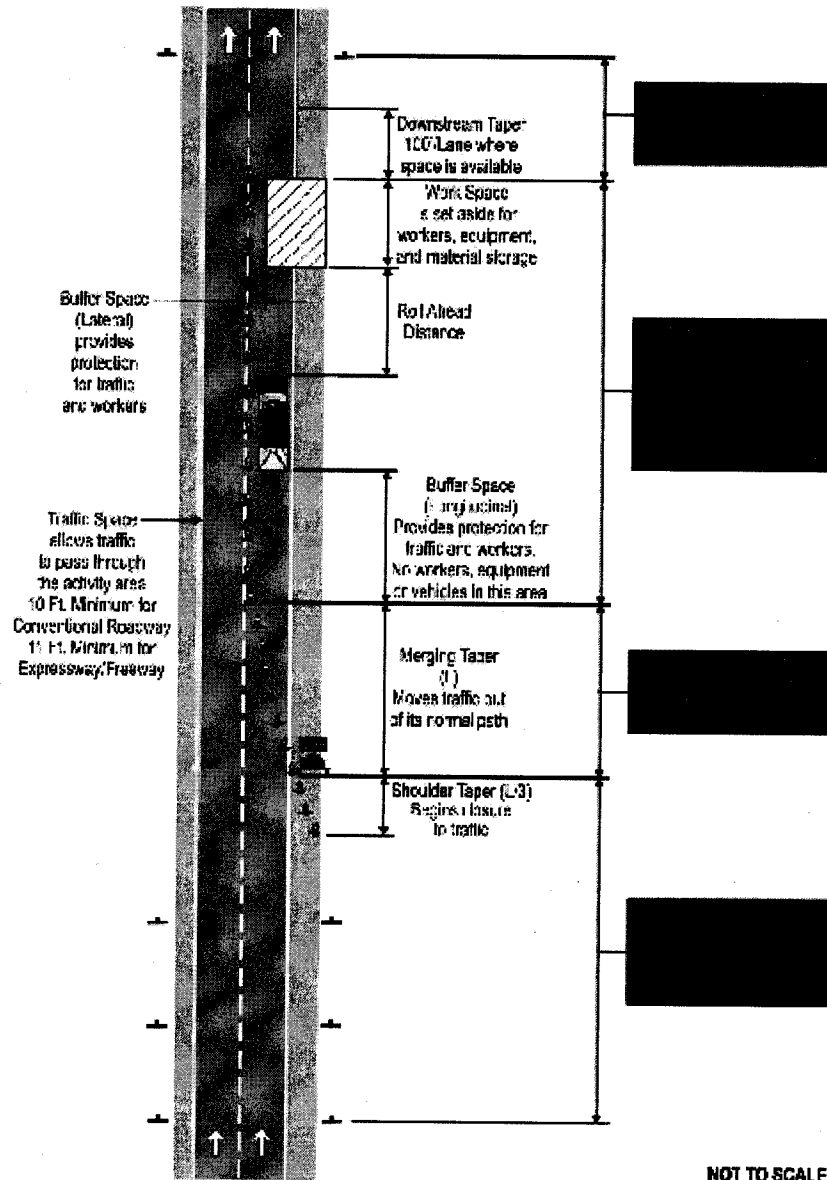
- Make traffic safety and temporary traffic control an integral and high-priority element of every project from planning through design, construction, and maintenance.
- Inhibit traffic movement as little as possible.
- Provide clear and positive guidance to drivers and pedestrians as they approach and travel through the temporary traffic control zone.
- Inspect traffic control elements routinely and modify when necessary.
- Pay increased attention to roadside safety near temporary traffic control.
- Train all persons that select, place and maintain temporary traffic control devices.
- Establish proper legislative authority to implement and enforce needed traffic regulations, speed zoning, parking controls, and incident management.
- Keep the public well informed.
- If there is a side road intersection/driveway or ramp within the work area, additional traffic control, such as flaggers and appropriate signs, may be needed on the side road/driveway approaches or ramps.

## The Work Zone

The work zone is the distance between the first advance warning sign and the point beyond the work area where traffic is no longer affected.

- Advance warning area tells traffic what to expect ahead.
- Transition area moves traffic out of its normal path.
- The Activity area provides space for the work, traffic, and buffer space and/or protective vehicles between the two.
  - Buffer areas separate traffic from workers and provide a recovery area for errant vehicles. **No equipment, vehicles or material shall be placed in this area.**
  - Protective vehicle area provides a temporary barrier vehicle and roll-ahead distance for worker safety. If a vehicle is not being used, then the roll-ahead distance is not necessary. **No equipment, vehicles or material shall be in the roll-ahead distance.**
  - Work area is set aside for workers, equipment and material storage.
- Termination area lets traffic resume normal driving.

# Components of a Work Zone Traffic Control Area



NOT TO SCALE

## Taper Length Criteria for Work Zones

The five types of roadway tapers (or transitions) used in work zone traffic control are the following:

1. **Merging Taper (L)** - When a lane is closed and vehicles in that lane must merge with traffic in an adjacent lane.
2. **Shifting Taper (L/2)** - When there is a lateral shift in the path of the lanes, but there is no reduction in the number of travel lanes.
3. **Shoulder Taper (L/3)** - When the shoulder is closed to traffic.
4. **One-lane, Two-way Taper** - When one lane of a two lane, two-way roadway is closed to traffic and where alternate one-way operation in one lane is in effect.
5. **Downstream Taper** - When transitioning traffic back to the normal traveling conditions.

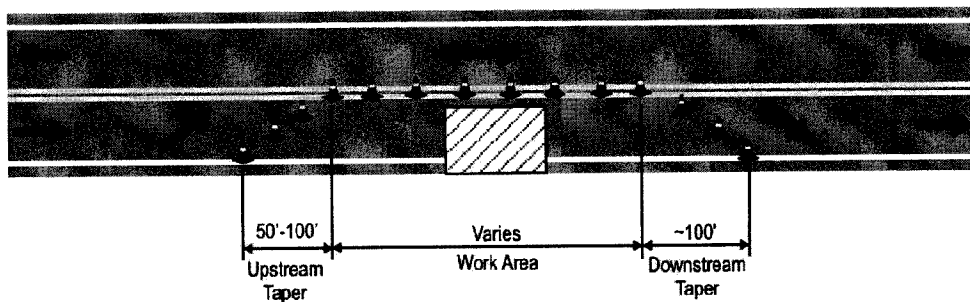
FORMULAS FOR DETERMINING TAPER	
Speed Limit 'S' (mph)	Taper Length 'L' (ft)
40 mph or less	$L = \frac{WS(S)}{60}$
45 mph or more	$L = WS$

L = Taper length in feet

W = Width of offset in feet

S = Posted speed limit, off peak 85<sup>th</sup> percentile speed prior to work starting or the anticipated operating speed in mph

### One-Lane Two-Way Tapers



TAPER LENGTHS AND NUMBER OF CONES CHART

Speed Width (ft.)	25 MPH			30 MPH			35 MPH			40 MPH		
	Taper Length L (ft.) # Skip Lines/ # of Cones	Shoulder Taper L/S (ft.) # Skip Lines/ # of Cones		Taper Length L (ft.) # Skip Lines/ # of Cones	Shoulder Taper L/S (ft.) # Skip Lines/ # of Cones		Taper Length L (ft.) # Skip Lines/ # of Cones	Shoulder Taper L/S (ft.) # Skip Lines/ # of Cones		Taper Length L (ft.) # Skip Lines/ # of Cones	Shoulder Taper L/S (ft.) # Skip Lines/ # of Cones	
1	20/1/2	20/1/2		20/1/2	20/1/2		20/1/2	20/1/2		40/1/2	20/1/2	
2	40/1/2	20/1/2		40/1/2	20/1/2		60/2/3	20/1/2		60/2/3	20/1/2	
3	40/1/2	20/1/2		60/2/3	20/1/2		60/2/3	40/1/2		80/2/3	40/1/2	
4	60/2/3	20/1/2		60/2/3	20/1/2		100/3/4	40/1/2		120/3/4	40/1/2	
5	60/2/3	20/1/2		80/2/3	40/1/2		120/4/5	60/2/3		140/4/5	60/2/3	
6	80/2/3	40/1/2		100/3/4	40/1/2		140/4/5	60/2/3		160/4/5	60/2/3	
7	80/2/3	40/1/2		120/3/4	40/1/2		160/4/5	60/2/3		200/5/6	80/2/3	
8	100/3/4	40/1/2		140/4/5	60/2/3		180/5/6	80/2/3		220/6/7	80/2/3	
9	100/3/4	40/1/2		160/4/5	60/2/3		200/5/6	80/2/3		240/6/7	80/2/3	
10	120/3/4	40/1/2		180/5/6	60/2/3		220/6/7	80/2/3		280/7/8	100/3/4	
11	120/3/4	40/1/2		180/5/6	60/2/3		240/6/7	80/2/3		300/8/9	100/3/4	
12	140/3/5	60/2/3		180/5/6	60/2/3		280/7/8	100/3/4		320/8/9	100/3/4	

Speed Width (ft.)	45 MPH			50 MPH			55 MPH			65 MPH		
	Taper Length L (ft.) # Skip Lines/ # of Cones	Shoulder Taper L/S (ft.) # Skip Lines/ # of Cones		Taper Length L (ft.) # Skip Lines/ # of Cones	Shoulder Taper L/S (ft.) # Skip Lines/ # of Cones		Taper Length L (ft.) # Skip Lines/ # of Cones	Shoulder Taper L/S (ft.) # Skip Lines/ # of Cones		Taper Length L (ft.) # Skip Lines/ # of Cones	Shoulder Taper L/S (ft.) # Skip Lines/ # of Cones	
1	60/2/3	20/1/2		60/2/3	20/1/2		60/2/3	20/1/2		80/2/3	40/1/2	
2	100/3/4	40/1/2		100/3/4	40/1/2		120/3/4	40/1/2		140/4/5	60/2/3	
3	140/4/5	60/2/3		160/4/5	60/2/3		180/5/6	60/2/3		200/5/6	80/2/3	
4	180/5/6	60/2/3		200/5/6	60/2/3		220/6/7	80/2/3		260/7/8	100/3/4	
5	240/6/7	80/2/3		260/7/8	100/3/4		280/7/8	100/3/4		340/9/10	120/3/4	
6	280/7/8	100/3/4		300/8/9	100/3/4		340/9/10	120/3/4		400/10/11	140/4/5	
7	360/9/10	120/3/4		360/9/10	120/3/4		400/10/11	140/4/5		500/13/14	160/4/5	
8	420/11/11	140/4/5		400/10/11	140/4/5		440/11/12	160/4/5		520/13/14	180/5/6	
9	480/12/12	160/4/5		460/12/13	160/4/5		500/13/14	180/5/6		600/15/16	200/5/6	
10	480/12/12	160/4/5		500/13/14	180/5/6		580/14/15	200/5/6		660/17/18	220/6/7	
11	500/13/13	180/5/6		560/14/15	200/5/6		620/16/17	220/6/7		720/18/19	240/6/7	
12	640/14/14	180/5/6		600/15/16	200/5/6		680/17/18	220/6/7		780/20/21	260/7/8	

## Buffer Spaces

The buffer space is a crucial safety feature of a work zone. It serves to separate traffic flow from the work area or potentially hazardous area and provides recovery space for an errant vehicle. In the past, buffer spaces (both longitudinal and lateral) were an optional feature in NYS work zone traffic control. However, **in NYS a longitudinal buffer space is no longer optional in most cases.** A few exceptions have been made depending on the type of work operation and the use of protective vehicles. If there is any question as to whether a buffer space is required for a specific operation, please contact the DOT Regional Traffic Engineer.

**Neither work activity nor the storage of equipment, vehicles, or material shall occur in this area.**

A lateral buffer space may also be used to separate passing traffic from the work area. Its use and width is based on conditions at the work site.

<b>LENGTH OF LONGITUDINAL BUFFER SPACE "B"</b>	
<small>BASED ON TABLE 6C-2 FROM THE NMUTCD</small>	
<b>Speed (mph)</b>	<b>Distance (ft)</b>
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730

Note: Use posted speed limit if 85<sup>th</sup> percentile is unknown

## Protective Vehicle Area and Roll-Ahead Distances

Proper placement of protective (shadow/barrier) vehicles is essential during all types of operations. The vehicle must be placed close enough to the operation to prevent motorists from intruding into the work space, but not so close as to have the protective vehicle pushed ahead into the work space if hit from behind. This distance is known as the roll-ahead distance. The weight of the protective vehicle, the speed of traffic, the speed of the work operation, and the vehicle make-up of the traffic stream (all passenger vehicles or a large number of tractor trailers) will determine the roll-ahead distance to be used. **The roll-ahead distances shown on our typical applications use a 24,000 lb protective vehicle and a 15,000 lb impacting vehicle.**

**There shall be no equipment, vehicles, or workers within the roll-ahead area.**

## Types of Protective Vehicles

There are two types of protective vehicles: **Barrier and Shadow**

**Barrier Vehicle:** A barrier vehicle is for stationary work operations to protect workers on foot in the roadway from errant vehicles. The barrier vehicle is unoccupied with the parking break set and front wheels turned away from oncoming traffic and employees in the work area, if possible. A barrier vehicle does not require a Truck Mounted Impact Attenuator (TMIA) in all cases. If a TMIA is used, it shall be attached to a large dump truck, a large rack truck or other vehicle having a gross weight of at least 24,000 pounds. Where the posted speed limit is 55 mph or less, the TMIA shall be a Test Level 2 attenuator. Where the posted speed is more than 55 mph, a Test Level 3 attenuator shall be used, if available. Barrier vehicles may be loaded with sand, gravel or fine aggregate to enhance the vehicle's gross weight.

**Shadow Vehicle:** A shadow vehicle is for mobile operations only. The shadow vehicle shall be equipped and meet the same size and weight requirements as a barrier vehicle. The driver shall remain in the vehicle and adjust the vehicle's spacing as work progresses.

**Advance Warning Vehicle:** This vehicle is stationed a considerable distance in advance of a moving or stationary maintenance operation. Its purpose is to display sign messages which will advise motorists of what to expect ahead. If the vehicle is able to stay completely on the shoulder, a pick up truck may be used. However, if the vehicle encroaches into the travel lane, it then becomes a Barrier/Shadow Vehicle and shall be equipped accordingly.

### Computed Roll-Ahead Distances for Protective Vehicles

<b>SHADOW VEHICLE MOVING OPERATION (B)</b>					
<b>Vehicle Weight (lb)</b>	<b>Prevailing Speed (mph)</b>	<b>Weight of Impacting Vehicle To Be Contained (a)</b>			
		<b>4,500 lb</b>	<b>10,000 lb</b>	<b>15,000 lb</b>	<b>24,000 lb</b>
<b>10,000</b>	60-65	100 Ft.	175 Ft. (c)	225 Ft.	275 Ft.
	50-55	100 Ft.	150 Ft. (c)	175 Ft.	200 Ft.
	45 or less	75 Ft.	100 Ft. (c)	125 Ft.	150 Ft.
<b>15,000</b>	60-65	75 Ft.	150 Ft.	175 Ft.	225 Ft.
	50-55	75 Ft.	125 Ft.	150 Ft.	175 Ft.
	45 or less	50 Ft.	100 Ft.	100 Ft.	100 Ft.
<b>24,000</b>	60-65	75 Ft.	100 Ft.	150 Ft.	175 Ft.
	50-55	50 Ft.	75 Ft.	100 Ft.	150 Ft.
	45 or less	50 Ft.	75 Ft.	75 Ft.	100 Ft.

**Notes:**

- (a) Weights of typical vehicles: mid-size auto, 2,250 lb; full-size auto 3,500 lb; loaded ¾-ton pickup truck, 6,000 lb; loaded 1-ton cargo truck, 10,000 lb; **loaded 4-yard dump truck, 24,000lb.**
- (b) **Distances are appropriate for the shadow vehicle speeds up to 15 mph.**
- (c) Values suggested as the appropriate buffer distance for vehicles equipped with TM/As.

**Source:**

J.B. Humphreys and T.D. Sullivan, "Guidelines for the Use of Truck-Mounted Attenuators", Proceedings of the Symposium on the Work Zone Traffic Control, Federal Highway Administration, June 1991.



### Computed Roll-Ahead Distances for Protective Vehicles

<b>BARRIER VEHICLE STATIONARY OPERATION</b>					
<b>Vehicle Weight (lb)</b>	<b>Prevailing Speed (mph)</b>	<b>Weight of Impacting Vehicle To Be Contained (a)</b>			
		<b>4,500 lb</b>	<b>10,000 lb</b>	<b>15,000 lb</b>	<b>24,000 lb</b>
<b>10,000</b>	60-65	50 Ft.	100 Ft.	150 Ft.	200 Ft.
	50-55	25 Ft.	75 Ft.	100 Ft.	150 Ft.
	45 or less	25 Ft.	50 Ft.	75 Ft.	100 Ft.
<b>15,000</b>	60-65	25 Ft.	75 Ft.	100 Ft.	150 Ft.
	50-55	25 Ft.	50 Ft.	75 Ft.	100 Ft.
	45 or less	25 Ft.	25 Ft.	50 Ft.	75 Ft.
<b>24,000</b>	60-65	25 Ft.	50 Ft.	75 Ft.	100 Ft.
	50-55	25 Ft.	25 Ft.	50 Ft.	75 Ft.
	45 or less	25 Ft.	25 Ft.	25 Ft.	50 Ft.

**Notes:**

- (a) Weights of typical vehicles: mid-size auto, 2,250 lb; full-size auto 3,500 lb; loaded ¾-ton pickup truck, 6,000 lb; loaded 1-ton cargo truck, 10,000 lb; **loaded 4-yard dump truck, 24,000lb.**
- (b) N/A
- (c) Values suggested as the appropriate buffer distance for vehicles equipped with TMIA's.

**Source:**

J.B. Humphreys and T.D. Sullivan, "Guidelines for the Use of Truck-Mounted Attenuators", Proceedings of the Symposium on the Work Zone Traffic Control, Federal Highway Administration, June 1991

## Work Area Duration

Work duration is a major factor in determining the number and types of devices used in work zone traffic control areas. As a general rule, the longer the operation will last, the more traffic control devices are needed.

**Mobile Work:** Work that moves intermittently or continuously.

**Examples:**

- Placing cones and/or signs for stationary work zones
- Herbicide spraying
- Sweeping operations
- Paint striping operations
- Placing traffic counters

Mobile work zones provide the lowest level of traffic control and safety and should only be used where the work at any specific location will be completed within 15 MINUTES. There may be cases where site specific conditions justify longer duration use of mobile work zones to minimize the exposure of traffic and the workers to each other. In such cases, an exception may be approved by responsible person(s) designated by the region after consideration of relevant factors such as speeds, sight distance, staging of the work, degree of obstruction to traffic, traffic volumes, and the relative severity and duration of exposure to workers and traffic.

**Short Duration:** Work that occupies a location for up to 1 hour.

**Examples:**

- Placing traffic counters
- Re-lamping traffic signals/ streetlights
- Pot hole Repair
- Minor guiderail repair
- Sign Repair

Due to the short work time, simplified traffic control set-ups are allowed to reduce the hazards of traffic exposure to workers. Careful consideration of traffic and roadway conditions must be given to each work zone prior to selecting the most appropriate traffic control set-up. Shoulder work and work on low speed, low volume roadways may only require a single warning sign, cones, and a flagger, while a high speed, high volume road would require a more detailed lane closure utilizing more safety control devices such as a barrier vehicle, signs, channelizing devices and a flashing arrow panel.

**Short-Term Stationary:** Daytime work that occupies a location for more than 1 hour within a single daylight period.

**Examples:**

- Guiderail Repair
- Bridge Inspection/Repair
- Ditch Maintenance
- Concrete Roadway Repair

Short term stationary work areas are typically occupied by materials, equipment and workers, but the work area is cleared at the end of the work day and normal traffic flow restored. Traffic control typically includes signs on portable supports, cones or drums

forming a taper and separating the work space from traffic and flashing arrow boards or PVMS as needed. Buffer space or Barrier vehicles are required and impact attenuators are required on the barrier vehicles if prevailing speeds are 45 mph or greater. Traffic control is removed at the end of the work day.

**Intermediate-Term Stationary:** Work that occupies a location more than one daylight period up to 3 consecutive days, or night time work lasting more than 1 hour.

Typically, the work area is occupied by excavations, materials, and/or equipment at times when workers are not present. Temporary traffic control requirements for these type operations are found in the 619 series of NYSDOT Standard Sheets.

**Long-Term Stationary:** Work that occupies a location for more than 3 consecutive days. Typically, the work area is occupied by excavations, materials, and/or equipment at times when workers are not present. Temporary traffic control requirements for these type operations are found in Section 619 of the NYSDOT Standard Sheets.

**Night work:** Extra care should be taken when scheduling work at night. Lighting of the work area and/or flagging stations is required. Appropriate devices include retro reflective signs, large channelizing devices, light dimming arrow panels and additional lights on work equipment. Consult your RTE for additional specific nighttime requirements.

**Incident Management Situations:**

**Examples:**

Traffic accident

Debris on the highway

Initial response to flooding and emergency road and bridge repairs

The immediate response to an emergency situation must be handled safely and make use of available devices and equipment available at that moment. Given the opportunity, however, longer-term (longer than 1 hour) emergencies should be treated in a matter similar to a work zone of other temporary traffic control work sites and proper traffic control should be established as soon as possible.

Response to an emergency situation is inherently more dangerous than a planned situation. Carefully consider the personal safety risks against the public safety needs when selecting a response to the emergency. If the risks outweigh the public safety benefit, wait for assistance from police and other NYSDOT personnel and equipment.

## **Advance Warning Signs**

All work zone signing (ground or truck mounted) shall conform to the NMUTCD and NYS Supplement. Special conditions or emergencies may require additional signing. Refer to the MUTCD and the NYS Supplement for guidance on the proper location, message, spacing, sequence, mounting height and size of signs used for traffic control.

### **Materials**

Rigid and flexible "roll-up" signs may be used for mobile, short duration and short term stationary work. Rigid signs must be mounted at least 5 feet above grade (7 feet where there are pedestrians or parked cars) for visibility and to avoid windshield penetration if they are impacted. Flexible signs must be mounted at least one foot above grade. Mesh signs shall not be used. Use retro reflectorized rigid signs for night work because they present a flat, uniform reflective surface. Sign stands/posts must meet NCHRP 350 crash testing standards. Ex: Breakaway posts and hinges..

### **Installation**

All signs should face at approximately right angles to on-coming traffic and be as close to vertical as possible to avoid reflecting sun glare into the driver's eye. In mobile and short duration work zones, signs may be mounted on vehicles. Orange flags can be mounted on warning signs to enhance their visibility.

### **Credibility**

Signs shall be maintained, clean and with the legend fully intact. They shall remain in place only when needed. Signs which do not reflect actual conditions promote driver disobedience of all signs and therefore should be covered, removed or turned away so they are not visible to traffic in any travel lane. Sign covers must be opaque, and cover the sign face completely. Partially visible signs may divert attention away from traffic and other devices.

If unneeded signs are to be stored at roadside, try to store them out of the clear zone or as far from traffic as practical. If stored close to traffic, lay the signs flat and fold up the legs of the sign supports.

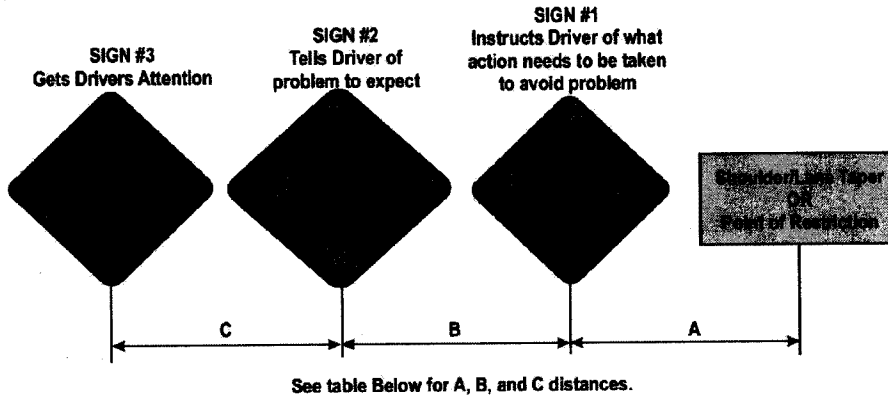
Where operations are performed in stages, only use those devices that apply to the conditions present during the stage in progress. Signs set up over a long distance should be periodically checked.

## Guidance for Proper Signing

- Install one or more work zone warning signs whenever the work results in a changed condition which may require a higher level of driver caution. One sign (usually "Road Work Ahead") may be adequate for minor changes such as removed guide rail, removed edge line or roadside work which does not encroach on the shoulder or travel lane. Use "Road Work Ahead" as the first sign in a warning sign series on minor side roads where distance information is not necessary. Use more signs as the impact on traffic increases. For work which obstructs traffic, a 3 sign series is typical. The first sign is a general warning sign to get the motorist's attention. The second sign warns of the specific condition and the third sign advises the driver of any action to be taken.
- General warning signs such as "Road Work XX Ft" should be limited to the first sign of a series. Subsequent warning signs in that series should identify specific conditions. Use signs shown in the MUTCD/WZTCM for lane and shoulder closure, alignment and intersection signs, flagger and worker symbol signs, road closed, detour, etc.
- Location of advance warning signs should consider exiting and entering traffic. Advance posting distances indicated in the MUTCD and WZTCM are starting points and should be adjusted as appropriate for site specific conditions. Avoid starting a warning sign series upstream from a major exit or intersection, except when it is desirable to divert traffic off the route at that point or where the intersection is within 1000 feet of the work site.
- Where single advance warning signs are provided on ramps or minor intersecting roads, the "Ahead" wording rather than a specific distance is preferred because it is easier to adapt to site conditions and reduces sign inventory needs.
- Warning signs must be located to provide adequate visibility distance to drivers; not blocked by foliage, roadway features, or other signs and traffic control devices; and not located where glare from light sources behind the sign may reduce visibility. Actual distance from a warning sign to the condition should be close to the stated distance on the sign, but accuracy should not be at the expense of sign visibility.
- Signs must be adequately spaced to provide time for the driver to read each one. Sign spacing varies with the type of highway and the prevailing speeds and is specified in the MUTCD and WZTCM. See Advance Warning Sign Spacing Table on the next page for details.

**ADVANCE WARNING SIGNS**

(Typically a 3 Step Process)



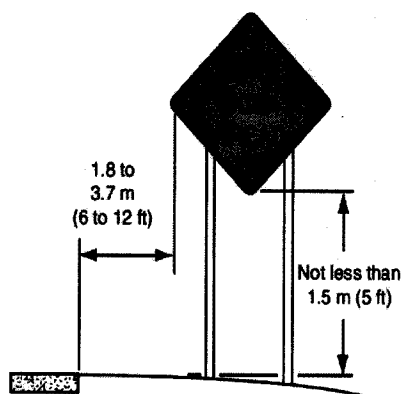
<b>ADVANCE WARNING SIGN SPACING TABLE</b>			
Road Type	Distance Between Signs		
	A	B	C
Urban (30 MPH or Less)	100 Ft.	100 Ft.	100 Ft.
Urban (35-40 MPH)	200 Ft.	200 Ft.	200 Ft.
Urban (45 MPH or Greater)	350 Ft.	350 Ft.	350 Ft.
Rural	500 Ft.	500 Ft.	500 Ft.
Expressway/Freeway	1,000 Ft.	1,500 Ft.	2,600 Ft.

**URBAN:** (Meets one or more of the following criteria)

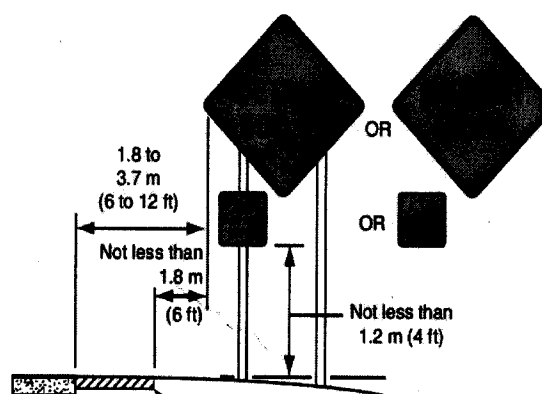
- Sidewalks
- Bicycle Usage
- Curbing
- Closed Drainage Systems
- Driveway densities greater than 24 driveways/mile
- Minor Commercial Driveways densities greater than 10 driveways/mile or greater
- Major Commercial Driveways
- Numerous ROW Constraints
- High Density of Cross Streets
- 85<sup>th</sup> percentile speeds of 45 MPH or less

**RURAL:** Any area not exhibiting more than one of the above characteristics.**EXPRESSWAY:** Divided Highway for through traffic with full or partial control of access and generally with grade separations at major crossroads.**FREEWAYS/INTERSTATE:** Local or interregional high-speed, divided, high-volume facilities with full or partial control of access.

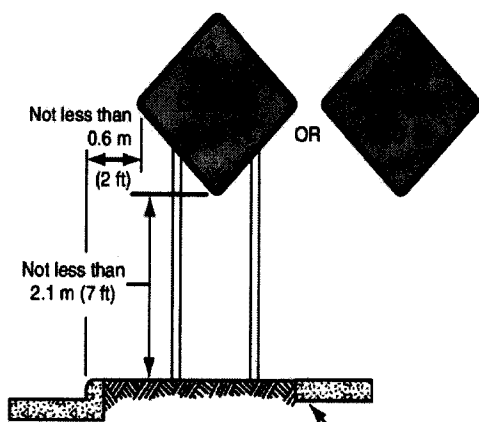
# Height and Lateral Location of Signs - Typical Applications



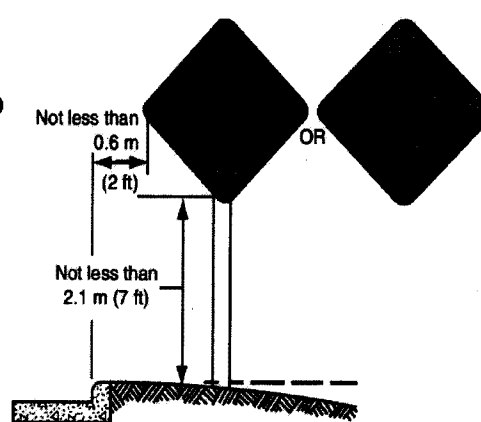
RURAL DISTRICT



RURAL DISTRICT WITH  
ADVISORY SPEED PLATE

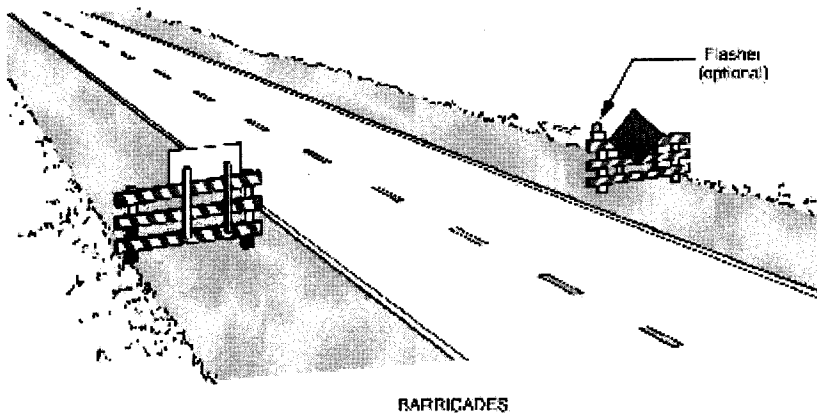
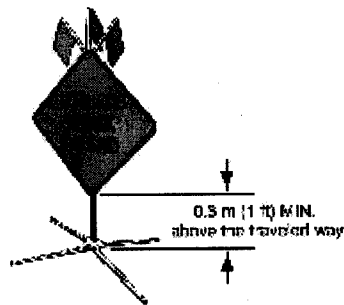
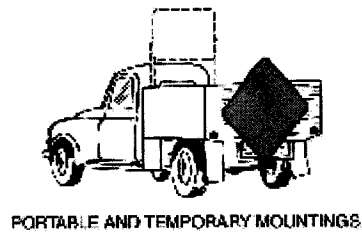
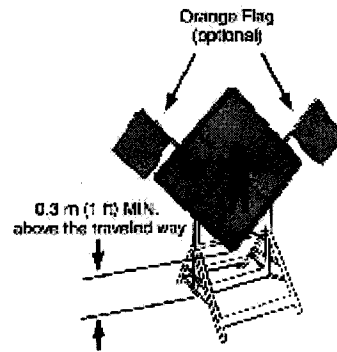
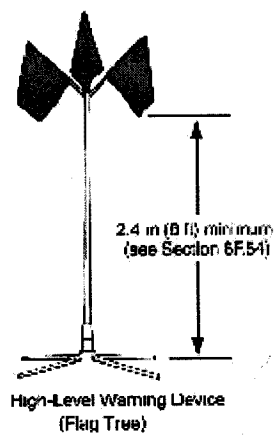


URBAN DISTRICT



URBAN DISTRICT

Methods of Mounting Signs Other Than on Posts





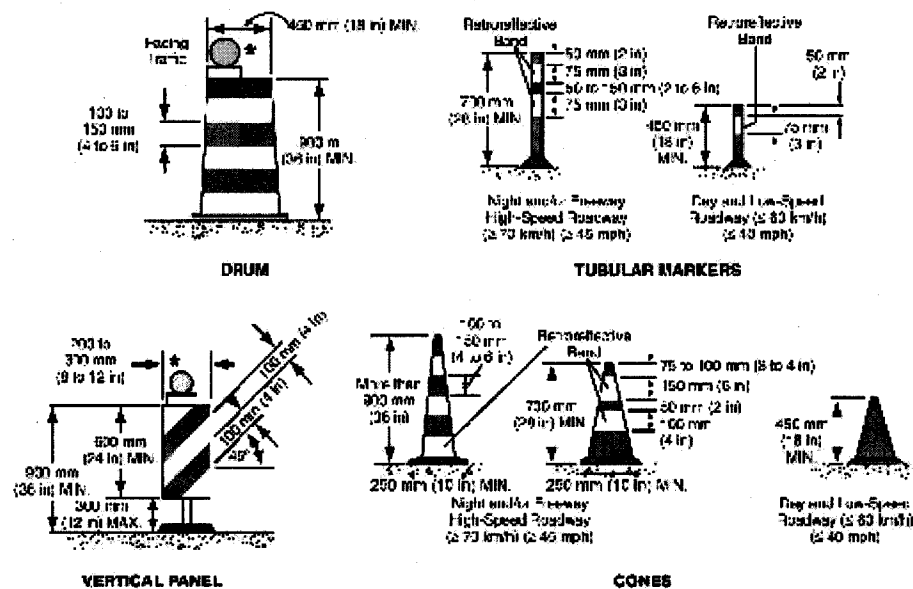
## Channelizing Devices

Channelizing devices are used to warn and alert drivers of conditions in work zones, to protect workers, and to guide and direct drivers and pedestrians safely. Channelizing devices include cones, tubular markers, vertical panels, drums, barricades, and barriers.

Cones are used most commonly for Short Duration/Short Term maintenance & Utility work. Cones used at night shall be retro reflectorized. Drums are most commonly used where they will remain in place for a prolonged work period Ex: Long Term Stationary Operations (> 3 Days). Ballast shall not be placed on top of channelizing devices.

Cone Spacing in the Work Area (straight a way) shall be a maximum of 40 feet (1 Skip Line)

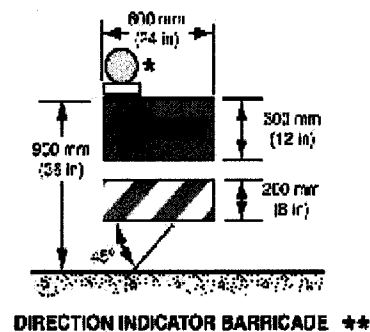
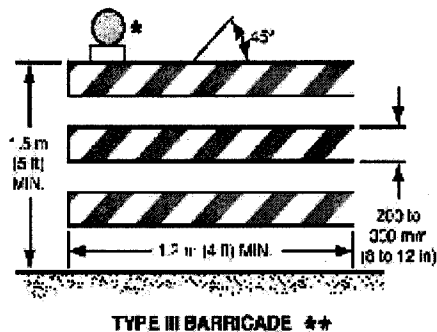
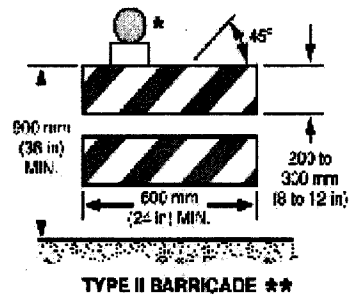
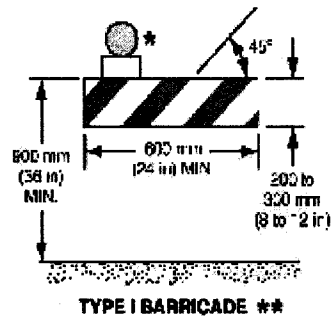
### Channelizing Devices



\* Warning lights (optional)

Note: If drums, cones, or tubular markers are used to channelize pedestrians, they shall be located such that there are no gaps between the bases of the devices, in order to create a continuous bottom, and the height of each individual drum, cone, or tubular marker shall be no less than 900 mm (36 in) to be detectable to users of long cars.

### Channelizing Devices (Continued)



\* Warning lights (optional)


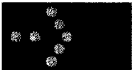
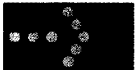


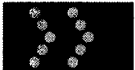



\*\* Rail stripe widths shall be 150 mm (6 in), except that 100 mm (4 in) wide stripes may be used if rail lengths are less than 900 mm (36 in). The sides of barricades facing traffic shall have retroreflective rail faces.

Note: If barricades are used to channelize pedestrians, there shall be continuous detectable bottom and top rails with no gaps between individual barricades to be detectable to users of long canes. The bottom of the bottom rail shall be no higher than 150 mm (6 in) above the ground surface. The top of the top rail shall be no lower than 900 mm (36 in) above the ground surface.

## Flashing Arrow Panels

- Arrow panels are traffic control devices used for additional advance warning and where a lane is closed and traffic must merge with traffic in an adjacent lane. They are generally used for lane closure, and slow moving maintenance activities. Use flashing arrow panels for all lane closures on highways where the posted speed limit equals or exceeds 45 mph.
- **The arrow display should NEVER be used on two-lane, two-way roads.** Arrow displays should only be used where traffic can be moved to another lane without danger of meeting on-coming traffic....multi-lane, single direction roadways.
- The four corner flash mode may be used to provide additional advance warning where an arrow display is not appropriate.  
*THE FLASHING BAR DISPLAY IS NOT PERMITTED.*
- Locate arrow panels to maximize the distance between the arrow panel and the point where drivers first must see and understand the arrow. Provide at least ½ mile legibility (more if possible) for highways with speed limits of 45 mph or greater. Trailer mounted arrow panels should be 4 feet high by 8 feet wide, mounted at a height of 7 feet. Provide at least 1500 foot legibility if used where speed limits are below 45 mph.
- For stationary lane closures, place the arrow panel on the shoulder inside the taper near the beginning of the taper. Avoid placing it near ramps, median crossovers, and intersections where it may confuse drivers. Use only one arrow panel for each **stationary** lane closure. Too many arrow panels can encourage drivers to change lanes unnecessarily.
- For mobile maintenance activities where a lane is closed, an arrow panel must be placed in the closed lane at the rear of the activity. If possible, use two arrow panels for mobile/moving work zones; one on the first shadow vehicle in the closed lane, and the second on a shadow vehicle, pick-up truck or trailer on the shoulder upstream of the first one. The arrow panel should be placed on a vehicle separate from a work vehicle and positioned between the last work vehicle and approaching traffic.
- In areas of restricted sight distance, it may be necessary for the arrow panel vehicle to lag behind or stop and wait behind the activity to maintain optimal visibility to approaching traffic. As sight distance improves behind the activity, the arrow panel vehicle should close the gap. However, the distance between the arrow panel vehicle and the work activity should be kept short enough to discourage drivers from re-entering the lane.

## Advance Warning Arrow Display Specifications

Operating Mode	Panel Display (Type C panel illustrated)
I. At least one of the three following modes shall be provided:	(Right arrow shown; left is similar)
Flashing Arrow	 Move/Merge Right
Sequential Arrow	   Move/Merge Right
Sequential Chevron	   Move/Merge Right
II. The following mode shall be provided: Flashing Double Arrow	 Move/Merge Right or Left
III. The following mode shall be provided: Flashing Caution	 Caution

Panel Type	Minimum Size	Minimum Legibility Distance	Minimum Number of Elements
A	1200 x 600 mm (48 x 24 in)	0.8 km (1/2 mi)	12
B	1500 x 750 mm (60 x 30 in)	1.2 km (3/4 mi)	13
C	2400 x 1200 mm (96 x 48 in)	1.6 km (1 mi)	15
D	None*	0.8 km (1/2 mi)	12

\*Length of arrow equals 1200 mm (48 in), width of arrowhead equals 600 mm (24 in)

## **Portable Variable Message Signs (PVMS)**

These devices provide added (supplemental) warning and real time information concerning changing conditions. Use PVMS, if available, on high-speed, high-volume roadways (and on other roadways as needed) to supplement static signs to alert drivers to nighttime maintenance activities, road closures and workers exposed to traffic. PVMS shall not be used by themselves except in emergencies. Radar equipped PVMS should also be deployed in major active work zones where workers are exposed to traffic on high speed limited access highways for a minimum of 4 hours.

- Place PVMS well upstream of work areas, road closures or detours to allow time for driver response or diversion to other routes.
- Simple, specific messages are essential to ensure that they can be read and understood. Provide specific instructions and information ("Paving Ahead / Right Lanes Closed", or "Exit 45 Closed / Use Exit 46"). Check the "Policy and Guidance for use of VMS" manual which is available from the Regional Traffic office for standard messages or consult with the Traffic Group.
- Limit messages to 2-part, 3-word text if possible. Longer messages cannot be read at typical freeway speeds. Don't display general messages ("Drive Safely" or "Have A Nice Day") or cautionary messages ("Caution" or "Road Work Ahead").
- When not needed, turn off VMS, and, if possible, store outside the clear zone.

## **Traffic Controllers (Flagger)**

### **Flagger**

A flagger may be necessary to alert traffic, or to stop traffic intermittently, as required by the progress of work in a work zone. The flagging operation provides protection for other workers and the public. A flagger should be alert, neat appearing and act responsibly.

The flagger's only job is work zone protection and traffic control. The flagger must never assist the crew with work activities, or engage in any distraction, and must remain on duty until properly relieved. Use stop-slow paddles, where feasible. Flags may be used at intersections or where the back-side message is inappropriate for opposing traffic and where conditions such as high wind make the use of a paddle impractical.

Flaggers should be used in the following situations:

- One lane is alternately used for both directions of traffic.
- The roadway is closed for a brief period of time.
- Traffic speeds need to be substantially reduced.
- Inadequate sight distance hinders advance warning.
- Information, such as changing conditions, needs to be conveyed to motorists.
- Opposing traffic needs to be controlled at an intersection.
- Installing and removing other traffic control devices.
- Where conditions require unusual precautions.

### **General**

No employee is to be utilized as a flagger until the employee has shown conclusively to their Supervisor that they realize fully the importance of the job, and understands the duties and responsibilities associated with it.

Flaggers must:

- Always face oncoming traffic.
- Never leave their position until relieved.
- Know where crew members and equipment are, be aware of changes, and never stand among workers and equipment.
- Be courteous, yet authoritative.
- Minimize conversations with motorist and pedestrians.
- Be positioned to compensate for limited sight distance, to provide maximum advance warning, and remain clearly visible to traffic at all times.
- Maintain continuous communication with any other flaggers.
- Try to maintain color contrast with background; consider sun glare on motorist.
- Establish eye contact with drivers to whom they must give direction.

A flagger's activities bring them into continuous contact with the public. As they are the ones the public sees in most cases, it is important that the flaggers conduct themselves in a manner which will bring credit both to themselves and the Department. Courtesy should be exercised at all times. Even under trying conditions, a flagger should be courteous, though firm.

**The flagger's supervisor shall determine when flaggers are to be used, how many are needed, where they are to be stationed for a specific operation, and the methods of communication between multiple flaggers.**

Traffic controllers must use the following equipment and personal protective gear:

- Hard hat.
- High Visibility Apparel (Vest, T-Shirt or 3 Season Jacket): Must meet approved ANSI/ISEA 107-2004, Performance Class II standards.
- 24 inch stop/slow paddle, Red flag (24in by 24in). The paddle is the preferred device but the flag may be used at intersections where the stop/slow paddle would offer contradicting information to drivers traveling in opposite directions/legs of the intersection or during emergency situations.
- A red wand flashlight, if working at night, and portable lighting is unavailable.

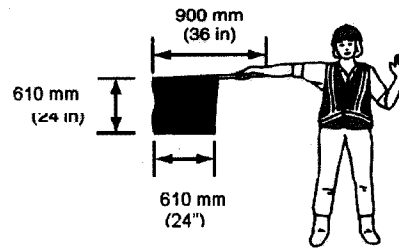
#### **Traffic Observers (Spotters)**

A spotter is a person with the same qualifications of the flagger. A spotter may be required to warn workers of errant vehicles, danger from traffic, or to assist drivers of work vehicles in entering or leaving work sites or in performing U-turns.

***Use of Hand-Signaling Devices by Flaggers***

**PREFERRED METHOD  
STOP/SLOW Paddle**

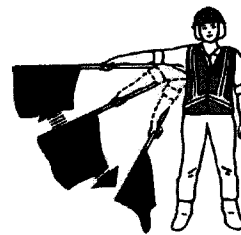
**EMERGENCY SITUATIONS ONLY  
Red Flag**



**TO STOP TRAFFIC**



**TO LET  
TRAFFIC PROCEED**



**TO ALERT AND  
SLOW TRAFFIC**



## **Rolling Road Block Use Guidelines**

A rolling road block (also known as a "Slow Roll" or a "Rolling Slowdown") is a means of slowing and controlling traffic to clear a section of roadway and allow a work operation which requires short duration access to an entire roadway (typically a freeway or other controlled access highway).

A rolling road block typically involves:

- A shadow vehicle in each lane
- A shoulder of 8 foot or greater width, possibly assisted by police
- Slowing and pacing upstream traffic at the reduced speed to create a downstream gap in traffic of sufficient duration to accomplish the work in the roadway.

Typically used when:

- Cable, overhead sign structure, bridge beam, traffic counter tubes, pavement monitoring devices; etc.) is being strung/placed across the highway or to change a traffic pattern in a temporary traffic control zone.
- A simpler variation has also been used for post-storm clean-up on elevated segments of freeways with close echelon plowing to pull built-up snow from median barriers to the right side of roadway.

### **Prior to implementing a Rolling Road Block:**

- The Regional Traffic Engineer should be contacted before selecting a rolling road block for traffic control in case there may be other preferable traffic management alternatives such as detours and/or other planned events which could further impact traffic operations.
- The Regional Traffic Command Center (TMC) and the appropriate State Police troop and local police agencies must be notified at least 24 hours prior to the closure.
- The region should also consider requiring advance deployment of Portable Variable Message Signs (PVMS) warning of the event several days prior to the event to allow motorists to plan adjustments to their route or time of travel.

### **Planning the Rolling Road Block**

When determining where/when to start the rolling road block, consider the following:

- Duration of work
- Clearance time for last uncontrolled vehicle to pass by work area
- Projected travel time of rolling road block - 15 mph = 1 mile in 4 minutes
- Number and location of entrance ramps requiring closures
- Start in a tangent section with adequate sight distance
- Periods of lightest traffic to minimize impacts
- Communication and preparation meeting

Work duration should be kept to a minimum, no more than 15 minutes.

The permittee/contractor should be required to demonstrate that they will deploy the resources necessary to complete the work within the specified time period.

The selection of the speed of the roadblock should consider the work duration and the location of upstream on-ramps which need to be closed, but should generally be 15 mph or greater. 15 minute duration would require closure of at least 5 miles of mainline roadway at a 20 mph pace and 3.75 miles at a 15 mph pace plus buffer space, set-up and deceleration distance.

Any on-ramps within the required distance must be closed and traffic either detoured or adequate storage for queued traffic provided on the ramp.

The work requiring the rolling road block shall be scheduled during periods of light traffic in order to minimize impacts, typically early Saturday or Sunday mornings (between 6:00 and 8:00 AM) in daylight conditions.

The work shall also be scheduled to avoid inclement weather, adverse environmental or roadway conditions which could ultimately affect visibility, vehicle handling or the time needed to accomplish the work within the highway.

A preconstruction/preparation meeting with all parties involved is required prior implementing the rolling road block. All logistics including communication issues and scheduling issues shall be resolved during this meeting. Also, contingency plans for concerns which could stop the road block or delay the operation shall be made. Cell phones or walkie-talkies, if radios are not workable, shall be used to communicate during the rolling road block implementation.

For **permit** work, the permittee or its contractor should provide or ensure a common communication system to all parties.

On **contract** work, the contractor should provide a common communication system to all parties. The common communication system shall include, workers, clearance vehicle, all rolling road block drivers, traffic controllers at on-ramps and, if participating, police. Work should not begin until the Department's representative on-site is confident that the work can be completed within the specified time and the communication system is adequate to accommodate all reasonably foreseeable scenarios.

Police participation is optional and at the discretion of the Regional Office and the State Police troop or other local police agency. In general, police participation should be unnecessary unless there are site specific enforcement concerns.

**Police Cars - If Deployed**

- A police car should never be used to close an open lane of traffic.
- A police car may be positioned in front (downstream) of a TMA equipped shadow vehicle and/or on a closed on-ramp. Flashing lights should be placed immediately downstream of the shadow vehicles forming the rolling road block to discourage drivers from passing the road block.
- Position the police car where it is visible to traffic through the lateral gap between the shadow vehicles to enhance the visibility of the police car. However, gaps between the shadow vehicles should not be wide enough to encourage vehicles to pass between them.
- A police car may also be positioned, with lights flashing, on an on-ramp which will be closed to discourage ramp traffic from passing the flagger. If there are multiple on-ramps within the road block limits, deploying the police car at the downstream ramp may better enable it to stop a vehicle which has breached the gap between the work area and the road-block.

The drawings show the closure of a two lane roadway, however, three and four lane roadways can be closed by either adding additional shadow vehicles or by closing lanes using a typical lane closure set-up, which will reduce the number of shadow vehicles needed. At some sites, it may be preferable to use typical lane closures to reduce the traffic flow to one lane before deploying the rolling road block.

### Advance Warning

- All traffic control devices used to warn or guide traffic shall comply with the National Manual on Uniform Traffic Control Devices ( MUTCD ).
- Advance warning signs or portable VMS (SLOW TRAFFIC AHEAD/BE PREPARED TO STOP) should be on the right side of the roadway one mile upstream of initial position of road block vehicles. Permanent VMS controlled by the TMC can also be used, if appropriate.
- An additional portable VMS either on a trailer hitched to a truck or mounted on the truck should be located on the right shoulder 1500 feet upstream of the initial roadblock location and should move as necessary to remain approximately 1500 feet upstream of the queue.
- A police car (if available) on the shoulder near the upstream end of the queue can enhance queue warning.
- Advance warning signs or VMS on both sides of the road is desirable. If there is not enough room on the shoulder, a lane closure to accommodate the VMS may be appropriate, especially for three lane, or wider, roadways. If a VMS is used on the left side of the roadway, it should be placed ½ mile upstream of the initial road block position and not directly across the roadway from the first VMS. Offsetting the VMS boards from each other will avoid confusion which can result from two VMS boards directly across the roadway from each other displaying different portions of their message at any given instant.
- All required VMS and advance warning signs shall be in place prior to implementing the rolling road block.
- Advance warning signs shall be placed on affected on-ramps and the crossroad to warn approaching vehicles of stopped traffic on the ramp or of a ramp closure. The signing will depend on site specific conditions including the expected length of queued traffic and the length of the ramp. If the queued traffic on the ramp will affect traffic operations on the crossroad, signing will be needed on the crossroad. A **W20-7** flagger sign and a **W3-4 BE PREPARED TO STOP** sign would be the minimum advance warning needed on the ramp.

## Implementation

The rolling road block should be staged from the right shoulder if no on-ramp or rest area is available. The upstream shadow vehicle should close the shoulder ( if shoulder is 8 ft. or wider ) or the right lane ( if the shoulder is less than eight feet wide ). The second downstream shadow vehicle should then close the next lane to the left and so on.

**Step 1:** The rolling road block shall form near the designated starting point and any on-ramps shall be closed simultaneously or very shortly after, depending on how far downstream the on-ramp is (see Step 2).

**Step 2:** On-ramp traffic shall be stopped and held by a properly trained traffic controller (flagger).

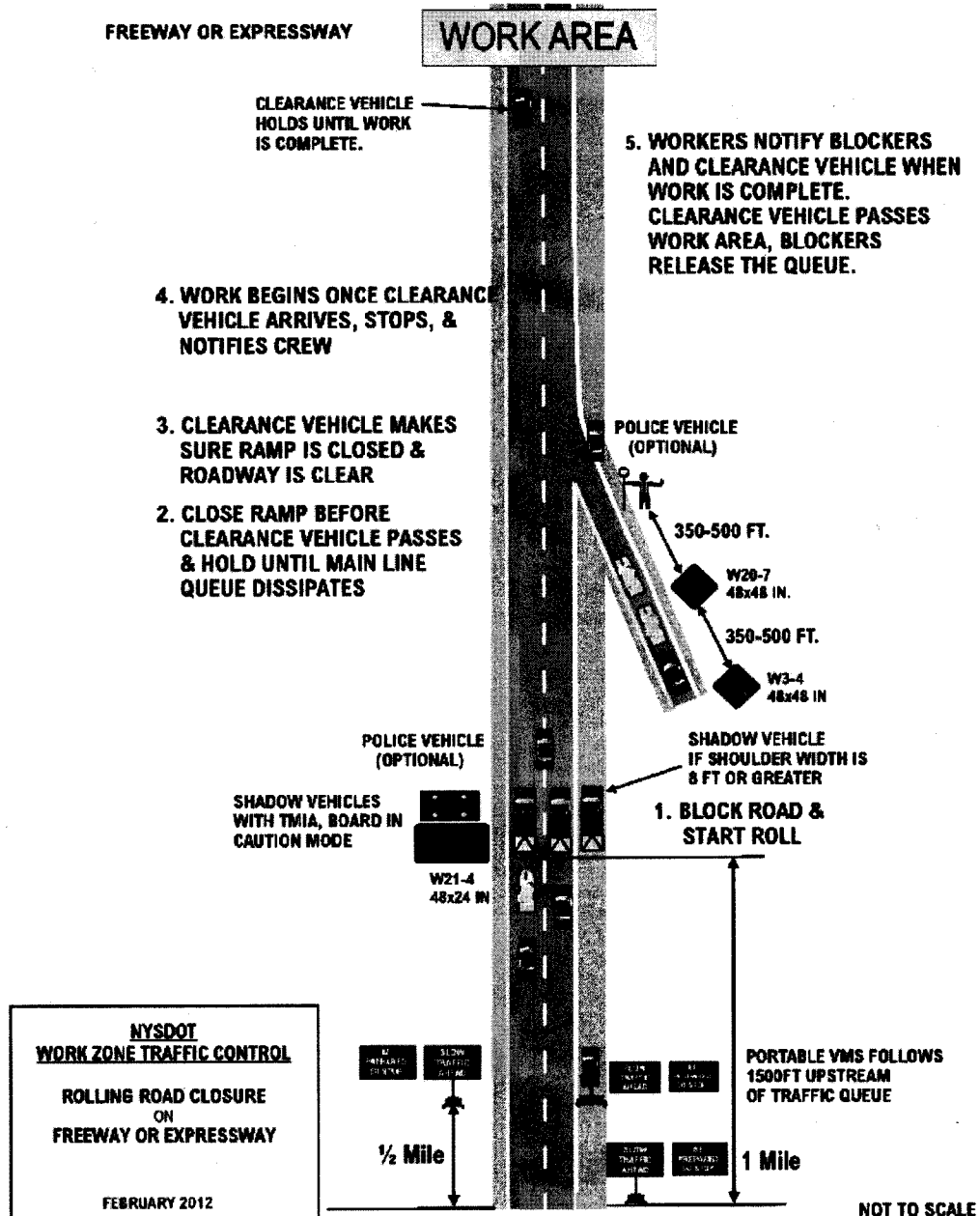
**Step 3:** A clearance vehicle initially positioned immediately downstream of the rolling road block shall follow the last vehicle traveling in advance of rolling road block to ensure that there are no moving or parked cars and no open on-ramps or other access points, and to notify the work crew that road is closed and free of traffic.

**Step 4:** Work in the roadway begins. The clearance vehicle should stop and hold its position immediately upstream of the work site until the work is done to provide a visual cue to the approaching roadblock whether the work is done and the roadway cleared.

The road block shall proceed downstream at the pre-determined speed and be in constant communication with the work site. The speed of the roadblock can then be adjusted to accommodate the pace of the work. A truck either with a mounted VMS or towing a trailer mounted VMS positioned on the right shoulder should maintain an approximately 1500 foot following distance behind (upstream of) the end of the queue. As the road block passes an on-ramp, ramp traffic can be released when the mainline queue dissipates or moves downstream and mainline traffic flow can safely accommodate the merge from the on-ramp. The procedure and timing of the release of vehicles held on the ramps should be determined at the preconstruction/preparation meeting.

**Step 5:** Once the need for closure has ended, the work crew shall notify the rolling road block and the clearance vehicle should pass the site. The blocking vehicles should gain speed and pull over to right side of roadway starting from the left lane. Police, if used, should continue with flow of traffic to ensure controlled acceleration of released vehicles. Inactivate or modify PVMS as appropriate.

5/30/2014



# **WORK ZONE TRAFFIC CONTROL TYPICAL APPLICATION INDEX**

Typical Code	Title	Roadway Type	Issue Date
TAG-CE1	Work Beyond the Shoulder	All Roadway Types	Feb. 2013
TAG-C1	Mowing With Work Beyond the Shoulder	Conventional Highway	Feb. 2013
TAG-C2	Mowing With Shoulder Encroachment ( Paved Shoulder 8Ft. or Wider )	Conventional Highway	Feb. 2013
TAG-C3	Mowing With Lane Encroachment	Conventional Highway	Feb. 2013
TAG-C4	Mulching / Herbicide	Conventional Highway	Feb. 2013
TAG-C5	Signal Work Occupying Right Turn Lane	Conventional Highway	April 2013
TAG-C6	Signal Work Within the Intersection	Conventional Highway	April 2013
TAG-C7	Overhead Signal Work With Bucket Truck	Multi-Lane Divided Conventional Highway	April 2013
TAG-C8	"Throw-N-Go" Pothole Patching	Rural or Urban Two Lane Conventional Highway	April 2013
TAG-E1	Mowing Work Beyond Shoulder	Freeway or Expressway	Feb. 2013
TAG-E2	Mowing With Shoulder Encroachment ( Paved Shoulder 8 Ft. or Wider )	Freeway or Expressway	Feb. 2013
TAG-E3	Mowing With Lane Encroachment	Freeway or Expressway	Feb. 2013
TAG-P1	Mowing With Lane Encroachment or Closure	Parkway	May 2014
TAG-E4	Mulching / Herbicide	Freeway or Expressway	Feb. 2013
TAG-E5	Rolling Roadway	Freeway or Expressway	Feb. 2012

Typical Code	Title	Roadway Type	Issue Date
TAM-C1	Right Shoulder Closure ( Paved Shoulder Less Than 8 ft. )	Two Lane Conventional Highway	Aug 2014
TAM-C2	Lane Closure	Two Lane Conventional Highway	Aug 2014
TAM-P1	Lane Closure or Encroachment ( Grass Shoulder or No Shoulder )	Parkways	Aug 2014
TAM-E1	Right Shoulder Closure ( Paved Shoulder 8 ft. or Wider )	Freeway or Expressway	Aug 2014
TAM-E2	Right Shoulder Closure ( Paved Shoulder Less Than 8 ft. )	Freeway or Expressway	Aug 2014
TAM-E3	Right Lane Closure ( Paved Shoulder 8Ft. or Wider )	Freeway or Expressway	Aug 2014
TAM-E4	Right Lane Closure ( Paved Shoulder Less Than 8 ft. )	Freeway or Expressway	Aug 2014
TAM-E5	Right Two lane Closure ( Paved Shoulder 8 Ft. or Wider )	Freeway or Expressway	Aug 2014
TAM-E6	Right Two Lane Closure ( Paved Shoulder Less Than 8 ft. )	Freeway or Expressway	Aug 2014
TAM-E7	Left Shoulder Closure ( Paved Shoulder Less Than 8 ft. )	Freeway or Expressway	Aug 2014
TAM-E8	Left Lane Closure ( Paved Shoulder Less Than 8 ft. )	Freeway or Expressway	Aug 2014
TAM-E9	Left Two Lane Closure ( Paved Shoulder Less Than 8 ft. )	Freeway or Expressway	Aug 2014
TAM-E10	Left Shoulder Closure on Ramp	Freeway or Expressway	Aug 2014



Typical Application Code	Title	Roadway Type	Issue Date
TASD-C1	Right Shoulder Closure ( Paved Shoulder 8 ft. or Wider )	Rural or Urban Two Lane Conventional Highway	Feb 2013
TASD-C2	Interior Lane Closure	Rural or Urban Four Lane Conventional Highway	Feb 2013
TASD-C3	Exterior Lane Closure	Rural or Urban Four Lane Conventional Highway	Feb 2013
TASD-C4R	Center Left Turn Lane & Interior Lane Closure	Rural Four Lane Conventional Highway	Feb 2013
TASD-C4UL	Center Left Turn Lane & Interior Lane Closure	Low Speed Urban Four Lane Conventional Highway	Feb 2013
TASD-C4UH	Center Left Turn Lane & Interior Lane Closure	High Speed Urban Four Lane Conventional Highway	Feb 2013
TASD-E1	Right Shoulder Closure ( Paved Shoulder 8 ft or Wider )	Freeway or Expressway	Feb 2013
TASD-E2	Right Shoulder Closure ( Paved Shoulder Less Than 8 ft )	Freeway or Expressway	Feb 2013
TASD-E3	Right Lane Closure ( Paved Shoulder 8 ft. or Wider )	Freeway or Expressway	Feb 2013
TASD-E4	Right Lane Closure ( Paved Shoulder Less Than 8 ft. )	Freeway or Expressway	Feb 2013
TASD-P1	Right Lane Closure ( Grass Shoulder Less Than 8 ft. )	Parkway	Feb 2013
TASD-E5	Right Two Lane Closure ( Paved Shoulder 8 ft. or Wider )	Freeway or Expressway	Feb 2013
TASD-E6	Right Two Lane Closure ( Paved Shoulder Less than 8 ft. )	Freeway or Expressway	Feb 2013

TASD-E7	Left Shoulder Closure ( Paved Shoulder Less Than 8 ft. )	Freeway or Expressway	Feb 2013
TASD-E8	Left Lane Closure ( Paved Shoulder Less Than 8 ft. )	Freeway or Expressway	Feb 2013
TASD-E9	Left Two Lane Closure ( Paved Shoulder Less Than 8 ft. )	Freeway or Expressway	Feb 2013
TASD-E10	Left Shoulder Closure On Exit Ramp	Freeway or Expressway	Feb 2013

Typical Code	Title	Roadway Type	Issue Date
TAST-C1R	Daytime Lane Closure With Flaggers	Rural Two Lane, Conventional Highway	June 2014
TAST-C1UL	Daytime Lane Closure With Flaggers	Low Speed Urban, Two Lane Conventional Highway	June 2014
TAST-C1UH	Daytime Lane Closure With Flaggers	High Speed Urban, Two Lane Conventional Highway	June 2014
TAST-C2R	Daytime Lane Closure Prior to An Intersection With Flagger Control	Rural Two Lane, Conventional Highway	June 2014
TAST-C2UL	Daytime Lane Closure Prior to An Intersection with Flagger Control	Low Speed Urban, Two Lane Conventional Highway	June 2014
TAST-C2UH	Daytime Lane Closure Prior To An Intersection With Flagger Control	High Speed Urban, Two Lane Conventional Highway	June 2014
TAST-C3R	Daytime Lane Closure With Two Automated Flagger Devices ( Stop/Slow Panels )	Rural Two Lane, Conventional Highway	June 2014
TAST-C3UL	Daytime Lane Closure With Two Automated Flagger Devices ( Stop/Slow Panels )	Low Speed Urban, Two Lane Conventional Highway	June 2014
TAST-C3UH	Daytime Lane Closure With Two Automated Flagger Devices ( Stop/Slow Panels )	High Speed Urban Two Lane Conventional Highway	June 2014
TAST-C4R	Shoulder Closure ( Paved Shoulder 8 ft of Wider )	Rural Two Lane Conventional Highway	June 2014
TAST-C4U	Shoulder Closure ( Paved Shoulder 8 ft of Wider )	Urban Two Lane Conventional Highway	June 2014
TAST-C5R	Right Lane Closure ( Paved Shoulder Less Than 8 ft. )	Rural Multi Lane Conventional Highway	June 2014
TAST-C5UL	Right Lane Closure ( Curbed or No Shoulder )	Low Speed Urban One Way Conventional Highway	June 2014
TAST-C5UH	Right Lane Closure ( Paved Shoulder Less Than 8 ft. )	High Speed Urban One Way Conventional Highway	June 2014

TASt-C6UL	Right Two Lane Closure ( Curbed Or No Shoulder )	Low Speed Urban One Way Conventional Highway	June 2014
TASt-C6UH	Right Two Lane Closure ( Curbed Or No Shoulder )	High Speed Urban One Way Conventional Highway	June 2014
TASt-C7R	Two Way Left Turn Lane Closure	Rural Conventional Highway	June 2014
TASt-C7UL	Two Way Left Turn Lane Closure	Low Speed Urban Conventional Highway	June 2014
TASt-C7UH	Two Way Left Turn Lane Closure	High Speed Urban Conventional Highway	June 2014
TASt-C8UL	Right Lane Closure Thru Intersection ( Curbed or No Shoulder )	Low Speed Urban One Way Conventional Highway	June 2014
TASt-C8UH	Right Lane Closure Thru Intersection ( Curbed or No Shoulder )	High Speed Urban One Way Conventional Highway	June 2014
TASt- E1	Shoulder Closure ( Paved Shoulder 8 ft. Or Wider )	Freeway Or Expressway	June 2014
TASt-E2	Right Lane Closure ( Paved Shoulder 8 ft. Or Wider )	Freeway Or Expressway	June 2014
TASt- E3	Right Lane Closure ( Paved Shoulder Less than 8 ft.)	Freeway Or Expressway	June 2014
TASt- P1	Right Lane Closure ( Grass Shoulder Less than 8 ft.)	Parkway	June 2014
TASt- E4	Right Two Lane Closure ( Paved Shoulder 8 ft. or Wider )	Freeway Or Expressway	June 2014
TASt- E5	Right Two Lane Closure ( Paved Shoulder Less Than 8 ft.)	Freeway Or Expressway	June 2014
TASt- E6	Left Lane Closure ( Paved Shoulder Less than 8 ft.)	Freeway Or Expressway	June 2014
TASt- E7	Left Two Lane Closure ( Paved Shoulder Less than 8 ft.)	Freeway Or Expressway	June 2014

## **APPENDIX E: OCMC TRAFFIC STIPULATIONS**



# Department of Transportation

POLLY TROTTERBERG, Commissioner

## OCMC TRAFFIC STIPULATIONS

March 13, 2017

OCMC FILE NO: BXEC 17-118  
 CONTRACT NO: P-1SAND01  
 PROJECT: (STARLIGHT PARK, PHASE II STAGE 2 BRONX)  
 LOCATION(S): BRONX – BRONX RIVER AVENUE AND EAST 172 STREET

PERMISSION IS HEREBY GRANTED TO THE NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION AND ITS DULY AUTHORIZED AGENT, TO ENTER UPON AND RESTRICT THE FLOW OF TRAFFIC AT THE ABOVE LOCATION(S) FOR THE PURPOSE OF CARRYING OUT THE ABOVE NOTED PROJECT, SUBJECT TO THE STIPULATIONS, AS NOTED BELOW:

### A. SPECIAL STIPULATIONS

1. **EMBARGOES** – A CONSTRUCTION EMBARGO WILL APPLY TO THOSE LOCATIONS BELOW WHICH FALL WITHIN THE **HOLIDAY EMBARGO** OR ANY OTHER SPECIAL EVENT EMBARGOES SUCH AS THE **(OTHER EMBARGOES IF APPLICABLE)** AS PUBLISHED BY THE BUREAU OF PERMIT MANAGEMENT AND CONSTRUCTION CONTROL.
2. **BIKE LANES** – IF WORK IS IN OR AFFECTING A BIKE LANE, THE PERMITTEE MUST POST ADVANCE WARNING SIGNS 350 FEET AND 200 FEET PRIOR TO THE WORK ZONE STATING "CONSTRUCTION IN BIKE LANE AHEAD PROCEED WITH CAUTION", AND ALSO POST A SIGN AT THE WORK ZONE STATING "CONSTRUCTION IN BIKE LANE PROCEED WITH CAUTION". SUCH SIGNS SHALL BE ORANGE, 3' X 3', DIAMOND-SHAPED WITH 4" BLACK LETTERING. SIGNS SHALL BE POSTED IN ACCORDANCE WITH THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
3. **BIKE SHARE STATIONS**: THE PERMITTEE SHALL NOT REMOVE, RELOCATE, DAMAGE OR DISRUPT THE OPERATION OF EXISTING BIKE SHARE STATIONS WITHOUT FIRST CONTACTING NYC BIKE SHARE AT 855-245-3311 FOR THEIR REQUIREMENTS PRIOR TO COMMENCING WORK.
4. **BUS STOPS** – THE PERMITTEE SHALL PROVIDE WRITTEN NOTICE TO NYC DOT OCMC AND NEW YORK CITY TRANSIT (NYCT) A MINIMUM OF FIVE (5) WEEKS IN ADVANCE FOR LANE/STREET CLOSURES THAT AFFECT BUS ROUTES/BUS STOPS.
5. **STREET LIGHTS / TRAFFIC SIGNALS**: THE PERMITTEE SHALL NOT REMOVE OR RELOCATE EXISTING STREET LIGHTS OR TRAFFIC SIGNALS WITHOUT FIRST OBTAINING APPROVAL FROM NYCDOT STREET LIGHTING / TRAFFIC SIGNALS UNIT.
6. **TRAFFIC CAMERAS, DETECTION/COMMUNICATION EQUIPMENT**: IF AT ANY TIME DURING THE APPROVED WORK, THE PERMITTEE ENCOUNTERS TRAFFIC SURVEILLANCE CAMERAS, DETECTION EQUIPMENT OR ANY TYPE OF COMMUNICATION EQUIPMENT (WIRELESS OR HARD-WIRED) ON ANY NYC DOT FACILITY, THAT IS NOT INCLUDED ON THE DESIGN/BUILD DRAWINGS, THE PERMITTEE SHALL IMMEDIATELY NOTIFY NYC DOT TRAFFIC MANAGEMENT BY PHONE AT 718-433-3390 OR 718-433-3340 AND VIA EMAIL AT [TMC@DOT.NYC.GOV](mailto:TMC@DOT.NYC.GOV) AND AWAIT DIRECTION PRIOR TO CONTINUING WORK.
7. **METERS** – THE PERMITTEE SHALL NOT REMOVE OR RELOCATE PARKING METERS WITHOUT FIRST OBTAINING APPROVAL FROM NYCDOT PARKING METER DIVISION AT 718-894-8651.
8. **TEST PITS** – THE BELOW TRAFFIC STIPULATIONS DO NOT APPLY TO TEST PIT WORK RELATED TO THIS CONTRACT. WORK HOURS AND OTHER REQUIREMENTS FOR TEST PIT OPERATIONS MAY DIFFER FROM THE STIPULATIONS IDENTIFIED BELOW. THE PERMITTEE SHALL BE REQUIRED TO OBTAIN SEPARATE PERMITS RELATED TO TEST PITS.
9. **TEMPORARY PARKING REGULATIONS/PAVEMENT MARKINGS** – THE PERMITTEE IS REQUIRED TO INSTALL, MAINTAIN AND REMOVE ALL NECESSARY TEMPORARY PARKING AND REGULATORY SIGNS AND PAVEMENT MARKINGS, AND RESTORE THEIR ORIGINAL CONDITION PER NYC DOT STANDARDS, PRIOR TO EXPIRATION OF THEIR PERMITS. THE PERMITTEE OR AGENCY PERFORMING PUBLIC OUTREACH SHALL POST AND MAINTAIN ADVISORY SIGNS A MINIMUM OF 48 HOURS PRIOR TO CHANGING EXISTING PARKING REGULATION SIGNS TO APPROVED TEMPORARY CONSTRUCTION PARKING REGULATION SIGNS. THE ADVISORY SIGNS SHOULD BE POSTED ON ALL POLES AND DRIVE RAILS ON THE SEGMENT AFFECTED, INDICATING THE DATE OF THE CHANGE, THE NEW REGULATIONS AND A TELEPHONE NUMBER TO OBTAIN MORE INFORMATION.
10. **ACCESS TO ADJUTING PROPERTIES** – THE PERMITTEE SHALL COORDINATE ALL ACTIVITIES WITH ADJUTING PROPERTY OWNERS TO ENSURE ACCESS IS PROVIDED TO/FROM ENTRANCES/DRIVEWAYS AT ALL TIMES.
11. **AUTHORIZED PARKING** – PRIOR TO PERFORMING WORK WHICH IMPACTS AUTHORIZED PARKING, THE PERMITTEE SHALL SUBMIT IN WRITING, AND COPY OCMC-STREETS, A REQUEST TO OCCUPY SPACE CURRENTLY USED BY AUTHORIZED VEHICLES. APPROVAL MUST BE RECEIVED FROM AUTHORIZED PARKING PRIOR TO OCCUPYING THESE AREAS.

NYC Department of Transportation  
 Bureau of Permit Management and Construction Control  
 5 Water Street, Concourse Level  
 New York, New York 10041  
 T: 212.839.9621 F: 212.839.9696  
[www.nyc.gov/dot](http://www.nyc.gov/dot)

OCMC FILE NO: BXEC 17-118  
 CONTRACT NO: P-1SAND01  
 PROJECT: (STARLIGHT PARK, PHASE II STAGE 2 BRONX)

March 13, 2017  
 Page 2 of 3

12. **NOTIFICATION** – THE PERMITTEE MUST AT LEAST TWO (2) WORKING DAYS BEFORE THE START OF CONSTRUCTION NOTIFY THE NYC FIRE DEPARTMENT, NYC POLICE DEPARTMENT, NYC EMS, LOCAL COMMUNITY BOARD, BOROUGH PRESIDENT'S OFFICE-CHIEF ENGINEER, NYCDOT OCMC OFFICE, AND ALL ABUTTING PROPERTY OWNERS.
13. **CONSTRUCTION INFORMATIONAL SIGNS** – THIS PROJECT REQUIRES A CONSTRUCTION PROJECT INFORMATIONAL SIGN (CPIS) IN ACCORDANCE WITH NYCDOT HIGHWAY RULE SECTION 2-02 (4) AND (5). CRITERIA AND A PROTOTYPE FOR THIS SIGN MAY BE FOUND ON THE NYCDOT WEBSITE AT:

[HTTP://WWW.NYC.GOV/HTML/DOT/DOWNLOADS/PDF/DOT\\_CPIS\\_DIRECTIONS.PDF](http://www.nyc.gov/html/dot/downloads/pdf/dot_cpis_directions.pdf)

14. **ENHANCED MITIGATIONS**

- o **ENHANCED MITIGATIONS FOR PEDESTRIAN FLOW**, INCLUDING METAL FENCING, SHALL BE PROVIDED TO ENSURE PEDESTRIANS STAY WITHIN THEIR DESIGNATED PATH/ROUTE. FLAGGERS SHALL BE PROVIDED TO ASSIST WITH PEDESTRIANS AT THE DESIGNATED CROSSWALK AREAS. THESE FLAGGERS SHALL BE ASSIGNED TO THIS FUNCTION ONLY.
- o **VARIABLE MESSAGE SIGNS (VMS)** SHALL BE PROVIDED FOR THIS PROJECT. THE LOCATIONS AND MESSAGES SHALL BE RECOMMENDED BY NYCDOT AND THEIR CONTRACTOR A MINIMUM OF TWO (2) WEEKS PRIOR TO WORK COMMENCING, FOR OCMC REVIEW AND APPROVAL.
- o **"NO STANDING ANYTIME-TEMPORARY CONSTRUCTION" SIGNS** AND TEMPORARY PAVEMENT MARKINGS SHALL BE INSTALLED AND MAINTAINED AS WARRANTED BY THE MAINTENANCE AND PROTECTION OF TRAFFIC (MPT) REQUIRED TO FACILITATE TRAFFIC MOVEMENTS THROUGH THE WORK ZONE. ALL TEMPORARY SIGNS AND PAVEMENT MARKINGS SHALL BE REMOVED UPON COMPLETION OF THE PROJECT.
- o **COMMUNITY OUTREACH** SHALL BE PROVIDED FOR THE DURATION OF THE PROJECT.

**B. MAINTENANCE AND PROTECTION OF TRAFFIC FOR STARLIGHT PARK PHASE II, STAGE 2, BRONX**

**1. EAST 172 STREET BETWEEN DEAD END AND BRONX RIVER AVENUE**

- Work hours shall be as follows: 7:00 am to 6:00 pm, Monday to Friday.  
8:00 am to 6:00 pm, Saturday.
- Contractors must maintain 5 ft. of side on both sides of the sidewalk.
- Contractors may close dead end area to work purposes.
- Contractors may occupy 8 feet adjacent to south curb lane.

**2. BRONX RIVER AVENUE BETWEEN WESTCHESTER AVENUE AND EAST 172 STREET**

- Work hours shall be as follows: 7:00 am to 6:00 pm, Monday to Friday.  
8:00 am to 6:00 pm, Saturday.
- Contractors may fully close sidewalk and maintain a pedestrian walkway in the roadway.
- Contractor must store all material and equipment behind fence.
- Flag person must be provided to stop pedestrian and/or vehicle traffic while exiting/entering the work zone.

**SPECIAL NOTES:**

- ◆ Contractors must coordinate with tire shop and business owners in the area prior to commencing work.
- ◆ Contractors must NOT place anything in front 1233/1237 Bronx River Avenue property unless owners approve of it and do not block their driveway.

**C. GENERAL NOTES**

1. **THIS IS NOT A PERMIT.** THIS STIPULATION SHEET MUST BE SUBMITTED WITH ALL REQUESTS FOR PERMITS PERTAINING TO THE ABOVE CONTRACT AND PRESENT AT THE WORK SITE ALONG WITH ALL ACTIVE CONSTRUCTION PERMITS WHEN THE APPROVED WORK IS BEING PERFORMED.
2. THE CONTRACTOR MUST COMPLY WITH ALL CONSTRUCTION EMBARGOS ISSUED BY THE NYCDOT INCLUDING THE HOLIDAY EMBARGO.
3. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE NYCDOT SPECIAL EVENTS UNIT AS IDENTIFIED BELOW:

**A. STREET FAIRS / FESTIVALS**

- ALL EXCAVATIONS MUST BE PLATED WITH SKID RESISTANT PLATES.
- PLATES MUST BE RECESSED AND FLUSH WITH PAVEMENT.
- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

**B. RUNNING / WALKING / BIKING EVENTS**

OCMC FILE NO: BXEC 17-118  
 CONTRACT NO: P-1SAND01  
 PROJECT: (STARLIGHT PARK, PHASE II STAGE 2 BRONX)

March 13, 2017  
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- ALL EXCAVATIONS MUST BE BACKFILLED AND PAVED OR PLATES MUST BE RECESSED AND PAVED OVER FLUSH WITH PAVEMENT.
- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

**C. PARADES**


- ALL EXCAVATIONS MUST BE BACKFILLED AND PAVED OR PLATES MUST BE RECESSED AND PAVED OVER FLUSH WITH PAVEMENT.
- FORMATION AND DISPERSAL AREA PLATES MUST BE RECESSED AND FLUSH WITH PAVEMENT (PLATES MUST BE SKID RESISTANT).
- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

**D. MAYORAL EVENTS**

- ALL EXCAVATIONS MUST BE BACKFILLED AND PAVED OR PLATES MUST BE RECESSED AND PAVED OVER FLUSH WITH PAVEMENT.
- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

4. ALL RELOCATION WORK BY THE UTILITIES SUCH AS: CON EDISON, TELEPHONE, GAS AND CABLE COMPANIES SHALL PRECEDE THE CONTRACTORS' START OF WORK ON ALL AFFECTED ROADWAYS IN THE IMPACTED CONTRACT AREA.
5. THE CONTRACTOR IS ADVISED THAT OTHER CONTRACTORS MAY BE WORKING IN THE GENERAL AREA DURING THE TERM OF THIS STIPULATION. IN WHICH EVENT, THE CONTRACTOR MAY REQUIRE MODIFICATIONS BY THE OCMC-STREETS.
6. THE PERMITTEE IS NOT AUTHORIZED TO ENTER, OCCUPY OR USE ANY PUBLICLY-OWNED OR PRIVATELY OWNED, NON-PAVED, LANDSCAPE OR NON-LANDSCAPED LOCATION WITHOUT SPECIFIC WRITTEN PERMISSION. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF A LIMITED-ACCESS ARTERIAL HIGHWAY, **WRITTEN** APPROVAL FROM THE NYCDOT OCMC-HIGHWAYS IS REQUIRED. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF A PUBLIC STREET OR PUBLIC PARK, **WRITTEN** APPROVAL FROM THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION OR NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION IS REQUIRED. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF ANY OTHER JURISDICTION SUCH AS PRIVATE PROPERTY, STATE, FEDERAL ETC., IT IS THE PERMITTEE'S RESPONSIBILITY TO DETERMINE THE PROPERTY OWNER AND OBTAIN THE WRITTEN APPROVAL.
7. THE PERMITTEE SHALL ADHERE TO THE NYCDOT BUREAU OF BRIDGES' SPECIAL PROVISIONS FOR LANDSCAPE PROTECTION, MAINTENANCE AND RESTORATION, ITEMS 1.18.15 THROUGH 1.18.19, WHENEVER AND WHEREVER ANY OF THE PERMITTEE'S ACTIVITIES OCCUR WITHIN A LIMITED ACCESS ARTERIAL HIGHWAY RIGHT - OF - WAY.
8. NO DEVIATION OR DEPARTURE FROM THESE STIPULATIONS WILL BE PERMITTED WITHOUT THE PRIOR WRITTEN APPROVAL FROM THE OCMC-STREETS. REQUEST FOR SUCH MODIFICATIONS SHALL BE SUBMITTED TO THE OFFICE OF THE OCMC-STREETS, NEW YORK CITY DEPARTMENT OF TRANSPORTATION, A MINIMUM OF TWENTY (20) DAYS IN ADVANCE FOR CONSIDERATION.
9. FOR ANY CONSTRUCTION ACTIVITY RESULTING IN THE FULL CLOSURE OF A ROADWAY FOR MORE THAN 180 CONSECUTIVE CALENDAR DAYS, THE CONTRACTOR MUST PRODUCE AND SUBMIT A COMMUNITY REASSESSMENT, IMPACT AND AMELIORATION (CRIA) STATEMENT TO NYCDOT PLANNING AND OBTAIN THEIR APPROVAL BEFORE APPLYING FOR PERMITS, IN COMPLIANCE WITH THE PROVISIONS OF **LOCAL LAW 24 STREET CLOSURE LAW**.
10. FOR THIS PROJECT THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN ALL NECESSARY ADVANCE WARNING AND DETOUR SIGNS, TEMPORARY CONTROL DEVICES, BARRICADES, LIGHTS AND FLASHING ARROW BOARDS IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," THE TYPICAL SCHEMES INCLUDED IN THIS SPECIFICATION; AND AS ORDERED BY THE ENGINEER-IN-CHARGE AND THE OCMC-STREETS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING HIS CONSTRUCTION SIGNAGE. THE IDENTIFICATION SHALL INCLUDE THE CONTRACTOR'S NAME, SPONSORING AGENCY NAME AND THE CONTRACT NUMBER. THE IDENTIFICATION SHALL BE PLACED ON THE BACK OF THE SIGN. THE LETTERING SHALL BE THREE (3) INCHES HIGH.
12. THE OCMC-STREETS RESERVES THE RIGHT TO VOID OR MODIFY THESE STIPULATIONS SHOULD CONSTRUCTION FAIL TO COMMENCE WITHIN TWO (2) YEARS OF THE SIGNED DATE OF THESE STIPULATIONS.

  
**GARY SMALLS**  
 DIRECTOR  
 OCMC-STREETS

  
**MILAGROS RIVERA**  
 PROJECT MANAGER- BRONX  
 OCMC-STREETS



**APPENDIX F: NYCDOS INTERPRETIVE MEMORANDUM #2**



## **THE CITY OF NEW YORK Department of Sanitation**

S. ELIZABETH SEARLE  
Assistant Commissioner  
for Legal Affairs

Bureau of Legal Affairs  
44 Beaver Street  
New York, NY 10004  
Telephone (212) 837-8110  
FAX (212) 837-8243

### **Department of Sanitation Rules and Regulations Governing Non-Putrescible Solid Waste Transfer Stations**

#### **INTERPRETIVE MEMORANDUM # 2 February 14, 1995**

***Subject: Temporary Storage and Processing of Construction and Demolition Debris  
by New York City Agency Contractors***

Contractors performing construction work for New York City agencies may be required to excavate dirt, concrete, rock, gravel and similar materials ("construction materials") from a contract site or to remove from a contract site construction materials resulting from construction, demolition, alteration, repair or renovation of structures, streets or buildings. On street construction projects, construction materials required to be excavated or removed may also include asphalt. The purpose of this Interpretive Memorandum is to (a) define the circumstances under which the Department of Sanitation (the "Department") will not deem its Rules and Regulations Governing Non-Putrescible Solid Waste Transfer Stations (the "Rules") to apply to the temporary storage, processing and/or stockpiling (collectively, "stockpiling") of such construction materials and (b) the procedure for ensuring such exemption. It is the responsibility of the contracting agency to oversee its contractors' compliance with the Rules and with this Interpretive Memorandum.

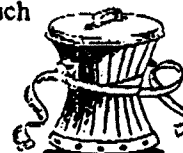
#### **1. When No Transfer Station Permit is Required**

Where a City contractor has:

- (a) set aside an area of a contract site for stockpiling construction materials excavated from and/or intended for that site; or
- (b) received written approval from the contracting agency for an off-site stockpiling location,

the Department will not deem such stockpiling location a transfer station and will not require the contractor to obtain a transfer station permit so long as: -

- (c) no construction materials or debris from off the contract site are received at the designated location for subsequent transfer to another location (other than the contract site); and
- (d) the temporary stockpiling location is clearly described as such in the contract or clearly approved by the construction agency and designated as such in writing to the Department by the agency; and
- (e) the construction agency represents in writing to the Department that such agency will monitor the temporary stockpiling location and ensure its clean-up and restoration pursuant to the procedures set out in this memorandum.



**Help Reduce  
New York's Waste.**



**Example: Street Construction Projects**

As part of a contract for street construction, the contractor may be working at one end of a street and using an area at the other end of the street for the temporary stockpiling of construction materials. Both ends of the street are part of the construction contract site. In addition, the contractor may have leased an off-site location for temporary stockpiling of materials, which, following processing, will be reincorporated into the contract site, with some portion of the remainder designated for delivery to a Department disposal facility. Neither location will be regulated by the Department as a transfer station so long as the procedures set out in this memorandum are followed.

**2. Procedure for Exception.**

Upon a City construction agency's approval of any location to be designated as a temporary processing, storage or stockpiling area, that agency must determine that (a) its contract with the contractor provides for clean-up and restoration of such area by, for example, the contractor's posting of a restoration bond and/or by contractual set-off and (b) the agency has adequate procedures for monitoring the designated area to ensure that it does not violate the provisions set forth in this memorandum and that such location is cleaned up and restored at the completion of the contract work.

The City construction agency must submit an official letter to the Department acknowledging compliance with both (a) and (b) immediately above and representing that the agency will ensure the contractor's compliance. The letter to be submitted must be in substantially the following form, addressed to the Director, Bureau of Waste Disposal, Department of Sanitation, 125 Worth Street, Room 726, New York, NY 10013:

"The New York City Department of \_\_\_\_\_ (the "Agency")  
has awarded a construction contract to \_\_\_\_\_ (Contractor)  
\_\_\_\_\_ (the "Contractor") for work to be performed at \_\_\_\_\_ (Contract  
Site) \_\_\_\_\_.

a. This Agency has approved the following locations to be used by the Contractor for the temporary storage, processing and/or stockpiling of construction materials (the "Stockpiling Locations") excavated from the construction site or intended for the construction site:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b. The terms of the contract require the Contractor to clean up and restore the Stockpiling Locations, whether on or off the contract site, at or before the completion of the contract work.

c. This Agency assumes responsibility for the monitoring of Stockpiling Locations to ensure that only materials received from and/or intended for the construction site are stockpiled at such locations and we will enforce clean-up and restoration of such Locations at the end of their use for temporary stockpiling or at the termination of the contract, whichever occurs earlier, through restoration

bonding requirements and/or contractual set-off provisions such that the costs of clean-up and restoration will not become a charge to the Department or the City. "

3. When a Transfer Station Permit is Required

A transfer station permit will be required under any circumstances other than those outlined above. Except in the specifically defined circumstances set forth in this memorandum, any operator of a location or facility which receives, processes, stores or stockpiles construction and demolition debris or fill material for purposes of transfer to another location, including to a New York City Department of Sanitation facility, and whether or not under contract to the Department for the delivery of such materials, will be fully subject to the Department's transfer station rules and liable for enforcement for violations.

## **APPENDIX G: ENVIRONMENTAL ASSESSMENT**

# **ENVIRONMENTAL ASSESSMENT**

## **BRONX RIVER GREENWAY WESTCHESTER AVENUE TO EAST TREMONT AVENUE**

Bronx, New York

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NYSDOT Contract No. D015284/PIN X027.05.122

Prepared for:  
**New York City State of Transportation**  
One Hunters Point Plaza  
47-20 41st Street  
Long Island City, New York 11101

Prepared by:  
**AKRF, Inc.**  
440 Park Avenue South  
New York, New York 10016

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**NOVEMBER 2006**

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**Chapter D-1:****Project Description****A. INTRODUCTION**

The New York State Department of Transportation (NYSDOT) proposes to provide a pathway as a walkway and “Cass I” bikeway along the Bronx River from Westchester Avenue to East Tremont Avenue in the Bronx. The Bronx River Greenway project will provide a quality facility for people to cycle, walk, run, or skate for transportation, recreation, or exercise, enhance the Bronx River’s natural qualities and public use, restore the Bronx River’s natural shorelines to the extent possible in this area, and provide additional public open space amenities (e.g., bridges over the Bronx River and an open air amphitheater). The project represents a major segment of the entire Bronx River Greenway corridor that extends from the Bronx/Westchester County border to the East River.

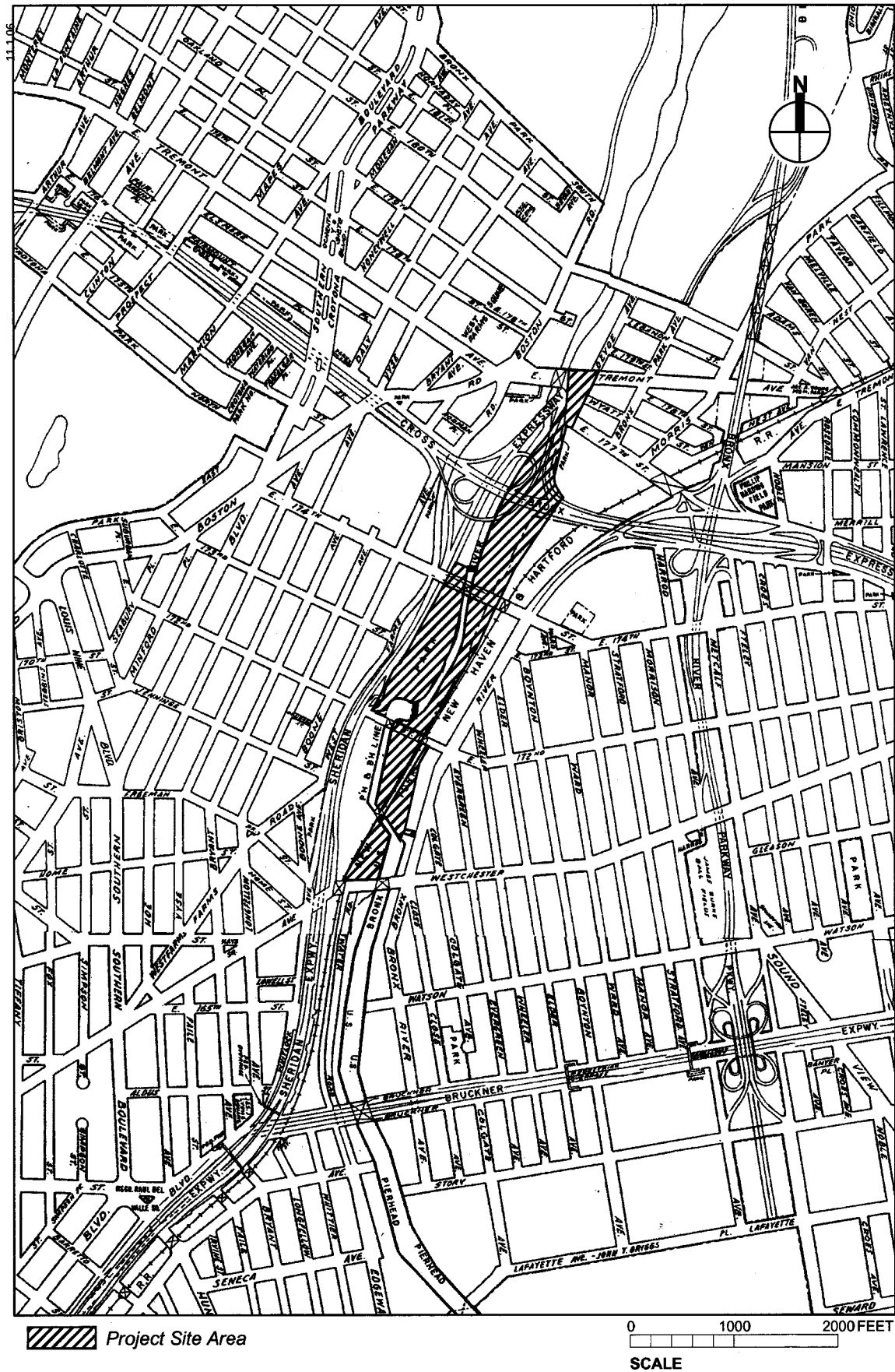
The Proposed Project requires city, state, and federal approvals and permits for funding and construction. NYSDOT is the public agency undertaking the project and its action is subject to State Environmental Quality Review (SEQR). In addition, this review may also form the basis of the National Environmental Policy Act (NEPA) for any required federal permits or other actions that the project may require. Due to eminent domain land acquisition required to progress this project to the stated project limits, the project documentation is being progressed as a SEQR Non-Type II Environmental Assessment (EA). The project is also considered to be a NEPA Class II action (Categorical Exclusion).

The Proposed Project involves a number of components, ranging from the provision of a multiuse path to shoreline restoration, provision of canoe/boat launch areas, floating docks, multi-use path bridges, and other amenities. This EA has taken all of the various project components into consideration in the analysis of the potential environmental effects of the overall project.

**B. PROJECT DESCRIPTION****PROJECT LOCATION**

Nestled within a complex network of transportation infrastructure—including Westchester Avenue, the elevated Nos. 2, 5, and 6 subway lines, I-95 (Cross Bronx Expressway), I-895 (Arthur Sheridan Expressway), and AMTRAK’s Northeast Corridor Line—the site is approximately 25 acres along a one-mile stretch of the Bronx River between Westchester Avenue and East Tremont Avenue (Figure D-1-1).

From East 172nd Street to East Tremont Avenue, all proposed construction will be on public right of way (ROW) under the ownership jurisdiction of NYSDOT, New York City Department of Transportation (NYCDOT), or New York City Department of Parks and Recreation (NYCDPR) depending on the location. East of AMTRAK’s ROW and south of 172nd Street, two properties will be acquired by NYSDOT under New York State’s Eminent Domain Procedures. These include Apex Auto on the east river bank and the PDJ Simone site (currently leased as a New York City Marshall Impound Lot) on the west river bank. Both parcels are currently paved and total 3.3 acres. Some of the properties currently in NYSDOT jurisdiction will be turned over to the City of New York, but NYCDPR has agreed to maintain the entire Bronx River Greenway corridor within the project limits regardless of property ownership.



**BRONX RIVER GREENWAY**

**Project Location  
Figure D-1-1**



## **Bronx River Greenway**

Starlight Park, located on the west bank of the river between approximately East 172nd and East 174th Streets, is under the ownership jurisdiction of NYCDPR. Currently denuded and closed to the public, the 3.6-hectare (HA) (8.9-acre) park is undergoing contaminated materials remediation by the Consolidated Edison Company of New York due to historic uses of the property. The remediation work in Starlight Park is the responsibility of the Con Edison, and is being performed by Con Edison under the supervision of the NYSDEC. Starlight Park was designed as part of the rehabilitation of the Arthur Sheridan Expressway and was part of the permitting and environmental evaluation of that project.

## **BRONX RIVER GREENWAY CORRIDOR**

The entirety of the Bronx River Greenway Corridor will provide valuable transportation links and options to the communities it passes through. The Proposed Project will eventually provide a vital link between the Bronx River Greenway Corridor extending from the East River to beyond the Westchester County border (Figure D-1-2). Although it would become a link in the larger network, the project provides significant utility independent of the entire Bronx River Greenway corridor, including car-free passage for cycling and walking between the Bronx River and West Farms neighborhoods and their associated transit services, schools, and shopping. The completed Bronx River Greenway would also provide improved walking and cycling access to the Bronx Zoo, the Bronx Botanical Gardens, various community parks along the Bronx River, and would eventually be part of a connection to and from Manhattan.

The Proposed Project will connect to NYCDPR's planned park at the former concrete plant site to the south and to NYCDPR's Bronx River Park (West Farms segment) of the Bronx River Greenway to the north. NYSDOT is coordinating closely with NYCDPR to ensure seamless links between these projects and additional projects linking Soundview Park and Randall's Island to the south and into Westchester County to the north. The Randall's Island connection will link the Bronx River Greenway corridor to the Manhattan Waterfront Greenway. In addition, the Bronx River Greenway corridor intersects the Pelham Parkway Greenway, including Pelham Bay Park, City Island, and Orchard Beach, and the Moshulu Parkway Greenway leading to Van Cortlandt Park and the North County Trail (continuous trail to be constructed from the New York City/Westchester County border up through part of Putnam County). The Proposed Project may also serve as a segment in the evolving East Coast Greenway from Florida to Maine.

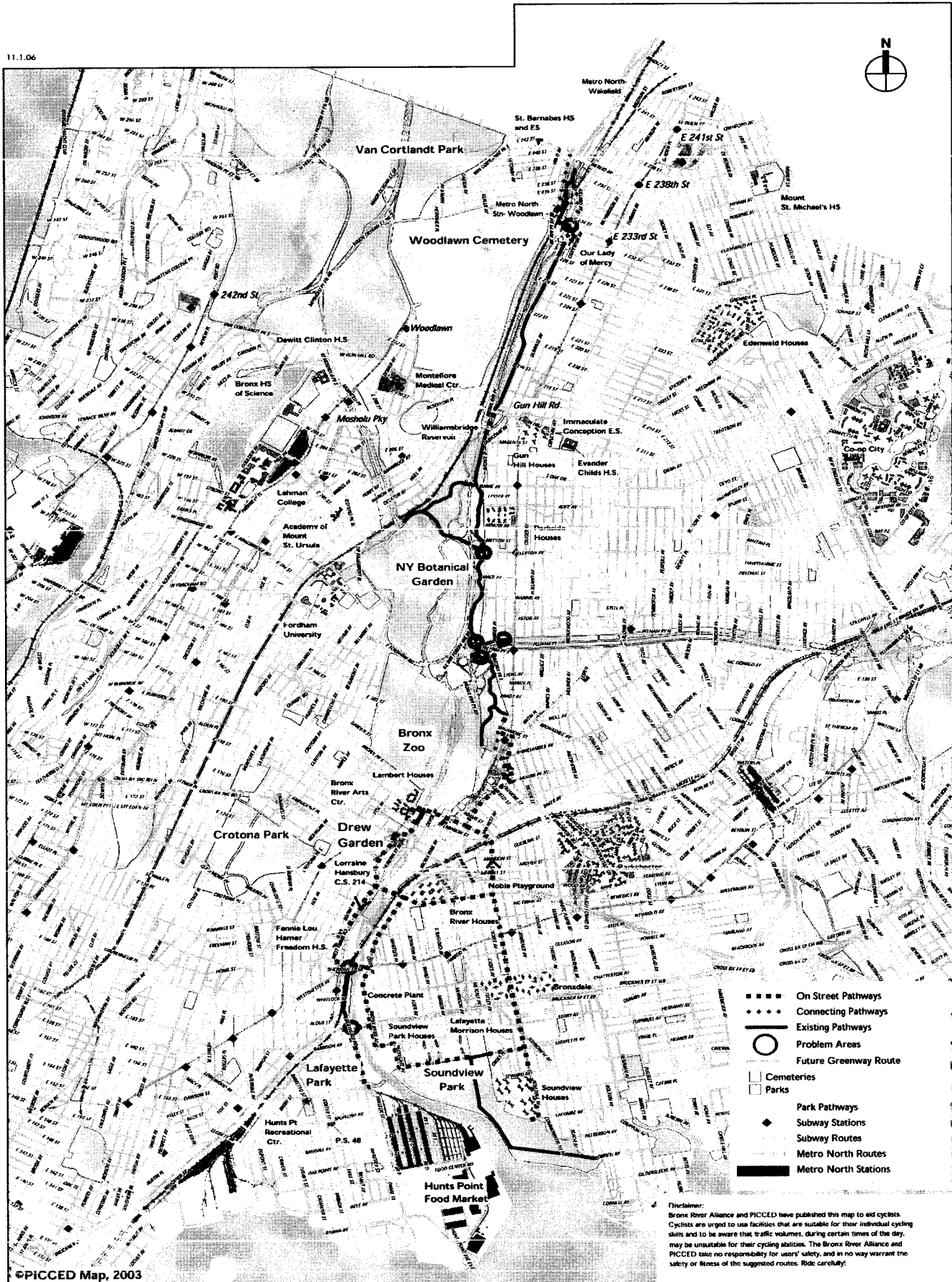
## **PROPOSED PLAN**

The Greenway will originate at the southern side of Westchester Avenue adjacent to the west shore of the Bronx River. At this location, a new signal and crosswalk will provide a safe crossing for trail users to the north side of Westchester Avenue.

From the north side of Westchester Avenue, the path will continue north, descending towards the Bronx River. The space through which the path travels will be bounded on the west by the Amtrak/CSX tracks and on the east by the Bronx River. Since the tracks pass underneath Westchester Avenue, and the path originates at grade on top of Westchester Avenue, it will be necessary to build a retaining wall along the tracks to make up the grade difference between the path elevation and the track elevation on which a fence will be constructed to secure the tracks.

From this wall, the earth will slope directly into the Bronx River, necessitating removal of the existing bulkhead and buildings will be removed from this space, and the ground will be sloped to a mid-tide elevation along the existing riverbank. Boulders and rip-rap will reinforce the bank from the river. From this wall, the earth will slope directly into the Bronx River, necessitating removal of the existing bulkhead and buildings will be removed from this space, and the ground will be sloped to a mid-tide

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Source: Bronx River Alliance

**Figure D-1-2**  
**Bronx River Greenway Corridor**

## BRONX RIVER GREENWAY

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**Chapter D-1: Project Description**

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elevation along the existing riverbank. Boulders and rip-rap will reinforce the bank from the river bottom to the mid-tide elevation. The slope between the path and the riverbank will be vegetated with native plants appropriate to the elevation above midtide level to provide new wildlife habitat. From midtide elevation to mean high water elevation will be a low-level marsh planted with *Spartina alternifolia*. From mean high water elevation to mean higher high water elevation will be a high level marsh planted with *Spartina patens* and other wetland plants. At higher elevations, a native meadow with scattered groupings of native trees is planned.

At the riverbank, a sitting area with shade structure will be provided on the south side of the path along the western shore of the Bronx River with a safety rail tying into the bridge railing. The path will then cross a new bridge to the east bank of the Bronx River parallel to the CSX Bridge over the Bronx River. This bridge will be a rustic steel truss to aesthetically compliment its neighboring bridges.

Just north of this bridge, neighborhood access will be provided by a side path that will connect the Greenway to Bronx River Avenue midway between Westchester Avenue and E. 172nd Street. This side path will also envelope and provide access to a new sitting area on the west bank of the Bronx River. This sitting area will provide views south under the Westchester Avenue Bridge and views across the river to the proposed native marsh and meadow. Existing bulkheads in this area will be removed, revealing natural rock outcroppings to be viewed from the sitting area or from the Greenway path on the opposite side of the river. Native plants will be planted or seeded in soil pockets in the rocks to create more wildlife habitat.

From this point, the main path will continue north, running through a space bounded on the west by the CSX tracks and on the east by the backyards of residential buildings that front on Bronx River Avenue. Security fence will be placed both along the tracks and along the back yards of adjacent property owners. East of the path will be a low area that will serve as an infiltration basin during and for up to 2 days after rain events and as an informal play lawn during dry weather.

The main path will continue north to a "T" intersection at 172nd Street, where another neighborhood access point will be provided. At this point, a side path (which will occupy a new ramp on the southern half of the existing East 172nd Street) will lead east to the intersection of East 172nd Street, Bronx River Avenue and Evergreen Avenue.

From 172nd Street, the main path will continue to the west, over a new bridge (Bridge #2) that will allow path users to cross from the east side to the west side of the Amtrak and CSX tracks. This bridge will be a similar truss style to Bridge #1, but require sufficient security measures for crossing over Amtrak's catenary lines and tracks.

From the west side of the railroad tracks, the main Greenway path will gently and gracefully wind downhill, traveling generally south before returning north, to meet the elevation of a new bridge ("Bridge #3") that will cross the Bronx River to reach the southern end of Starlight Park. Retaining walls will be required to allow the path to have a gradual descent to the river, while minimizing disturbance to existing vegetation and grades at the river's edge. At the top of this slope, an overlook will be constructed with a built-in seat wall and views of the Bronx River,

Bridge #3, and Starlight Park. For those walking, a winding staircase will be constructed to provide direct access from this overlook to provide a more direct route for able-bodied pedestrians to travel from 172nd Street to Starlight Park or the direct northern-bound portion of the path.

An overlook mid-way down the slope will provide seat walls and planted trees for shade from which to

## **Bronx River Greenway**

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enjoy the view. Near this overlook, an informal set of stairs will arc down a slope to meet a proposed nature path for walking only running south through the high-level marsh adjacent to the river. This nature path will also provide access to a dog run south of the slope along the Amtrak fence.

At the bottom of the winding, sloping portion of the path, a long, low seat wall, parallel to the edge of the path, will provide another vantage point from which to enjoy the Bronx River and adjacent restored high-level marsh. At the end of this seat wall, a wheelchair accessible entrance will be provided to the proposed pedestrian nature path that will form a loop near the entrance before branching out to follow the river bank north and south of the entrance.

Just north of the accessible nature path entrance, a side path will travel west across the Bronx River, over proposed Bridge #3, to Starlight Park. This bridge will be a rustic steel tied arch cable stay bridge, providing both sweeping views of the Bronx River and serving as a centerpiece to the project.

The main multi-use path will continue north, hugging the Amtrak property line on the east side of the Bronx River. As the width of property between Amtrak and the Bronx River narrows, the 5.2 m (17 ft) multi-use path splits into separated bikeway and walkway paths. The bikeway will be a 3.0 m (10 ft) asphalt path and walkway will be a 2.4 m (8 ft) stone dust path. These paths are relatively parallel, but the walkway will be next to the Bronx River and the bikeway closer to Amtrak. The purpose of separating the multi-use path into two separate paths was to give designers greater flexibility in retaining quality trees and give people walking a more relaxed experience along the riverbank.

Both the walkway and bikeway will travel northward through a restored native woodland and pass under the East 174th Street Viaduct. Several secondary walkways will create a mesh of alternative routes through the restored woodland. North of East 174th Street, the walkway and bikeway will rejoin into a 5.2 m multi-use path. This multi-use path will pass under a restored abandoned railroad signal bridge in a forested area near Amtrak, and follow a wide arc westward towards the river. A secondary walkway path will pass through a river viewing area adjacent to the Bronx River, and join the multi-use path near proposed Bridge #4. The multi-use path and secondary walkway form a large loop enclosing another restored woodland area and a combination play lawn / infiltration basin.

The multi-use path will diverge to provide a 5.2 m (17ft) multi-use path continuing north and a 5.2 m (17 ft) multi-use path connecting to the proposed Bridge #4 crossing the Bronx River into the north end of Starlight Park. A path within Starlight Park on the west bank of the river will connect Bridge #4 and Bridge #3 so that a continuous recreational loop will be created with the Greenway paths on the east bank of the Bronx River of close to 1 km (0.5 miles) in length. Via existing pedestrian ramps, Starlight Park paths will provide connections from the East 174th Street Viaduct to Bridge #4 and the main Greenway path.

Improvements within Starlight Park include floating docks just south of Bridge #3. The floating docks will provide a safe location for launching non-motorized watercraft and for portaging over an existing weir that is exposed during low tide. A platform will be constructed just above the high-high tide elevation on which the gantries will be hinged. The docks will maintain their positions on the high and low sides of the weir by lateral support from the gantries and supplementary cables. This design will allow the docks to accommodate changing tidal water elevations. Docks and gantries will be removed and stored during the winter months and if there is a major storm event.

Other facilities that will be included in Starlight Park include parking, a multi-use play field (permitted as a soccer field, two baseball diamonds, or performance seating), a basketball court, swing sets, spray bollards, a play structure, and a picnic area that can be utilized as a small performance space. NYCDPR will be constructing a boathouse with comfort station near the docks at the south end of Starlight Park and a comfort station and storage building near the playground and picnic areas just south of East 174th Street

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**Chapter D-1: Project Description**

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viaduct upon NYSDOT's completion of park reconstruction, which follows Con Edison's remediation, at the site.

North of Bridge # 4, the main Greenway path travels along the west side of the Metropolitan Transportation Authority's West Farms Bus Depot parking lot, and under the I-95 (Cross Bronx Expressway) Viaduct to the intersection of East 177th Street with I-895 (Arthur Sheridan Expressway) and Devoe Avenue. Just north of I-95 and an existing ramp from northbound I-895 to southbound I-95, the steep slope down to the river will be cut back to create a more gentle slope to the river and open up views to the river and views beneath the I-895 Bridge over the Bronx River.

The multi-use path will split into an upper and lower level multi-use paths just north of the aforementioned ramp from northbound I-895 to southbound I-95, the upper path leading to the intersection of I-895 with East 177th Street and Devoe Avenue and the lower path passing under the I-895 bridge over the Bronx River to avoid the intersection. Several retaining walls will have to be built and an existing combined sewer outfall immediately north of I-895 will have to be modified or relocated in order for this path to be a fully accessible multi-use path. Completion of the lower path may occur at a later date than the rest of this project, as it is most logical complete in conjunction with a New York City Department of Environmental Protection (NYCDEP) project to relocate the combined sewer outfall (CSO) in the future.

The upper multi-use path will cross the entrance/exit to I-895 on a newly created crosswalk containing a median pedestrian refuge island reinforced with new crossing and traffic lights. The multi-use path will continue northward, roughly paralleling a realigned Devoe Avenue, then will curve west to meet the existing sidewalk on East Tremont Avenue. A wide tree lawn between the path and Devoe Avenue will provide shade to path users and buffer the path from traffic noise and pollution. To the west of the path, the ground will be sloped downward, and the top 2.66 to 3.12 meters (8'-8" to 10'-2") of the existing stone retaining wall that forms the existing river bank will be removed to lower the river bank to an elevation 0.54 meters (2") higher than the highest water level ever observed. The top of the resulting wall will be approximately 0.58 meters (23") above mean high water, and 2.02m (6'-7") above its base on the riverbed. A safety railing will be provided at the top of this wall.

From the north end of the park, the multi-use path travels west, across the East Tremont Avenue Bridge over the Bronx River. Immediately after crossing the river, the path will turn north to cross East Tremont Avenue at a new signalized mid-block crossing. The north side of East Tremont Avenue will be the northern terminus of this project. This terminus is being coordinated with NYCDPR to blend seamlessly into their Bronx River Greenway multi-use path from East Tremont to East 180th Street. Other plans by NYCDPR and NYSDOT facilitate continuation of the Bronx River Greenway to the Westchester County border.

The exact alignment of the paths between Bridge #4 and the path's intersection with I-895 and East 177th Street may be temporary if future construction associated with the rehabilitation of I-95 by NYSDOT and the possible installation of a sewer overflow storage conduit by NYCDEP require the path to be relocated. The final alignment will be determined as a result of these projects and community outreach, but access to and continuity of the Bronx River Greenway will be maintained throughout any construction per NYSDOT policy.

As part of this project, the intersection of I-895 with East 177th Street and Devoe Avenue, the intersection of East 177th Street with East Tremont Avenue and the intersection of Devoe Avenue with East Tremont Avenue will be reconfigured. Currently, East 177th Street and Devoe Avenue diverge from the intersection of I-895 with East 177th Street and Devoe Avenue in the shape of a "V." This creates two intersection

**Bronx River Greenway**

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points with East Tremont Avenue: one with East 177th Street and the other with Devoe Avenue. This project will consolidate the two intersection points on East Tremont Avenue into one point—condensing the “V” of East 177th Street and Devoe Avenue into a five lane section along the alignment of Devoe Avenue with a center median. The median will provide space for a planter and a pedestrian refuge island. This will improve crossing safety, vehicle capacity, and aesthetics of these intersections. It will also increase available land area adjacent to the Bronx River, allowing for improved landscaping and path environments at this location.

**Chapter D-2:****Land Use, Community Facilities, Zoning and Public Policy****A. INTRODUCTION**

This analysis assesses the Proposed Project's potential impacts on land use, community facilities, zoning, and public policy.

The project's land use study area is located in the southern section of the Bronx and is a 0.4 km (0.25-mile) radius from the project boundary. The study area is generally defined as the area bounded by East 180th Street to the north, the Bronx River Parkway to the east, East 165th Street/Watson Avenue to the south, and Vyse Avenue to the west (see Figure D-2-1). The study area covers portions of several neighborhoods including Bronx River, Soundview, Longwood, Crotona Park East, West Farms, and Bronx Park South.

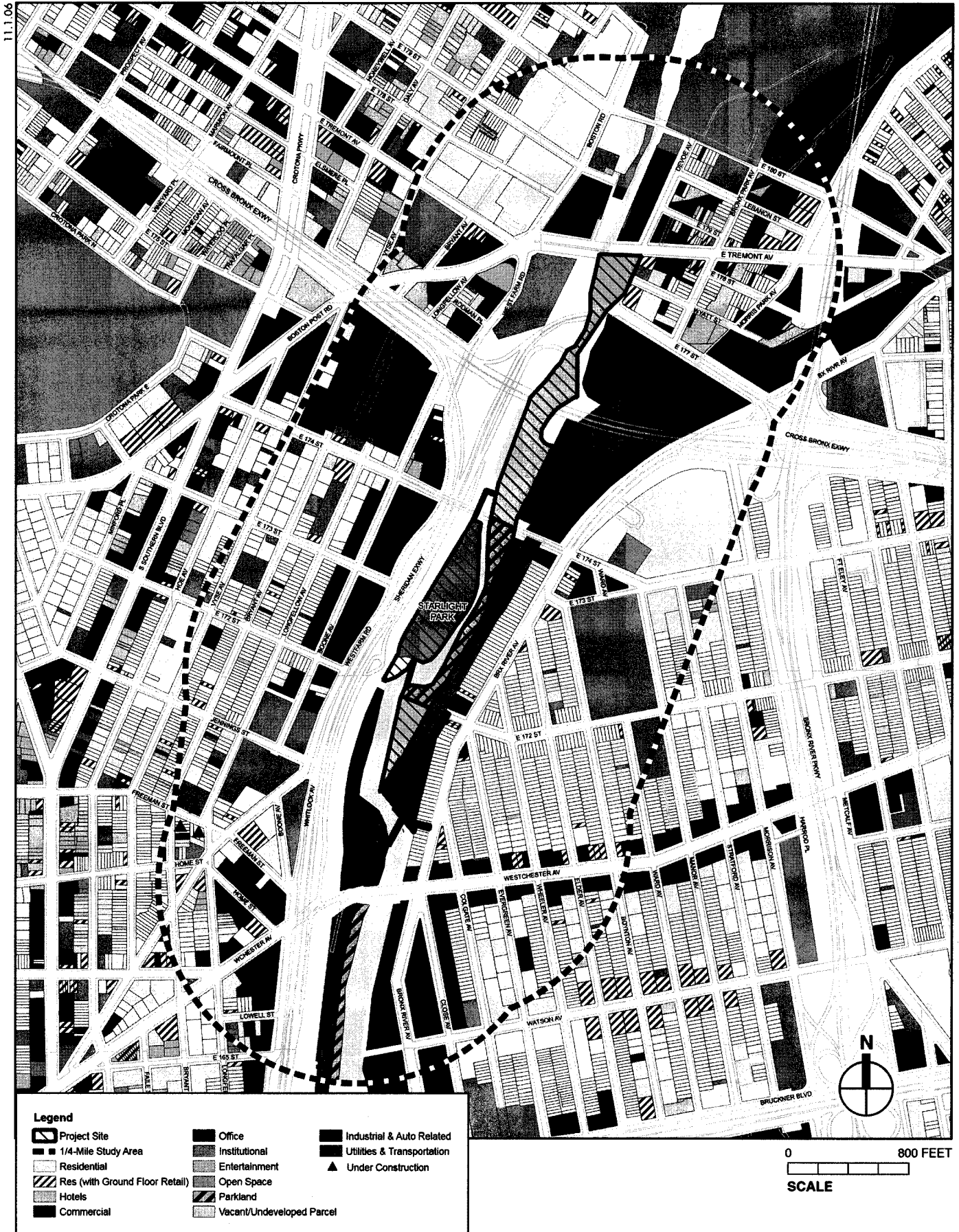
Various sources were used to prepare this section, including field surveys, data, and reports supplied by local government agencies, interviews with representatives of government agencies, internet research, and geographic information systems (GIS) land use data derived from New York City Department of Finance Real Property Assessment Data (RPAD) files published by the New York City Department of Finance and the New York City Department of City Planning (NYCDCP). Zoning information is based on the New York City Zoning Resolution and zoning maps.

**B. EXISTING CONDITIONS****LAND USE***PROJECT SITE*

The Project Site is irregularly shaped and consists of several parcels of land located along a one mile stretch of the Bronx River between East Tremont and Westchester Avenues (See Figure D-2-1). The entire Project Site north of East 174th Street consists of undeveloped land under the jurisdiction of New York State Department of Transportation (NYSDOT). Between East 174th and East 172nd Streets, the Project Site consists of parkland, including Starlight Park. Starlight Park is an approximately 3.6-hectare (HA) (9-acre) park under the jurisdiction of the New York City Department of Parks and Recreation (NYCDPR). It is bounded by the river to the east and I-895 (Arthur Sheridan Expressway) to the west. Due to ongoing remediation for hazardous materials, Starlight Park has no amenities and is closed to the public. The balance of the parkland is bounded by the river to the west and the AMTRAK rail lines to the east and consists primarily of trees and fields with no amenities. It is generally inaccessible to the public and isolated from the surrounding residential neighborhoods. Another undeveloped parcel of land is located south of East 172nd Street between the river and the AMTRAK rail lines. In addition to parkland, the Project Site also includes two industrial sites. The industrial sites include the Apex Auto salvage site (Block 3769, Lot 49) and the New York City (City) Marshall Impound Lot, PDJ Simone (Block 3017, Lot 1), and consist of 70,190 and 74,874 square feet, respectively.

*STUDY AREA*

The study area is predominantly residential. In addition to residential uses, the study area contains a mix of transportation infrastructure, industrial, and commercial uses, as well as parkland, community facilities, and vacant land.





## **Bronx River Greenway**

### *Residential Uses*

Residential uses are generally located along the eastern and western boundaries of the study area. Residential uses found within the study area are mixed and generally range from lower density attached, semi-detached and garden apartment complexes to four- to seven-story apartment buildings. A few larger density, 13- to 21-story publicly assisted apartment buildings, under the jurisdiction New York City Housing Authority (NYCHA), are located in the northern portion of the study area along East 178th Street and Boston Road as well as East 174th Street and Bronx River Avenue.

### *Transportation Infrastructure and Industrial Uses*

The Project Site and the Bronx River are nestled within an intricate network of transportation infrastructure and industrial uses. The Arthur Sheridan Expressway generally runs along the western edge of the Project Site. AMTRAK's Northeast Corridor/CSX tracks generally run along the eastern edge of the Project Site. In the southern portion of the study area (between Westchester Avenue and 172nd Street), the tracks cross the Bronx River to the western border of the site. Several roadways traverse the River including East 180th Street, East Tremont Avenue, Cross Bronx Expressway, East 174th Street, and Westchester Avenue. Several interchanges and ramps connecting these roadways to each other and the street network are also located within the study area.

Two elevated subway tracks are also notable elements in the study area. The Nos. 2 and 5 lines are located in the northern portion of the study area and the No. 6 line runs over Westchester Avenue in the southern section. During fieldwork in April 2004, another set of decommissioned elevated tracks in the northeastern portion of the study area were in the process of being dismantled.

Several auto-related and other industrial uses, including Hunts Point Auto Parts and Marine Boiler and Welding, are adjacent to the Project Site to the west (between East 172nd Street and Westchester Avenue). Industrial uses within the industrial corridor running north/south through the center of the study area primarily consist of one- and two-story warehouses and auto-related uses. The larger industrial and auto-related uses in the northeastern portion of the study area include the West Farms Bus Depot at 177th Street and Devoe Avenue, and the New York City Marshall's Impound Lot and Jenna Concrete Corp. on a large lot along Bronx River Avenue between 177th Street and East 174th Street.

### *Open Space and Parklands*

In addition to the parkland and open space considered part of the Project Site, there are about 10 open spaces in the study area. Several parks within the study area are located along, and provide some access to, the Bronx River including River Park and Bronx River Park (West Farms segment). Both of these parks are located to the north of the Project Site (see Chapter D-3, "Open Space and Parklands" for more details). River Park is located along the northern boundary of the study area at East 180th Street and Boston Road on the western bank of the Bronx River. This park contains both active and passive space including a playground and barbeque pits. There is a small waterfall in the park. Benches and a path are located along the river and provide views of the river. Bronx River Park is also located on the west side of the Bronx River and is hidden at the end of East 179th Street. It is a predominantly passive recreational space with a variety of amenities including tables, benches, and pathways that run along the river.

The decommissioned concrete plant located along the western bank of the Bronx River south of Westchester Avenue is the site of additional parkland in the southern portion of the study area. Although not fully developed as a publicly accessible open space, the concrete factory is under the jurisdiction of the NYCDPR and is therefore considered parkland.

*Commercial Uses*

East Tremont Avenue, Westchester Avenue, and Boston Road are commercial thoroughfares in the study area. Businesses range from small commercial establishments that serve the local population, such as laundromats and small grocery stores, to larger chain stores. There is a larger commercial strip mall with a multilevel parking garage located at the intersection of Boston Road and East Tremont Avenue. Other commercial uses are scattered throughout the area.

**COMMUNITY FACILITIES**

No community facilities are located within the Project Site.

Several community facilities are scattered throughout the study area to serve local residents and mostly consist of schools and religious institutions. The community facility closest to the Project Site is I.S. 167, the Lorraine Hansberry School located at the corner of West Farms Road and East Tremont Avenue, adjacent to the Bronx River to the west. James Monroe High School is the largest institutional use and occupies two blocks with its building and playing fields along East 172nd Street in the eastern portion of the study area. No police stations or fire houses are located within the study area.

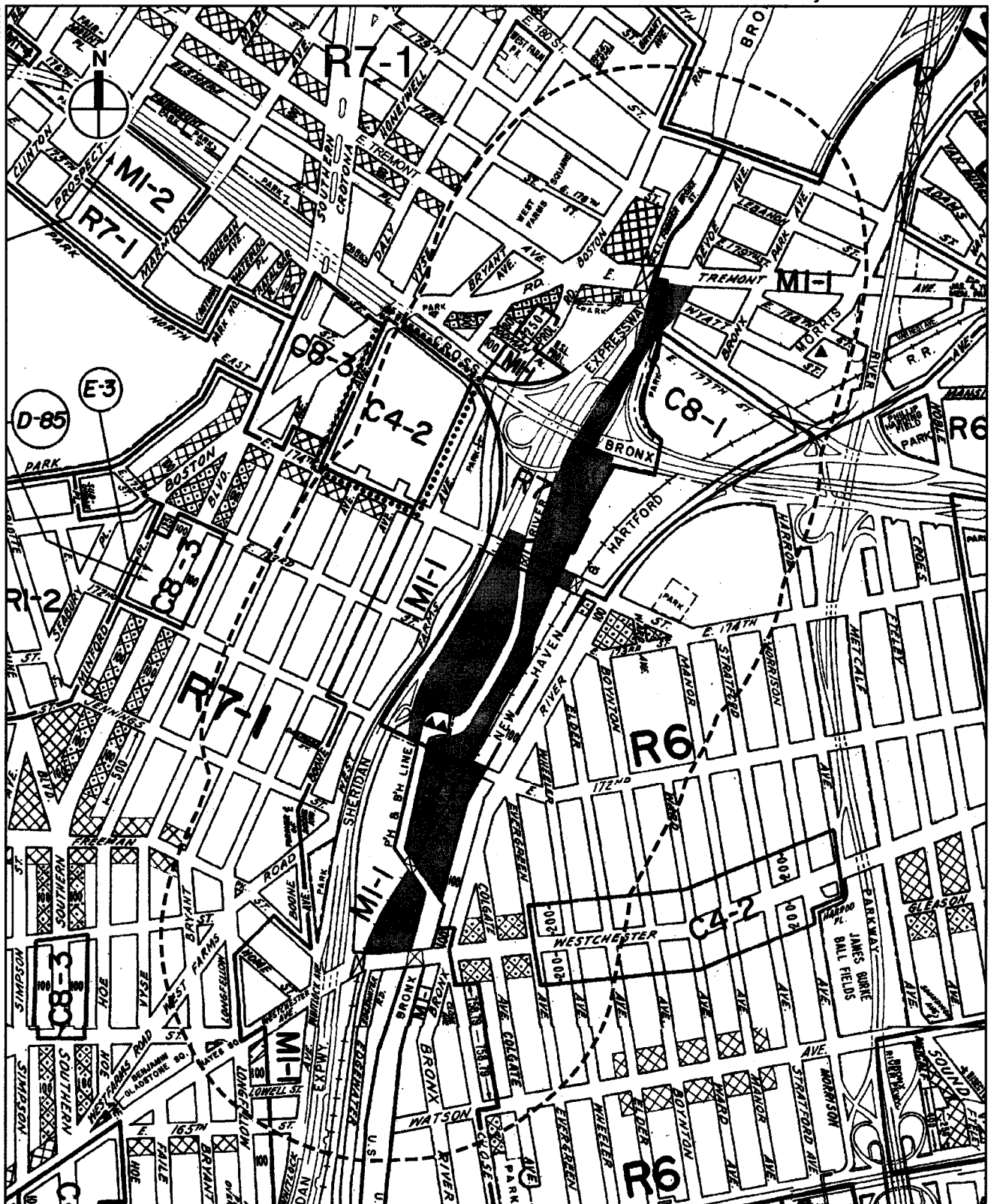
**ZONING***PROJECT SITE*







The portion of the Project Site north of East 174th Street is zoned R7-1 medium density residential (for a full description of zoning districts, see Table D-2-1). Between East 174th and East 172nd Streets, the Project Site is mapped as parkland and therefore has no designation. The area of the Project Site south of East 172nd Street has an M1-1 light manufacturing designation (see Figure D-2-2).

*STUDY AREA*

Much of the study area is zoned for residential use with some manufacturing and commercial districts located along major roadways.

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-  Project Site Area
-  Study Area Boundary (1/4-Mile Perimeter)
-  Zoning District Boundary
-  C1-2 Overlay
-  C1-4 Overlay
-  C2-2 Overlay

0 1000 FEET  
SCALE

BRONX RIVER GREENWAY

**Zoning**  
Figure D-2-2

**Bronx River Greenway****TABLE D-2-1  
ZONING**

<b>Zoning District</b>	<b>Permitted Uses and FAR</b>
<i>General Residential Districts:</i>	Commercial and manufacturing uses are prohibited. Community facilities permitted.
R6, R7-1	General residence district, medium density apartment house district. Maximum FAR for R6 is 0.78 to 2.43. Maximum FAR for R7-1 is 0.87 to 3.44.
<i>General Commercial Districts:</i>	Residential and community facility uses permitted except in C8 districts. Commercial districts can be mapped as zoning districts or as overlays in residential districts. Commercial overlays allow low-density development of commercial uses.
C1-2, C1-4	Local shopping and services often mapped as overlays, sometimes along major avenues. Maximum FAR is 1.0 to 2.0.
C2-2	Local shopping and services often mapped as overlays, generally along major avenues—serves a wider neighborhood than C1 overlays. Maximum FAR is 1.0 to 2.0.
C4-2	Shopping centers and offices in more densely built areas. Maximum FAR is 3.4.
C8-1	Automotive and other heavy commercial uses. Residential uses are not permitted. Maximum FAR for C8-1 is 1.0.
<i>Manufacturing Districts:</i>	Residential uses generally prohibited.
M1-1	Light manufacturing use; located adjacent to low density residential areas and serve as buffers of heavy manufacturing areas. Maximum FAR for M1-1 is 1.0
<b>Note:</b> FAR is floor area ratio. Maximum floor area allowable on a lot is the maximum FAR control number multiplied by the lot area.	
<b>Source:</b> <i>New York City Zoning Resolution</i> , New York City Department of City Planning	

An R7-1 medium density district covers much of the western section of the study area. A large R6 medium density district is located in the eastern portion of the study area. Light manufacturing (M1-1) districts make up a portion of the industrial corridor that runs lengthwise through the middle of the study area. Several commercial districts are scattered throughout the study area. A C8-1 heavy commercial district runs along the AMTRAK rail line in the eastern portion of the study area. A superblock in the northern portion of the study area, off the Cross Bronx Expressway, was rezoned in 1998 from light manufacturing to C4-2 commercial designation. The new zoning is designed for a shopping center that is under construction on the site. A C4-2 major commercial district runs along Westchester Avenue. Several commercial overlays are located throughout the residential districts and accommodate businesses that provide services to both the local community and a larger area.

**PUBLIC POLICY**

Crotona Park East, located in the western portion of the study area, was part of the Department of City Planning's Neighborhood Land Disposition Plan completed in 1992. West Farms and Bronx Park South neighborhoods, in the northern portion of the study area, are located within the boundaries of the Bronx Park South/Crotona Park North Neighborhood Land Disposition Plan, which was completed by the Department of City Planning in 1993. These plans provided a framework for guiding the disposition recommendations of vacant city-owned properties in the community. Crotona Park East is also part of the area covered by Community District 3's 197-a Plan called "Partnership for the Future: a 197-a Plan for the Revitalization of Community District 3" in 1993. The five main goals of the 197-a Plan include: (1) re-establish the district as a dynamic, viable community; (2) increase the district's population to 100,000

## **Chapter D-2: Land Use, Community Facilities, Zoning and Public Policy**

by the year 2000; (3) provide a viable economic base through the provision of job training and the creation of labor intensive opportunities; (4) maintain, develop, and expand the district's supporting infrastructure; and (5) maintain parks and recreation areas throughout the district.

The Crotona Park East study area also has several community development organizations which focus on housing, education, open space, and other community issues. These organizations include the Mid-Bronx Desperadoes which has built and rehabilitated housing, manages properties and offers job training programs.

### **C. PROBABLE IMPACTS**

#### **NO ACTION**

Several commercial and residential projects are expected to be completed within the study area by 2006.

The largest Proposed Project is the MBD New Horizons Retail Center. This retail development will be located in the northeastern portion of the study area on a superblock bounded by East 176th Street/Cross Bronx Expressway to the north, Boone Avenue to the East, East 174th Street to the south and Vyse Avenue to the west. It will be anchored by an approximately 50,000-sf Pathmark Supermarket with 21 additional businesses. The total development will consist of approximately 135,000 sf of retail space and a large accessory parking lot. The retail center was under construction during fieldwork conducted in April 2004. It is expected that it will be occupied and open for business in mid-2004.

During fieldwork conducted in April 2004, several residential and church-related buildings were under construction in the southwestern portion of the study area on Freeman Street between Bryant and Longfellow Avenues. On-going construction was also observed on the Arthur Sheridan Expressway, adjacent to the Project Site to west. Expressway repaving and improvements are expected to be completed by 2005.

In the northeastern portion of the study area, an elevated rail line was demolished leaving several parcels of vacant land just east of Bronx Park Avenue between East 177th Street and East 180th Street. These properties will remain under the ownership of the New York City Transit Authority but are expected to be leased to residents and businesses on a long-term basis. It is likely that residents adjacent to the sites will use them as accessory space (driveways, yards, etc.). Commercial uses could include one- to two-story retail businesses, accessory parking and storage areas.

The Bronx River Greenway extends from the Bronx/Westchester County border to the East River project. The Proposed Project is a major segment of the greenway and would connect to NYCDPR's planned redevelopment of the former concrete plant as a park to the south and to NYCDPR's Bronx River Park (West Farms segment) of the Bronx River Greenway to the north. Independent of the Proposed Project, development of the Bronx River Greenway could be occurring within the study area. It is likely that improvements to these segments would overlap with the construction period for this project.

#### **PROPOSED PROJECT**

The following section assesses the potential impacts of the construction and operation of this segment of the Bronx River Greenway project (see Chapter D-1 "Project Description" for a full description of the Proposed Project) on land use, community facilities, public policy and zoning.

**Bronx River Greenway**

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**CONSTRUCTION**

As mentioned in the Chapter D-1 "Project Description", some on-street improvements are planned as part of the Proposed Project along East Tremont and Devoe Avenues, East 177th Street and the terminus of the Arthur Sheridan Expressway. Therefore, the potential impacts to service delivery of community facilities (fire and police protection etc.) in the study area during the construction period were assessed.

The Lorraine Hansberry school is adjacent to the proposed street improvements to the south. While the proposed street improvements are expected to result in the closure of several lanes of traffic, they would not result in a total closure of the streets or sidewalks. Therefore, the proposed construction would not prevent school buses, students, and faculty from gaining access to the school. As mentioned above in the community facilities section, no police or fire stations are located within the study area. Therefore the proposed street improvements would not directly block access to or from these services. Given that the street would remain open, emergency vehicles would continue to be able to use these streets to access the entire study area. The proposed on-street improvements would not obstruct the delivery of services of community facilities within the study area. Therefore, no significant adverse impacts to community facilities are expected to occur during the construction phase of the Proposed Project.

**OPERATION***Land Use*

The Proposed Project would provide residents, workers, and visitors improved Bronx River waterfront access and recreational opportunities via the use of the multi-use path. Most of the Project Site consists of inaccessible parkland with no amenities. The Greenway would not represent a change in land use on the majority of the Project Site but would enhance existing parkland and would provide a link from the communities and commercial areas to much of the parkland adjacent to the Bronx River. The Greenway would alter land use on two parcels of land by displacing the auto-related uses on these parcels and replacing them with park space (see Chapter D-4 "Economic Conditions" for further discussion of the displacement). These businesses are not water dependent, and do not contribute substantially to a defining element of the neighborhood's land use. As mentioned earlier, the Proposed Project is one of many segments that would ultimately result in a greenway that runs from Westchester County to the East River; therefore, the two industrial properties on the Project Site are an important link within this segment. In addition, given that the Apex Auto site is adjacent to residential uses, the proposed parkland would be a more compatible use. The Proposed Project would provide substantial improvements to existing parkland that would be compatible with the area's residential neighborhoods. It would also provide access to the neighborhoods that have been isolated from the River and surrounding parkland. Therefore, the Proposed Project is not expected to result in any significant adverse impacts to land use.

*Zoning*

A portion of the Project Site, between East 174th and East 172nd Streets, is currently, and will remain, designated parkland. For public benefit, it is important to have mapped parkland and open spaces in residential districts. Therefore the parkland designation would be compatible with the northern portion of the Project Site, between East Tremont Avenue and East 174th Street that is currently zoned for residential use. The Proposed Project is compatible with the study area given that it is mostly zoned for residential uses. As a result of the Proposed Project, two industrial sites located within an M1-1 light manufacturing zone would become the multi-use path and open space. The acquisition of these two sites would be beneficial as they are an important link within this Greenway segment and the Greenway as a whole. In addition, Greenway is more compatible with the adjacent residential district than the existing manufacturing designation. The Proposed Project would not have an adverse impact on the surrounding

**Chapter D-2: Land Use, Community Facilities, Zoning and Public Policy**

light manufacturing and heavy commercial zoning districts; in fact, it is likely that the employees of the businesses within these zones would benefit from the proposed Greenway. Overall, the Proposed Project would be beneficial to the area and would not result in significant adverse impacts to zoning.

*Public Policy*

As part of the disposition plans by DCP, much of the vacant, city owned property within the study area has been redeveloped into residential and commercial property. The proposed Greenway would provide an important amenity and would be compatible with this development. The Proposed Project would also be consistent with Community District 3's 197-a Plan, "Partnership for the Future: a 197-a Plan for the Revitalization of Community District 3". The proposed greenway would apply to the goals of maintaining parks and recreation throughout the area as well as helping to re-establish the district as a dynamic, viable community. Providing publicly accessible open space is an objective of many of the community development organizations located within the study area. Therefore, the proposed property would be consistent with public policy for the study area.

**Chapter D-3:****Open Space and Parklands****A. INTRODUCTION**

This chapter addresses the Proposed Project's potential effects on open space and parkland. Specifically, the analysis assesses the project's potential impacts on public open space during both construction and operation. Construction of the Greenway may affect the usage of adjacent parks or require the use of adjacent parks for construction staging and will be discussed. During operation, this project would substantially increase the amount of open space in the area, therefore a qualitative discussion of the benefits associated with the Greenway will be provided.

**B. EXISTING CONDITIONS**

Open space and parkland located within or adjacent to the Project Site include Starlight Park, Bronx River Park (West Farms segment), the planned park at the former concrete plant site, and other parkland.

**PROJECT SITE**

Within the Project Site, parkland is located on both sides of the Bronx River between East 174th and East 172nd Streets. Starlight Park consists of approximately 3.6 hectares (HA) (9 acres) and is located on the western bank of the river. I-895 (Arthur Sheridan Expressway) runs along the western edge of the park. Starlight Park is a New York City Department of Parks and Recreation (NYCDPR)-operated park. Remediation for hazardous materials is being undertaken at Starlight Park; therefore the park is closed to the public and contains no amenities.

Unimproved, inaccessible land covered by vegetation is located on the eastern bank of the Bronx River. This land is under the jurisdiction of the New York City Department of Parks and Recreation (NYCDPR), generally across from Starlight Park between East 172nd Street and East 174th Street, of New York State Department of Transportation (NYSDOT) generally south of East 172nd Street and north of East 174th Street, adjacent to the Bronx River, and of the Metropolitan Transportation Authority (MTA) for parcels adjacent to Amtrak both south and north of East 174th Street.

**ADJACENT TO THE PROJECT SITE**

Parks located within the study area which do not border the proposed Greenway would not be affected because of the increased distance from construction activities and/or the fact that the intervening structures between the public open spaces and the construction activities would function as a screen to shield parks from impacts. Therefore, only open spaces in immediate proximity of the Proposed Project are analyzed.

Bronx River Park and the planned park at the former concrete plant site are both located along the west bank of the Bronx River. Bronx River Park is entirely under the jurisdiction of the New York City Department of Parks and Recreation (NYCDPR) and the concrete plant site is in the jurisdiction of NYCDPR along the waterfront only. Certain parts of the Concrete Plant Park are in the jurisdiction of New York City Department of Transportation and is anticipated to revert to NYCDPR upon completion of the Bruckner/Sheridan Interchange reconstruction. Bronx River Park is a 0.2 HA (0.51-acre) park north of the Project Site in a remote location at the end of East 179th Street. The elevated tracks of the Nos. 2 and 5 subway lines cut across the southern portion of the park. The open space is adjacent to a residential complex and, due to its remote location, it is assumed that it is mostly used by those residents.



## **Bronx River Greenway**

The park's amenities include paths and benches that allow for the appreciation of the river. This is a predominantly passive recreational space with trees, landscaping, and tables with markings for games (i.e., chess and checkers). The park has also been used as a launch point for canoes and kayaks.

The site of the planned park at the former concrete plant site is located to the south of the Project Site, south of Westchester Avenue and the elevated No. 6 subway line. The concrete plant's structures and associated piers are dilapidated and vacant and remain on the site primarily fenced off and inaccessible. Although it contains almost no amenities, a large area of the parcel is under the jurisdiction of the NYCDPR and is therefore considered parkland.<sup>1</sup> In addition to the remnants of the factory, the parkland consists of a dirt road and unimproved vegetated areas and is accessible from Westchester Avenue. Several boulders lining the dirt road have been painted by neighborhood residents to decorate the unimproved parkland. A community garden for growing vegetables is located within the parkland. The southern portion of the site has some waterfront access and is occasionally used as a disembarking point for canoes and kayaks.

### **C. PROBABLE IMPACTS**

#### **NO ACTION**

##### *PROJECT SITE*

In the future without the Proposed Project, remediation at Starlight Park will continue. The park will continue to be closed and off-limits to the public. With or without the proposed Greenway, after remediation is completed, the park would be restored as an open space. Without the Proposed Project, amenities of the renovated park would probably include primarily active recreational space (i.e., baseball fields).

Changes are not expected to occur to the parcel of parkland adjacent to Starlight Park to the east. Additional open space would not be created on the Project Site.

##### *ADJACENT TO THE PROJECT SITE*

By 2006, construction of improvements to Bronx River Park and the planned park at the former concrete plant site still be underway as part of the Bronx River Greenway corridor. Some improvements to the planned park at the former concrete plant site may already be in place including landscaping and better access to the waterfront. These two sections of the Greenway Corridor will be built with or without the proposed segment. Without the Proposed Project, these segments will not be linked and the entire Greenway Corridor will be missing an important piece.

#### **PROPOSED PROJECT**

##### *CONSTRUCTION*

The general effects of construction activities on open space and transportation and recreational improvements that would occur under the Proposed Project are discussed below.

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<sup>1</sup> The western portion of the parcel is under the jurisdiction of NYSDOT for future use as construction staging for the Bruckner/Sheridan Interchange project.

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**Chapter D-3: Open Space and Parklands**

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*Project Site*

Starlight Park is undergoing remediation for hazardous materials. The remediation work in Starlight Park is the responsibility of the Consolidated Edison Company of New York (Con Edison), and is being performed by Con Edison under the supervision of the NYSDEC. As a result of the remediation, the park is closed to the public and has no amenities. During the construction of the Proposed Project, portions of the park will be used for construction staging for both the park itself and the new improvements in the proposed Greenway. Given that the park is not and will not be open, construction of the Proposed Project will not affect usage of the park.

In addition, ultimately, the park will be reconstructed as part of the project. During construction of the Proposed Project, the entire segment, including Starlight Park, would be closed to the public. The closure of the park for its own reconstruction is not considered a significant adverse impact. Although the proposed NYSDOT Greenway project will use portions of Starlight Park as a staging area for construction of the Proposed Project, this project will proceed as a joint park/transportation project development. There is a long history of coordination on the development of the Greenway that has occurred from the project's inception in 1999 to present day. This has included joint public outreach to community boards, extensive coordination through the Bronx River Alliance's many not-for-profit and government members, and coordination between New York State Department of Transportation designers with NYCDPR's planners and designers. The multi-use path and bridges were jointly planned with NYCDPR for the project and also to be consistent with NYCDPR's planned park at the former concrete plant site and proposed Bronx River Park West Farms Segment. The provisions of 23CFR771 and related FHWA policy guidance allow for such joint development of a transportation project that is concurrently planned and developed with a public park, which precludes the need for a Section 4(f) statement. Therefore, Section 4(f) does not apply.

The parkland on the eastern bank of the Bronx River, across the river from Starlight Park, is unimproved and inaccessible. Therefore, construction would not affect its usage.

*Adjacent to the Project Site*

Construction of the Greenway would not require the use of either Bronx River Park or the site of the planned park at the former concrete plant site. Therefore, the construction of the Proposed Project is not expected to affect the usage of these adjacent parks.

In addition, noise and dust during construction are not expected reduce the overall desirability of adjacent and nearby open spaces. Although within close proximity, Bronx River Park is not immediately adjacent to the Project Site. Several buildings, East Tremont Avenue and elevated subway lines separate the Project Site from Bronx River Park. Westchester Avenue and elevated subway tracks are situated between the Project Site and the planned park at the former concrete plant site. It is likely that these would act as barriers and would insulate these open spaces from noise and dust generated by the Proposed Project during the construction period.

**OPERATION**

The Proposed Project would result in the development of 6.5 HA (16 acres) of land with a multiuse path and open space along the Bronx River between East Tremont and Westchester Avenues (for details, see Chapter D-1 "Project Description"). The multi-use path will be a transportation facility used for cycling, skating, walking, and exercising. Overlooks for appreciation of the Bronx River and improved parkland would be provided along the path. Pedestrian bridges connecting the multi-use path and open space on both sides of the river will be constructed. The project will create a naturalized shoreline with new intertidal wetlands, and plant native vegetation to provide habitat for Bronx River wildlife. The Greenway

**Bronx River Greenway**

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would serve the residents and workers in neighborhoods bordering the Proposed Project. As an important segment in the entire Greenway Corridor, it would also serve people from the rest of the city and Westchester. The park will offer public access to the waterfront in an area that has long been separated physically and visually from the Bronx River, despite its geographic proximity. Access to other segments of the Greenway, Bronx River Park to the north and the site of the planned Concrete Plant Park to the south, will also be created. An amphitheater will also provide the area with a performance space. Without the Proposed Project, these benefits would not be provided.

As discussed above, Starlight Park will be reconstructed after remediation for hazardous materials is completed. This will provide additional active recreational space, including basketball courts, baseball diamonds, a soccer field, and a variety pieces of play equipment. In addition, a boat house and a floating dock for non-motorized boat access would also be provided at Starlight Park. The multi-use Greenway path would loop around Starlight Park. Although Starlight Park will eventually be reopened to the public for use as a park, the amenities in the park without the Proposed Project will not be comparable to those that will be provided with the Proposed Project.

**Chapter D-4:****Economic Conditions****A. INTRODUCTION**

Although the construction of the Bronx River Greenway is not expected to have any major economic consequences, there will be four entities that will potentially be displaced by the Proposed Project, two of which will be acquired by NYSDOT under the New York State Eminent Domain Procedures. As a result, this section will assess any potential impacts that may occur due to direct business displacement as well as address any physical impacts on existing businesses due to any projected diversions during the construction period.

**B. EXISTING CONDITIONS**

The Project Site is located between East Tremont and Westchester Avenues as the northern and southern boundaries respectively. Following a north-south axis, parts of the Project Site are separated by the Bronx River and will be connected by four bridges. The study area is roughly defined as the area within a 0.4 km (0.25-mile) radius of the Proposed Project and generally extends from Watson Avenue to the south and East 180th Street to the north. Within the 0.4 km (0.25 mile) study area boundary are five distinct residential neighborhoods that surround the proposed Bronx River Greenway project. The following analysis identifies the businesses and employment areas within these five neighborhoods.

**CROTONA PARK EAST**

The Crotona Park East neighborhood is located just west of the Proposed Project. The neighborhood is mostly residential with a majority of the industrial uses located east of Longfellow Avenue along Boone Avenue and West Farms Road. The southern section of Crotona Park East, which is defined as the area south of Jennings Street, is predominately made up of auto-related uses such as a car wash, a towing business, parking lots, and an auto repair and spare parts businesses. Other industrial uses in this area include a private ambulance service, and a manufacturing business that fabricates metal products. Commercial uses such as a dry cleaner, deli, and a fast food establishment line Westchester Avenue.

There are a few businesses located between I-895 (Arthur Sheridan Expressway) and the Bronx River just north of Westchester Avenue between Freeman Street and East 172nd Street. Some of the businesses include a large auto parts and accessories business, a welding facility, and a baskets and crates manufacturer. Though not a business, the NYC Marshall Impound Lot (aka PDJ Simone), which is facing potential displacement as a result of the Proposed Project. The entrance of the impound facility fronts Westchester Avenue and extends north alongside the Bronx River.

Further north along Boone Avenue and West Farms Road, the industrial uses are primarily warehousing and manufacturing. Boone Avenue contains more one-story warehouse buildings that are mainly used for shipping and receiving and for storage facilities. Other uses on Boone Avenue include auto-related businesses, a commercial laundry facility, and an iron works business. Facing the Arthur Sheridan Expressway, businesses along West Farms Road are involved in heavier industrial uses such as structural metal fabricators, lumber supply, iron and metal works, and paint supply. Other uses in the area include a laundry equipment provider, auto recovery, and a welding facility.

## **BRONX PARK SOUTH**

The Bronx Park South community, which is located north of I-95 (Cross Bronx Expressway) and west of Boston Road and West Farms Boulevard, is predominately residential with some commercial and industrial uses. Commercial uses such as a parking garage and vehicle repair shops are located along

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### **Bronx River Greenway**

Bryant Avenue and Boston Road. Heavy industrial uses along West Farms Boulevard include a manufacturer of rolling steel doors and windows and stone cutting and stone products while lighter industrial uses such as auto repair shops and a parking garage facility are located along Boston Road.

## **BRONX RIVER**

The Bronx River neighborhood is located east of the Bronx River and the Proposed Project. Similar to Bronx River South in the north of the study area, Bronx River is mostly residential with much of the industrial uses located along the Bronx River and Bronx River Avenue. Businesses along the northern part of Bronx River Avenue range from automobile storage facilities, vehicle impound, a truck parking and storage business, a concrete manufacturing facility, and several auto related businesses. Behind these businesses, alongside the river, is the AMTRAK Northeast Corridor rail line as well as the northern section of the Project Site. Commercial businesses in the area consist of restaurants, a supermarket, delis, tax services, a liquor store, and fast food establishments along East 174th Street between Bronx River and Manor Avenues.

Further south on Bronx River Avenue between East 172nd Street and Westchester Avenue is the entrance to Apex Auto, also facing potential displacement by the Proposed Project. Located between residential homes, Apex Auto is a used auto parts business that occupies a large lot behind the residential houses and fronts the Bronx River along its southern border. Industrial uses at the intersection of Bronx River and Westchester Avenues are auto related uses, including a gas station and auto repair shops as well as a manufacturer of advertising signs. Much of the commercial uses such as eating establishments, barber shops, hair salons, delis, laundry facilities, and retail shopping are located along Westchester Avenue.

## **SOUNDVIEW-BRUCKNER**

The Soundview-Bruckner neighborhood is south of Westchester Avenue. This section of the study area has a high concentration of industrial uses along Bronx River Avenue and Close Avenue between Watson and Westchester Avenues. All of the businesses in this area are located in one to two-story warehouse buildings with a variety of tenants such as a Christmas decoration company, two fuel oil companies, a car dealership, and a dairy manufacturing business along Bronx River Avenue. Businesses along Close Avenue included a pulverizing warehouse, auto related uses, an egg depot, a fitness management business, a letter signs company, and a sand, abrasives, and sandblasting equipment dealer.

## **WEST FARMS**

The West Farms community is located north of the Cross Bronx Expressway and east of the Boston Road. The area of West Farms which is located within the boundaries of the study area is made up of residential, commercial, retail and industrial uses. Much of the industrial uses are transportation related such as the elevated No. 2 subway, the AMTRAK-Hellgate rail line, and vacant lots that were at one point used as subway overpasses. Industrial uses in this neighborhood are scattered along Boston Road North and Devoe Avenue and include businesses such as a medical warehouse facility, car wash, a gas station, a sheet metal

manufacturer, millwork facility, a construction firm, a furniture warehouse, and a public parking facility located alongside the Bronx River on East 179th Street.

A small shopping area with a supermarket, a pharmacy, a dry cleaners, and fast food establishments is located on a commercial block on Boston Road between East Tremont Avenue and East 179th Street.

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#### **Chapter D-4: Economic Conditions**

A commercial parking lot and Christy's Rubbish Removal, both located south of East Tremont Avenue and west of Devoe Avenue, will be displaced as part of the Proposed Project. These businesses lease the property from NYSDOT on a month-to-month basis, and will have to vacate the property prior to construction.

### **C. PROBABLE IMPACTS**

#### **NO ACTION**

In the future without the project, no changes to the Project Site are expected to occur by the build year 2006 and it is assumed that the two existing businesses on the Project Site will remain and continue operation in the future.

#### **PROPOSED PROJECT**

As mentioned above, the Proposed Project could result in the direct displacement of four existing entities and construction related impacts due to roadway reconstruction of the intersection of the Arthur Sheridan Expressway with East 177th Street and Devoe Avenue and the intersection of East Tremont and Devoe Avenue. In addition, two businesses may be affected by the proposed ramp and portal at the 172nd Street entrance to the Greenway.

#### ***DIRECT DISPLACEMENT***

The development of the Proposed Project will require the acquisition and permanent displacement of businesses currently operating on the Project Site. As previously discussed, there are three private businesses (Apex Auto, Christy's Rubbish Removal, and a commercial parking lot) and one City entity (NYC Marshall Impound Lot) with a total of 40 employees located on the Project Site that will be displaced. According to the New York State Department of Labor (NYSDOL), total employment in the Bronx was approximately 188,151 in the third quarter of 2003. Within zip code 10460, which includes the 0.4 km (0.25 mile) study area, total employment was approximately 6,348 during the same time period. The 40 employees within the Project Site represent less than 0.02 percent of total employment in the Bronx and within the 10460 zip code boundary.

Because there is a substantial amount of industrial space available within the Bronx, it is likely that these businesses could relocate within the borough, retaining all the jobs within the City. According to IGDNYC, Inc., a commercial real estate brokerage company, there is approximately 765,000 square feet of vacant industrial space available for lease within the Bronx as of May 2004. Of the 765,000 square feet, approximately 456,000 square feet consists of industrial buildings that are two stories or less. The asking rent for industrial space in the Bronx is about \$10 per square foot.

In addition to the availability of alternate industrial sites within the Bronx, the two businesses face direct displacement through the New York State Eminent Domain Procedure, which entitles them to receive a relocation package from NYSDOT which includes financial coverage for certain moving costs and re-establishment expenses, and use of brokerage services to find alternative locations. A Draft Conceptual Stage Relocation Plan was prepared by NYSDOT in April 2002, and is included in Appendix H. NYSDOT R-11 staff have located suitable relocation areas for the two businesses to be acquired. NYSDOT will continue to work with Apex Auto and NYC Marshall Lot (PDJ Simone), Community Boards #3, #6, and #9, and commercial real estate brokerage firms to select appropriate relocation properties

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### **Bronx River Greenway**

properties for these businesses. As a result, there would be no significant displacement impact.

The two lessees of NYSDOT property in the northern portion of the Project Site—the commercial parking lot and Christy's Rubbish Removal—will have to vacate the property prior to construction. As described above, these businesses lease the property from NYSDOT on a month-to-month basis. Both businesses are using NYSDOT Right-of-Way without NYSDOT's permission. For that reason, Christy's Rubbish Removal and the commercial parking lot will be required to vacate with no relocation assistance provided by NYSDOT. Therefore, the Proposed Project does not represent a significant displacement impact.

### ***CONSTRUCTION***

The construction work for the Bronx River Greenway consists of roadway reconstruction and sidewalk improvement which will occur on the northern part of the Proposed Project. The construction work will be completed in seven phases. Each phase would take approximately two months for a total of 14 months. Sidewalk reconstruction would temporarily affect access to businesses within the project limits on Devoe Avenue (second phase), East 177th Street (sixth phase), East Tremont Avenue (seventh phase). Sidewalk construction will temporarily inconvenience businesses for two months per phase, and access to all businesses will be maintained during construction activities.

Reconstruction of the roadway and construction of new curbs and sidewalks in front of the McDonald's and car wash, both fronting on East Tremont Avenue, will require temporary easements. However, access to these businesses will be provided throughout the construction period. Although sidewalk replacement along Devoe Avenue, East Tremont Avenue and East 177th Street will require temporary easements, Therefore, because businesses will always have access and the construction work is temporary, the Proposed Project will not have significant construction impacts.

Two businesses (Bronx River Tire and Wheel, Inc. and Villa Ramos Grocery) may be temporarily affected by the proposed portal and ramp at the 172nd Street entrance to the Greenway. Although access to these businesses will be maintained during construction, the number of parking places for use by customers of Bronx Tire and Wheel, Inc. will be reduced both during construction and permanently. The presence of construction equipment and activities may result in some reduction or an increase in patrons of Villa Ramos Grocery during construction. However, these impacts are temporary, and are therefore not expected to be significant.

Permanent Easements are required for installation and future maintenance of retaining walls in backyards of residential properties along Bronx River Avenue approximately between Colgate Avenue and East 172nd Street. However, during final design, special studies will be conducted to minimize and/or avoid impacts to the residential properties. Anticipated demolition of sheds or garages on the properties would be reimbursed to the property owner at fair market value as part of the property acquisition process.

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**Chapter D-5:**

**A. INTRODUCTION**

On February 11, 1994, President Clinton issued Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." This Executive Order is designed to ensure that each federal agency "shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

In April 1997, the US Department of Transportation (USDOT) issued the USDOT Order on Environmental Justice to Address Environmental Justice in Minority Populations and Low Income Populations (DOT Order 5610.2) to summarize and expand upon the requirements of Executive Order 12898. This chapter analyzes the Proposed Project's potential impacts in terms of their effects on minority and low-income populations, to determine whether it has any disproportionately high and adverse impacts on those populations.

**B. METHODOLOGY**

This analysis was prepared following the methodology set forth in the U.S. Department of Transportation's Final Order on Environmental Justice, April 1997. This involves (1) identifying potential adverse environmental impacts and the area to be affected (i.e., establishing a study area); (2) determining whether potential adverse environmental impacts are likely to affect a potential environmental justice area (i.e., whether low-income and/or minority populations are present in the study area); and (3) identifying whether potential adverse environmental impacts would disproportionately affect low-income and minority populations.

**ESTABLISH STUDY AREA**

The Proposed Project aims to provide a path for cyclists and pedestrians along the Bronx River from Westchester Avenue and East Tremont Avenue in the Bronx. The potential significant adverse environmental impacts that could result from the Proposed Project are associated with physical impacts on residents during the construction period. The study area for the environmental justice analysis was defined to include all locations where significant construction impacts can potentially occur—the area within a 0.4 km (0.25-mile) radius mile of the project site.

**IDENTIFY POPULATION OF CONCERN**

The next step in the analysis is to determine whether low-income or minority populations are present in the study area. Following USDOT's methodology, to identify minority and low income populations within the study area, demographic information was obtained from the U.S. Census Bureau for the year 2000. The U.S. Census Bureau collects information using various geographic units such as census tracts, block groups, and blocks. For the purposes of this analysis, demographic data such as population, race, median household income, and poverty status were compiled at the block group level within the environmental justice study area. All block groups that fall at least 50 percent within the study area were included in the analysis. These include Census Tract 52, Block Group 1; Census Tract 54, Block Groups 2 and 3; Census Tract 56, Block Groups 1 and 2; Census Tract 60, Block Group 1; Census Tract 62, Block Group 1; Census tract 121.01, Block Groups 1, 2, and 4; Census Tract 121.02, Block Group 1; Census Tract 123,

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Block Groups 1 and 2; Census Tract 157, Block Groups 1-4; Census Tract 161, Block Groups 1 and 2; Census Tract 220, Block Group 1; Census Tract 359, Block Group 1; and Census Tract 361, Block Groups 2, 4, and 5. In addition, data was compiled for Brooklyn as a whole and for New York City, to allow for a comparison of study area characteristics to a larger reference area.

**IDENTIFICATION OF MINORITY COMMUNITIES**

USDOT's policy defines minorities to include Blacks, Hispanics, Asian Americans, American Indian and Alaskan natives. In identifying minority residents within the study area, data from the U.S. Census Bureau was used to determine the population characteristics for the study area. The following information was collected for each block group:

- Data on racial and ethnic characteristics: The population in each block group within the study area was characterized using the following racial categories provided in the 2000 Census: White, Black, Asian, and "Other." In addition to racial characteristics, the 2000 Census also includes information on Hispanic origin, which is considered to be an ethnic rather than racial characteristic. People of this ethnic category can be any race.
- Total percentage of minority population: Because Hispanic residents may be of any race, people who characterized themselves as White, Black, Asian, and Other in the 2000 Census may be non-Hispanic or Hispanic. To determine the total number of minority residents in each block group, the number of Non-Hispanic, Black, Asian, Other, and Hispanics were tallied.

According to the guidance, a study area may be concluded to have a minority population when the percentage of minorities in a study area is "meaningfully greater" than the minority percentage of the general population or when the percentage of minorities exceeds 50 percent.

**IDENTIFICATION OF LOW-INCOME COMMUNITIES**

Data were compiled on the percentage of persons in each block group in the study area living below the poverty threshold (\$17,029 for a family of four, based on 2000 Census data). As another measure of low-income status, the median household income was also gathered for block groups, and an estimate was made of the median income of the study area. A low-income community is defined as any area where the low-income population (i.e., percent living below the poverty threshold) is equal to or greater than New York City's poverty level of 20.8 percent of the total.

**C. IDENTIFICATION OF AFFECTED POPULATION WITHIN THE STUDY AREA**

Using the methodology described above, the study area comprises four environmental justice neighborhoods, including Bronx Park South, Bronx River, Crotona Park East, and West Farms (Figure D-5-1). The characteristics of the entire study area as well as each of the four neighborhoods are summarized in Table D-5-1 and described below.

According to the 2000 Census, the one quarter mile study area had approximately 27,000 residents of which 40 percent are Other, 35 percent are Black, 24 percent are White and less than 2 percent are Asian residents. Compared to Bronx County, the study area has less White residents but relatively the same percentages of Black, Asian and Other residents. In contrast, New York City has 45 percent White, 27 percent Black, 19 percent Other and less than 10 percent Asian. Hispanic residents within the study area make up 65 percent of the total population while Bronx County had 48 percent and New York City had 27 percent. With a very high proportion of non-white residents, minorities make up 99 percent of the total population of the study area compared to 86 percent in the Bronx, and 65 percent in New York City.

### **BRONX PARK SOUTH**

Bronx Park South had about 5,000 residents in 2000. Approximately 44 percent of the total population are made up of people who defined themselves as Other followed by 32 percent Black and 23 percent White. More than half (69 percent) of the population in Bronx Park South are Hispanic and almost 100 percent of the population are minorities.

The median household income in Bronx Park South is approximately \$17,182 per year. Compared to other neighborhoods within the study area, residents of Bronx Park South had the lowest median household income per year. However, within Bronx Park South, Census Tract 359, Block Group 1 has a higher median household income (\$36,000) than the overall study area (\$19,000 per year) and Bronx County (\$28,000 per year), but less than New York City (\$38,000 per year). In addition to having a lower median household income, 45 percent of the population in Bronx Park South are below the poverty level.

### **BRONX RIVER**

The most populated of the neighborhoods, Bronx River had roughly 11,000 people in 2000 made up of Black (37 percent), Other (35 percent), White (25 percent) and Asian (2.3 percent). Although Hispanics are the majority of the total population with 59 percent, Bronx River has the lowest representation of Hispanics compared to the other neighborhoods. Approximately 99 percent of the total population in the Bronx River neighborhood are minorities.

Residents of Bronx River have the second lowest median household income, in the study area (\$17,262 per year). Census Tract 56, Block Group 2 has the lowest median household income (\$10,000 per year) compared to any other census tract in the study area, and is lower than Bronx County (\$28,000 per year) and New York City (\$38,000 per year). Approximately 39 percent of the total population was living in poverty in 2000, which is similar to the overall study area (40 percent) but less than Bronx County (31 percent) and New York City (21 percent).

### **CROTONA PARK SOUTH**

Crotona Park South had about 8,000 residents in 2000. The racial make-up of the neighborhood reflects that of the overall study area with Other making up the majority (40 percent) followed by Black (39 percent), White (21 percent) and Asian making up less than 1 percent. Similar to the other neighborhoods, Hispanics are the majority with 67 percent of the total population and minority residents comprising 99 percent of the total population.

The median household income in Crotona Park South ranged from a low of \$14,000 per year (Census Tract 121.02, Block Group 4) to a high of \$34,000 per year (Census Tract 121.01, Block Group 1). The median household income (\$21,000 per year) was higher than the overall study area (\$19,000 per year), but less than Bronx County (\$28,000 per year) and New York City (\$38,000 per year). Approximately 39 percent of the population is living below the poverty level, which is similar to the overall study area (40 percent) but higher than Bronx County (31 percent) and New York City (21 percent). A closer look at the block group level reveals that there are three block groups where more than 50 percent of the population is living below the poverty level.



**Bronx River Greenway**

**TABLE D-5-1**  
**ETHNICITY AND INCOME CHARACTERISTICS OF THE STUDY AREA**

Area	Population	Race and Ethnicity (Percent)						Economic Profile	
		White	African-American	Asian	Other	Hispanic*	Total Minority	1999 Median Household Income**	Percent Below Poverty Level***
<b>Bronx Park South</b>									
CT 359, BG 1	728	22.9	17.2	1.9	58.0	79.7	99.7	\$35,822	22.0
CT 361, BG 2	1,366	18.3	39.2	0.0	42.5	64.1	99.5	\$13,688	59.9
CT 361, BG 4	208	26.0	28.4	4.8	40.9	56.7	99.5	\$16,875	58.5
CT 361, BG 5	2,821	24.7	33.3	0.7	41.3	69.0	99.7	\$14,213	43.0
<b>Total</b>	<b>5,123</b>	<b>22.8</b>	<b>32.4</b>	<b>0.9</b>	<b>44.0</b>	<b>68.7</b>	<b>99.6</b>	<b>\$17,182</b>	<b>44.8</b>
<b>Bronx River</b>									
CT 52, BG 1	1,754	31.8	29.5	1.5	37.2	65.8	98.9	\$13,144	44.8
CT 54, BG 2	2,561	28.4	33.3	2.9	35.5	60.4	98.8	\$22,045	38.9
CT 54, BG 3	824	31.7	26.7	11.5	30.1	58.4	97.7	\$21,652	32.9
CT 56, BG 1	1,808	24.1	29.0	2.7	44.2	63.0	98.0	\$22,718	32.9
CT 56, BG 2	902	26.9	31.7	1.1	40.2	65.9	97.3	\$10,370	44.3
CT 62, BG 1	3,462	18.4	51.6	0.1	29.8	52.1	98.9	\$15,024	39.2
<b>Total</b>	<b>11,311</b>	<b>25.3</b>	<b>37.0</b>	<b>2.3</b>	<b>35.4</b>	<b>59.4</b>	<b>98.5</b>	<b>\$17,262</b>	<b>38.8</b>
<b>Crotona Park South</b>									
CT 121.01, BG 1	169	24.9	56.8	0.0	18.3	45.6	98.8	\$34,000	5.7
CT 121.01, BG 2	1,060	27.2	28.9	0.7	43.3	77.5	99.0	\$17,417	59.0
CT 121.01, BG 4	598	26.9	34.1	1.8	37.1	67.2	99.2	\$21,042	51.8
CT 121.02, BG 1	468	16.7	46.8	0.0	36.5	65.6	100.0	\$13,889	53.0
CT 123, BG 1	1,356	23.4	22.6	0.0	54.1	82.4	99.3	\$20,903	31.4
CT 123, BG 2	606	24.6	25.6	0.2	49.7	77.4	98.5	\$23,185	45.2
CT 157, BG 1	138	23.2	40.6	0.0	36.2	65.2	100.0	\$18,571	38.5
CT 157, BG 2	212	16.5	59.4	0.5	23.6	48.6	100.0	\$18,462	34.6
CT 157, BG 3	1,087	17.9	35.5	0.9	45.6	65.2	98.9	\$26,875	25.5
CT 157, BG 4	1,065	18.1	44.9	0.8	36.2	59.1	98.4	\$19,922	41.8
CT 161, BG 1	255	23.1	58.8	0.0	18.0	47.1	100.0	\$29,632	21.9
CT 161, BG 2	1,037	10.6	60.4	0.4	28.6	49.4	99.3	\$19,946	31.5
<b>Total</b>	<b>8,051</b>	<b>20.6</b>	<b>38.6</b>	<b>0.5</b>	<b>40.3</b>	<b>66.6</b>	<b>99.1</b>	<b>\$21,353</b>	<b>38.9</b>
<b>West Farms</b>									
CT 60, BG 1	1,081	32.3	16.2	0.5	51.1	81.4	97.0	\$30,242	17.1
CT 220, BG 1	1,445	26.3	23.1	3.3	47.3	75.4	98.3	\$11,190	53.3
<b>Total</b>	<b>2,526</b>	<b>28.9</b>	<b>20.2</b>	<b>2.1</b>	<b>48.9</b>	<b>78.0</b>	<b>97.7</b>	<b>\$19,237</b>	<b>37.5</b>
<b>¼ Mile Study Area</b>	<b>27,011</b>	<b>23.8</b>	<b>35.0</b>	<b>1.5</b>	<b>39.7</b>	<b>65.0</b>	<b>98.8</b>	<b>\$18,591</b>	<b>39.9</b>
<b>Bronx County</b>	<b>1,332,650</b>	<b>29.9</b>	<b>35.6</b>	<b>3.0</b>	<b>31.5</b>	<b>48.4</b>	<b>85.5</b>	<b>\$27,611</b>	<b>30.7</b>
<b>New York City</b>	<b>8,008,278</b>	<b>44.7</b>	<b>26.6</b>	<b>9.8</b>	<b>18.9</b>	<b>27.0</b>	<b>65.0</b>	<b>\$38,293</b>	<b>20.8</b>

**Notes:** \* An ethnic group that can include members of any racial categories.

\*\* The median household income reported for the study area is the weighted average of those reported for the block groups.

\*\*\* Percent of persons with incomes below the established poverty level; poverty level varies depending on household size.

Populations for the 0.4 km (0.25-mile) radius at the project site was estimated by tallying all block groups that fall 50 percent or more within the study area and adjusting where appropriate to account for land use patterns.

**Sources:** U.S. Department of Commerce, Bureau of the Census, 2000 Census, Summary File1 & 3.

### **WEST FARMS**

The West Farms community is the least populated of the neighborhoods, with only 2,500 residents. It has the highest concentration of Other (49 percent) and White (29 percent) populations and the lowest number of Blacks (20 percent) compared to other neighborhoods in the study area. The Hispanic population is 78 percent of the study area's population—more than the overall study area (65 percent), Bronx County (48 percent) and New York City (27 percent). Just like the other study areas, West Farms has a minority population that comprises 98 percent of the total population.

The median household income in West Farms (\$19,000 per year) is similar to the overall study area but much less than Bronx County (\$28,000 per year) and New York City (\$38,000 per year). Almost 38 percent of the total population in West Farms lives below the poverty level, which is the lowest in comparison to the other neighborhoods in the study area, but higher than Bronx County (31 percent) and New York City (21 percent).

In summary, minority representation in the study area exceeds the 50 percent minority threshold and the poverty level is more than the 21 percent, the entire study area is a low-income and minority community.

### **D. SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS**

No significant adverse impacts are anticipated to result from construction and operation of the Greenway project. Some localized impacts would be experienced during the construction period, including noise, traffic congestion, and fugitive dust. However, these impacts would be temporary, and the Proposed Project would result in significant positive effects to the community, as described below.

The principal impact of the Bronx River Greenway Project on ambient noise levels will occur during the construction period. Greenway construction will cause changes in noise levels from the operation of construction equipment throughout the construction period. This is due mainly to the use of heavy construction equipment.

Construction noise is regulated by the Environmental Protection Agency (EPA) noise emission standards for construction equipment. These Federal requirements mandate that 1) certain classifications of construction equipment and motor vehicles meet specified noise emissions standards; and 2) construction material be handled and transported in such a manner as not to create unnecessary noise. The New York City noise code further limits construction activities to weekdays between 7 AM and 6 PM. These regulations will be carefully followed to the greatest extent possible. However, because it will be necessary to obtain a lane closure permit from the New York City Department of Transportation (NYCDOT) Office of Construction Mitigation and Coordination (OCMC) (which often only grants such closures during nighttime hours) some construction activity may occur outside the regular 7AM to 6PM hours. In addition, appropriate low-noise emission level equipment will be used to the extent feasible, operational procedures implemented, and such provisions will be included in contract documents.

The most substantial noise source associated with the construction equipment will be pavement breaking operations, and the use of pile drivers. There are no effective noise mitigation measures that could be employed to reduce noise levels produced by pavement breaking operations or pile driving. However, this is a temporary construction activity and would therefore not have a significant adverse impact.

Construction easements would be required for installation of retaining walls, which may cause temporary impacts to backyards and garages of residential properties along Bronx River Avenue. However, during final design, special studies will be conducted to minimize and/or avoid impacts to the residential properties. Any damage to the properties, including garage structures, would be restored after construction of the Greenway is completed.

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**E. POSITIVE BENEFITS TO COMMUNITY FROM THE PROPOSED PROJECT****OPEN SPACE**

As discussed in Chapter D-2 “Land Use, Community Facilities, Zoning and Public Policy”, the Proposed Project would provide residents, workers and visitors improved waterfront access to the Bronx River and transportation and recreational improvements. As it currently exists, the project site is inaccessible parkland with no amenities. Therefore, the Bronx River Greenway is expected to have a beneficial effect on the community by providing a multi-use path for walking, running, bicycling, and skating, and provide a public recreational facility for use by the surrounding neighborhood. The Greenway will offer public access to an area of the Bronx River that has long been separated physically and visually from the public. The project will also improve access to Starlight Park by providing two multi-use path bridges that link the multi-use path with Starlight Park. In addition, Starlight Park will offer recreation amenities, including a basketball court, a multi-use field that can be permitted as either a soccer field or two baseball diamonds, and a variety of play equipment.

**TRAFFIC**

Intersection improvements to eliminate the intersection of East Tremont Avenue and East 177th Street and consolidate traffic to East Tremont Avenue and Devoe Avenue will simplify the flow of traffic and reduce congestion.

**F. CONCLUSIONS ON DISPROPORTIONATE PROJECT IMPACTS**

The study area includes a minority and low-income community. As detailed above, the Proposed Project would create substantial noise impacts during construction. However because the impacts are temporary, it is not expected to have significant adverse impacts. Therefore, the impacts related to noise would not adversely affect the population of the study area or any other area, and no disproportionate impact would occur.

Furthermore, as described above, the Proposed Project would bring notable benefits to the study area’s population. These include creation of open space and the reduction of traffic congestion north of the Project Site. Therefore, the Proposed Project on balance would not result in disproportionate significant adverse impacts to minority or low-income populations, and would be consistent with NYSDOT’s Environmental Justice policy with respect to project impacts.

**Chapter D-6:****Noise****A. INTRODUCTION**

This chapter examines the potential effects of the Proposed Project's ambient noise levels at sensitive locations in the study area during construction and operation of the Bronx River Greenway.

**B. EXISTING CONDITIONS**

Currently, noise in the project area is caused primarily by trains traveling on the AMTRAK Northeast Corridor Line, the elevated Nos. 2, 5, and 6 subway lines, and vehicles traveling on the roadways in the area. Interstate highways that cross or are directly adjacent to the Project Site include I-895 (Arthur Sheridan Expressway) and I-95 (Cross Bronx Expressway). Other roads that pass through or are adjacent to the Project Site include: Bronx River Avenue, Westchester Avenue, East 174th Street, East 177th Street, Wyatt Street, and East Tremont Avenue. The intersection between the northern terminus of the Cross Bronx Expressway and East Tremont Avenue experiences traffic congestion, further contributing to noise levels in the area. The nearest residence is within 100 feet of the proposed East 172nd Street bridge and within 100 feet of the proposed intersection improvements.

**C. PROBABLE IMPACTS****NO ACTION**

It is assumed there will be minimal changes to the Project Site without the Proposed Project. Once the remediation of Starlight Park is completed, the remaining portions of the park can be developed.

**PROPOSED PROJECT****OPERATION**

The NYSDOT *Environmental Procedures Manual* requires a Type I noise analysis for any proposed Federal or Federal Local Aid highway project for the construction of a highway on a new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment or increases the number of through lanes. The Bronx Greenway Project does not include any of the work defined in the criteria for a noise analysis. Therefore no noise analysis is required for this project.

When completed, the Bronx River Greenway will not generate additional traffic volumes of motorized vehicles that would result in substantially higher noise levels. Intersection improvements to eliminate the intersection of East Tremont Avenue and East 177th Street and consolidate traffic to East Tremont Avenue and Devoe Avenue will simplify the flow of traffic and reduce congestion. It is anticipated that the Greenway will be used as a non-motorized transportation corridor with the potential to reduce local trips by vehicles and traffic noise. In addition, the project would not relocate the roadway closer to sensitive noise receptors, such as residences or schools. Therefore, operation of the Proposed Project will not be expected to significantly increase noise levels.



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*CONSTRUCTION*

The principal impact of the Bronx River Greenway on ambient noise levels will occur during the construction period. Greenway construction will cause changes in noise levels from the operation of construction equipment throughout the construction period. This is due mainly to the use of heavy construction equipment.

Construction noise is regulated by the Environmental Protection Agency (EPA) noise emission standards for construction equipment. These Federal requirements mandate that 1) certain classifications of construction equipment and motor vehicles meet specified noise emissions standards; and 2) construction material be handled and transported in such a manner as not to create unnecessary noise. The New York City noise code further limits construction activities to weekdays between 7 AM and 6 PM. These regulations will be carefully followed to the greatest extent possible. However, because it will be necessary to obtain a lane closure permit from the New York City Department of Transportation (NYCDOT) Office of Construction Mitigation and Coordination (OCMC) (which often only grants such closures during nighttime hours) some construction activity may occur outside the regular 7AM to 6PM hours. In addition, appropriate low-noise emission level equipment will be used to the extent feasible, operational procedures implemented, and such provisions will be included in contract documents.

Increased noise levels caused by construction activities can be expected to be most substantial during the early phases of reconstruction. The level of impact of these noise sources depends on the noise characteristics of the equipment and activities involved, the construction schedule, and the location of potentially sensitive noise receptors. Noise and vibration levels at a given location are dependent on the kind and number of pieces of construction equipment being operated, as well as the distance from the construction site. Typical noise levels of construction equipment expected to be employed during the construction process are presented in Table D-6-1. Noise levels caused by construction activities would vary widely, depending on the phase of construction—demolition, excavations, erection of structures, etc.—and the specific task being undertaken.

The most substantial noise source associated with the construction equipment will be pavement breaking operations, and the use of pile drivers. Although there are no effective noise mitigation measures that could be employed to reduce noise levels produced by pavement breaking operations or pile driving the use of low noise emission equipment would be specified whenever possible and feasible instead of higher emission equipment (e.g., vibratory pile drivers instead of impact pile drivers).

**TABLE D-6-1**

**TYPICAL NOISE EMISSION LEVELS FOR CONSTRUCTION EQUIPMENT**

Equipment	Noise level at 50 feet (dBA)	Equipment	Noise level at 50 feet (dBA)
Air compressor	81	Dump truck	88
Asphalt spreader (paver)	89	Front end loader	84
Asphalt truck	88	Gas-driven vibrio-compactor	76
Backhoe	85	Hoist	76
Bulldozer	87	Jack hammer (paving breaker)	88
Compactor	80	Line drill	98
Concrete plant	83 <sup>1</sup>	Motor crane	93
Concrete spreader	89	Pile driver/extractor	101
Concrete mixer	85	Pump	76
Concrete vibrator	76	Roller	80
Crane (derrick)	76	Shovel	82
Delivery truck	88	Truck	88
Diamond saw	90 <sup>2</sup>	Vibratory pile driver/extractor	89 <sup>3</sup>
Dredge	88		

**Notes:**

1. Wood, E.W. and A.R. Thompson, Sound Level Survey, Concrete Batch Plant; Limerick Generating Station, Bolt Beranek and Newman Inc., Report 2825, Cambridge, MA, May 1974.
2. New York State Department of Environmental Conservation, *Construction Noise Survey, Report No. NC-P2*, Albany, NY, April 1974.
3. F.B. Foster Company, *Foster Vibro Driver/Extractors, Electric Series Brochure*, W-925-10-75-5M.

**Source:**

Patterson, W.N., R.A. Ely, and S.M. Swanson, *Regulation of Construction Activity Noise*, Bolt Beranek and Newman, Inc., Report 2887, for the Environmental Protection Agency, Washington, D.C., November 1974, except for notated items.

## **A. INTRODUCTION**

This section assesses in detail the potential air quality impacts from the intersection modifications/improvements at the northern portion of the site. The Proposed Project involves intersection modifications at East Tremont Avenue/Devoe Avenue/East 177th Street. The existing intersection is separated by an island into a northbound only roadway (Devoe Avenue) and a two-way roadway (East 177th Street). To improve intersection capacity and level of service (LOS), the project will consolidate the two intersection points condensing East 177th Street and Devoe Avenue into a multi-lane section with left turn lanes and a center-planter pedestrian refuge island parallel to Devoe Avenue's alignment. The I-895 (Arthur Sheridan Expressway)/East 177th Street intersection will also be improved as a result of the Devoe Avenue/East 177th Street/East Tremont Avenue reconfiguration.

Due to the re-alignment of the roadway and the addition of turning lanes, there would be an increase in the number of queued lanes at this intersection. Therefore, based on the procedures outlined in NYSDOT's Environmental Procedures Manual (EPM), a carbon monoxide (CO) microscale analysis has been performed to determine if the Proposed Project would cause any potential air quality impacts.

## **B. REGULATORY SETTING**

The Clean Air Act Amendments of 1990 (CAAA90) define nonattainment areas as geographic regions that have been designated as not meeting one or more of the Environmental Protection Agency's (EPA's) National Ambient Air Quality Standards (NAAQS). The Proposed Project is located in New York City. EPA has re-designated New York City as in attainment for CO. The CAAA90 requires that a maintenance plan ensure continued compliance with the CO NAAQS for former non-attainment Areas. New York City is also committed to implementing sitespecific control measures throughout the city to reduce CO levels, should unanticipated localized growth result in elevated CO levels during the maintenance period.

Manhattan has been designated as a moderate NAA for PM<sub>10</sub>. On December 17, 2004, EPA took final action designating the five boroughs of New York City as well as Nassau, Suffolk, Rockland, Westchester and Orange counties as PM<sub>2.5</sub> non-attainment areas under the CAA. State and local governments are required, by early 2008, to develop implementation plans designed to meet the standards.

Nassau, Rockland, Suffolk, Westchester and the five counties of New York City had been designated as severe non-attainment for ozone 1-hour standard. In November 1998, New York State submitted its Phase II Alternative Attainment Demonstration for Ozone, which was finalized and approved by EPA effective March 6, 2002, addressing attainment of the one-hour ozone NAAQS by 2007. New York State has recently submitted revisions to the SIP; these SIP revisions included additional emission reductions that EPA requested to demonstrate attainment of the standard, and an update of the SIP estimates using two new EPA models—the mobile source emissions model MOBILE6, and the non-road emissions model NONROAD—which have been updated to reflect current knowledge of engine emissions, and the latest mobile and non-road engine emissions regulations. On April 15, 2004, EPA designated these same counties as moderate non-attainment for the new 8-hour ozone standard which became effective as of June 15, 2004 (the entire Orange county was moved to the Poughkeepsie moderate nonattainment area for 8-hour ozone). EPA revoked the 1-hour standard on June 15, 2005; however, the specific control measures for the 1-hour standard included in the SIP are required to stay in place until the 8-hour standard is attained. The discretionary emissions reductions in the SIP would also remain but could be revised or dropped based on modeling. A new SIP for ozone will be adopted by the state no later than June 15, 2007, with a target attainment deadline of June 15, 2010.

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A State Implementation Plan (SIP) is a state's plan on how it will meet the NAAQS under the deadlines established by the CAAA90. While the specific details of the SIP are up to the states to determine, there is usually a component that will reduce emissions from mobile sources. The conformity requirements of the CAAA90 and the regulations promulgated thereunder also prohibit the federal government from engaging in, supporting, financing, licensing, permitting, or approving any activity that does not conform to a SIP's purpose. EPA's final transportation conformity rule, dated August 15, 1997, requires metropolitan planning organizations (MPOs), the Federal Highway Administration (FHWA), and Federal Transit Administration (FTA) to make conformity determinations on metropolitan long-range transportation plans (LRTPs), transportation improvement programs (TIPs), and projects before they are adopted, approved, or accepted. Conformity determinations for FTA projects must be made according to the requirements of 40 CFR Part 93.

The LRTP is the official intermodal metropolitan transportation plan for an area that is developed through the metropolitan planning process for the urbanized area, and generally has a 20-year planning horizon. The TIP is a staged, multiyear, intermodal program of transportation projects developed by an MPO, which is consistent with the LRTP. TIPs are generally for three to five years. A project must come from a conforming plan and TIP; there must be a currently conforming plan and TIP in place at the time of NEPA process completion; and, the projectlevel conformity requirements must also be satisfied. In addition, highway projects that are funded or approved by the FHWA must be found to conform. Conformity to a SIP is defined as conformity to a plan's purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of the standards.

Accordingly, an area's MPO, which is the entity responsible for transportation planning, together with the state, are responsible for demonstrating conformity with respect to the SIP on metropolitan LRTPs and TIPs. The EPA must then concur with such conformity determinations. The U.S. Department of Transportation has final approval of conforming plans and TIPs.

The New York Metropolitan Transportation Council (NYMTC) is the MPO for this region. NYMTC approved the conformity determination for the LRTP, known as the Regional Transportation Plan entitled "Mobility for the Millennium," on September 23, 1999. FHWA and FTA then approved the LRTP conformity determination on September 30, 1999, and EPA concurred with the findings. The 2004-2006 TIP was approved by NYMTC on September 30, 2003. A proposed regional transportation plan (RTP), Transportation Improvement Program (TIP) and emission analysis were submitted to the public for review and comment (pursuant to 40 CFR Section 93.105) on March 29, 2005.

At this time, as a result of the World Trade Center disaster on September 11, 2001, and the loss of NYMTC's files containing regional transportation and air quality data, combined with the damage incurred on the downtown mass transit system, the conformity requirements for the New York metropolitan area have been temporarily waived until September 30, 2005, pursuant to Public Law 107-230; Stat. 1469, enacted October 1, 2002. (This means that the MPO has until September 30, 2005, to produce a conforming TIP and Plan.) Interim interagency consultation procedures were developed, to be in effect during the waiver. These procedures were developed to assist New York State in the interim reporting to congressional committees, the EPA, and the U.S. Department of Transportation.

Design, right-of-way, and portions of the construction elements of the Bronx River Greenway Project were included in the approved TIP. Other portions of the Proposed Project, including advanced portions of the construction plan, were scheduled for review as part of the next TIP update. For purposes of transportation conformity, the Bronx River Greenway project is exempt from the regional emissions analysis requirements of 40 CFR Part 93.

## **C. CO MICROSCALE AIR QUALITY ANALYSIS**

A preliminary analysis for the proposed mid-block crossing at the middle site (Westchester Avenue/Edgewater Road) was performed using the Highway Capacity Software (HCS) 2000 to determine the operating conditions with the new traffic signal in place. Based on this analysis, the east- and westbound approaches of Westchester Avenue would operate at an acceptable level-of-service (LOS) B with delays of under 20 seconds, with adequate time available for the bicyclists and pedestrians to cross Westchester Avenue. Therefore, based on the preliminary assessment of traffic conditions at the new signalized crossing, along with the fact that no new vehicular trips would be generated by the proposed improvements, a detailed mobile source Air Quality analysis is not warranted at this location.

While the bike and pedestrian path will ultimately extend south to Soundview Park, the Proposed Project terminates at Westchester Avenue/Edgewater Road. Therefore, an analysis south of the Project Site has not been performed as part of this EA.

The CO microscale air quality analysis is based on the procedures outlined in the EPM. Since the project is situated in a maintenance area for CO, the analysis will be required for Estimated Time of Completion, ETC (2006) and a critical analysis year, which is that year of ETC+10 (2016) or ETC+20 (2026) that results in the highest emissions. Analysis was performed for a 2006 ETC, although the project schedule now has an ETC of 2009. It is not expected that the change in design year would produce significantly different results. A comparison between year 2006 and year 2009 traffic volumes and emission factors was conducted. As shown in Table D7-2, Year 2006 has the greater CO emission source strength than 2009.

### **CARBON MONOXIDE NAAQS**

The National Ambient Air Quality Standards (NAAQS) for CO are a one-hour average concentration of 35 ppm which cannot be exceeded more than once per year and an eight-hour average concentration of 9 ppm which cannot be exceeded more than once per year. The results of the air quality analysis were compared with these one-hour and eight-hour NAAQS.

### **EXISTING AIR QUALITY CONDITIONS**

Due to the improvement of vehicle emissions and other traffic control measures, CO concentrations have been reduced in recent years. NYSDEC air quality monitoring data indicate that the second highest one-hour and eight-hour average CO concentrations are 3.7 ppm and 2.1 ppm, respectively, in 2002 at the Bronx Botanical Garden monitoring site, which is the closest NYSDEC monitor to the Proposed Project.

### **MODELS USED IN THE AIR QUALITY ANALYSIS**

Vehicle emission factors are from the Carbon Monoxide Emission Factor Table EF1 (dated December, 2003) in Attachment 1.1-E of the EPM, which is calculated with MOBILE6 using the most up-to-date input parameters for the study area. These emission factors were used as input for the microscale Level I screening dispersion model CAL3QHC version 2 (abbreviated as CAL3QHC). The CAL3QHC model simulates worst-case carbon monoxide levels by employing conservative assumptions on wind speeds and directions, and is used as a screening tool to determine if there would be future predicted exceedances of the carbon monoxide one- and eight-hour NAAQS. In cases where there are predicted exceedances, the refined model, CAL3QHCR, may then be employed at the location with the predicted exceedance. The refinements included in CAL3QHCR include the capability to use actual meteorological data that has been collected at nearby airports (instead of worst case assumptions of wind speed and direction), and also the capability to account for lower traffic volumes during off-peak conditions in the one- and eight-hour average simulations.

**Bronx River Greenway****EMISSION FACTORS**

NYSDOT supplied project traffic volumes were employed with the corresponding CO emission factors in order to estimate the total emission source strengths. Vehicle classifications were supplied by NYSDOT, based on field surveys. The analysis was performed for ETC and the critical analysis year of ETC+10 or ETC+20, which is the year that is found to have the greatest total CO emission source strength.

Emission factors are from the Carbon Monoxide Emission Factor Table EF1 in the Attachment 1.1-E of the EPM. The table was generated using an ambient temperature of 43°F. Details of parameters can be found in the table. The emission factors were determined for each link at their respective speed. The average free flow speed used for all roadways was 15 mph, based on field survey data. Emission factors for urban arterial vehicle classes at 15 mph and idle conditions for the years ETC (2006), ETC+10 (2016) and ETC+20 (2026) were based on the speed, vehicle mix, and thermal state. These emission factors are shown in Table D-7-1.

These CO emission factors were used in the CAL3QHC modeling.

**TABLE D-7-1  
CO EMISSION FACTORS**

Speed	Year 2006	Year 2016	Year 2026
Urban Arterial			
15 mph <sup>1</sup>	8.91	4.90	4.02
Idle <sup>2</sup>	80.16	42.83	35.12
Notes:			
1	units are grams/vehicle-mile		
2	units are grams/vehicle-hour		

**CRITICAL ANALYSIS YEAR**

Emission factors for the critical year analysis are based on the free flow speed. Based on the traffic data provided, a speed of 15 mph was used for all links. Future year traffic volumes for years 2006 and 2016 were computed from year 2001 traffic volumes, using an annual growth rate of 0.5 percent. Using these vehicle speeds and the total traffic volumes at the intersection for the years 2006, 2016 and 2026, a corridor emission analysis was performed to determine the critical analysis year. Emission factors, traffic volumes, and total emission strength for the three years are provided below. Since the project is situated in a maintenance area for CO, the analysis was required for ETC (2006), and the critical analysis year, which is that year of ETC+10 (2016) or ETC+20 (2026) that results in the highest emissions. As shown in Table D-7-2, the critical analysis year for the air quality analysis was determined to be the year 2016. The emission factors in Table D-7-2 reflect the June 2004 update to EFi. Year 2009 emission factors and traffic volumes are included in this table for comparison purposes only.

**TABLE D-7-2  
CORRIDOR EMISSIONS ANALYSIS**

Year	Emission Factor (g/veh-mi)*	2-Way Design Hour Traffic Volume (vph)	Total Emission Strength (g/mi-hr)
East Tremont Avenue (urban arterial)			
2006	8.10	1,994	16,145
2009	5.82	2,024	11,781
2016	4.25	2,093	8,893
2026	3.67	2,193	8,051
Devoe Avenue (urban arterial)			
2006	8.10	1,040	8,426
2009	5.82	1,056	6,148
2016	4.25	1,092	4,641
2026	3.67	1,144	4,202
Totals			
2006	NA	3,034	24,571
2009	NA	3,080	17,929
2016	NA	3,186	13,533
2026	NA	3,337	12,253
<b>Note:</b> NA - Not Applicable *June 2004 update to Table EFL			

#### **CO BACKGROUND CONCENTRATIONS - ROLLBACK ANALYSIS**

Based on the recommendations in the EPM, a “rollback” analysis was performed to determine the future background CO levels for the analysis year 2016. Estimated 2006 future background CO levels listed in Table 9, Chapter 1.1 in the EPM for Region 11 are 3.3 and 2.3 parts per million (ppm) for the one- and eight-hour averages, respectively. Using 2006 and 2016 traffic volumes (calculated using an assumed growth factor of 0.5 percent from the base year 2001), the following formula was used to determine the CO background concentrations for the year 2016:

$$C_{2016} = C_{2006} * (0.2 + \frac{EF_{2016} * V_{2016}}{EF_{2006} * V_{2016}} * 0.8), \quad (1)$$

where  $C_{2006}$  and  $C_{2016}$  are the year 2006 and 2016 background concentrations (can be either eight-hour or one-hour background),  $EF_{2006}$  and  $EF_{2016}$  are the emission factors for 2006 and 2016. The emission factors for 2006 equal 8.91 g/veh-mi. The emission factors for 2016 equal 4.90 g/veh-mi.  $V_{2006}$  and  $V_{2016}$  represent the total PM peak hour vehicles for future conditions, and were estimated at 3,034 and 3,186 vph respectively. Based on these parameters, the background concentrations for year 2016 were calculated to be 2.2 and 1.5 ppm for the one-hour and eight-hour averages, respectively.

#### **DISPERSION MODELING**

The CAL3QHC model was employed in this study for the Level I microscale air quality analysis at the site.

**Bronx River Greenway**

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*PERSISTENCE FACTOR*

A persistence factor of 0.70 was used to convert one-hour average concentrations to eight-hour concentrations due to dispersion (without background) for the Level I screening model, CAL3QHC.

*WIND SPEED*

A 1 m/s wind speed was used in the CAL3QHC dispersion model.

*SURFACE ROUGHNESS HEIGHTS*

Based on the land uses near the analysis sites, a surface roughness height of 175 cm was used in the CAL3QHC analysis.

*ATMOSPHERIC STABILITY*

An urban atmospheric stability classification (D) was used in the CAL3QHC modeling.

*WIND DIRECTIONS*

The CAL3QHC model calculations were performed at 5° increments from 0° to 360° for all receptor locations in the 2006 No Build, 2006 Build, 2016 No Build, and 2016 Build analyses.

**RECEPTOR LOCATIONS**

Receptors are used in the model to determine the impact of roadway traffic within the project area (Figures D-7-1 and D-7-2). The receptors are placed at locations that are accessible to the public. Receptors were placed near the corners of the intersections, and along the roadways at intervals of 25 m from the corner receptors. Additional receptors were placed at property lines and buildings near the intersections including six receptors at the school at the corner of East Tremont Avenue and West Farms Road (P.S. 167). Receptors were placed in locations both common to the No Build and Build Alternatives and in locations unique to each alternative.

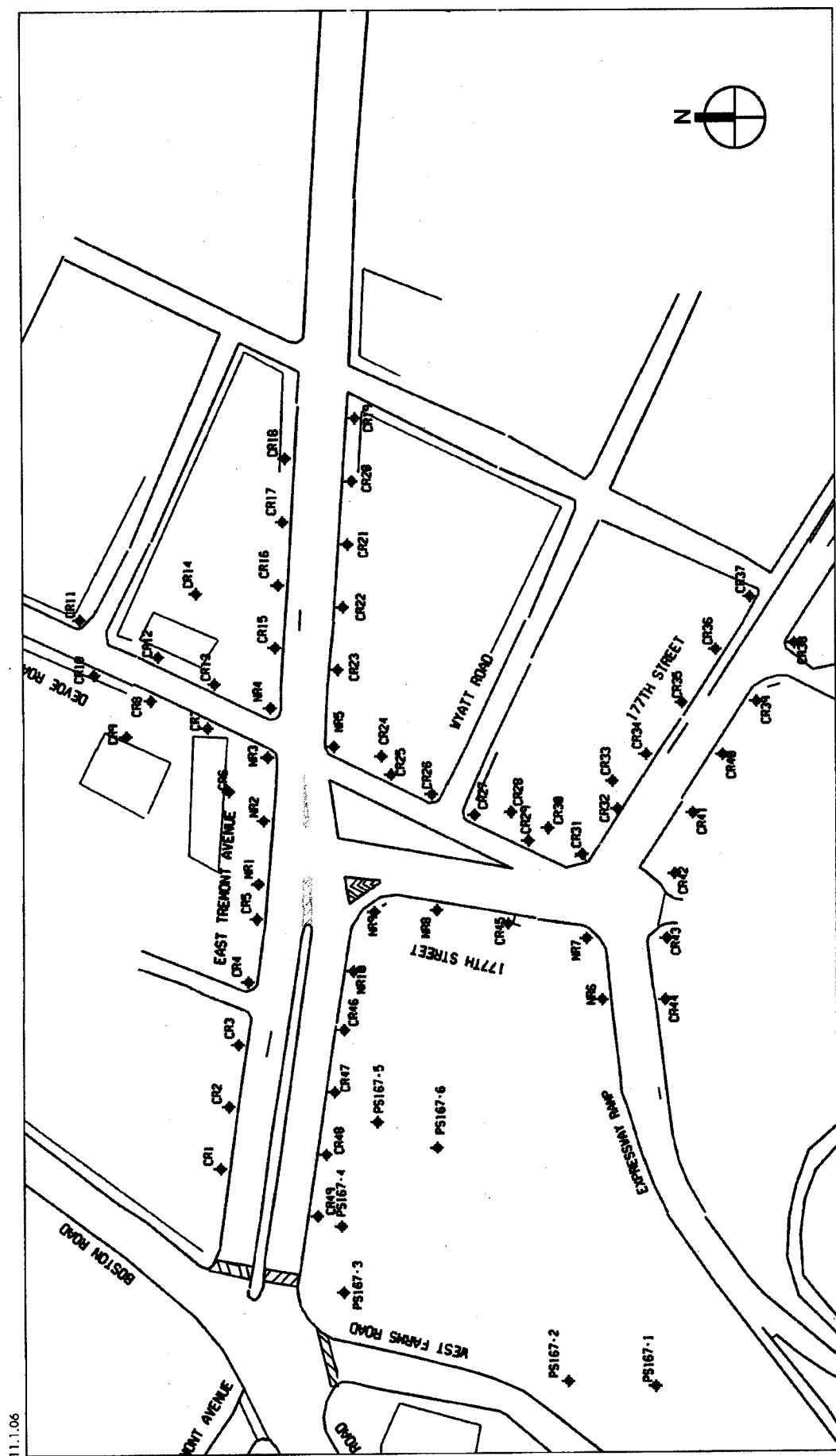
*PEAK HOUR TRAFFIC VOLUMES*

The PM peak hour traffic volumes for the 2006 and 2016 No Build and Build Alternatives were employed in the CAL3QHC analyses.

**MODEL RESULT ANALYSIS**

The CAL3QHC input and output files for the years 2006 and 2016 are presented in the attachment. The results from the model represent one-hour average concentrations due to the nearby modeled traffic only. To determine the total one-hour average concentration at each receptor, the one-hour background value was added to the dispersion modeling results. For the eight-hour average concentration at each receptor, the one-hour dispersion component from the model was multiplied by the persistence factor of 0.70, the result of which was then added to the corresponding eight-hour background value.

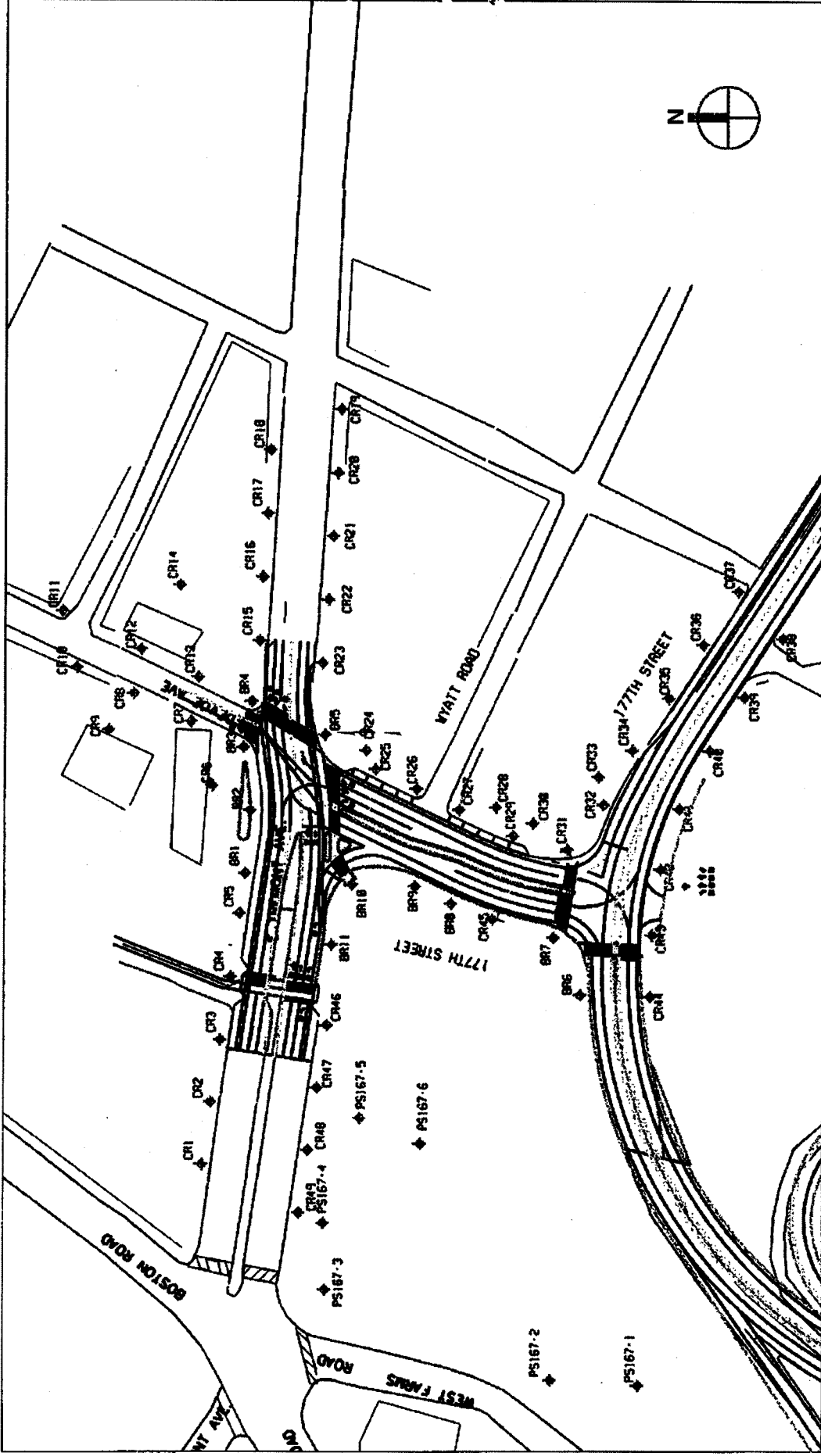




**Figure D-7-1  
Bronx River Greenway CO Analysis  
Build Receptors**

<b>NR</b>	<i>No Build Receptors</i>
<b>CR</b>	<i>Common Receptors (No Build and Build)</i>
<b>PS167</b>	<i>P.S. 167 School Receptors</i>

# BRONX RIVER GREENWAY



- BR Build Receptors
- CR Common Receptors (No Build and Build)
- PS167 P.S. 167 School Receptors

Figure D-7-2  
Bronx River Greenway CO Analysis  
Build Receptors

BRONX RIVER GREENWAY

***CAL3QHC (LEVEL I) MODELING RESULTS***

Table D-7-3 shows the maximum predicted one-hour and eight-hour average CO concentrations at all the receptor locations at the intersection of East Tremont Avenue/Devoe Avenue/177th Street, for the 2006 and 2016 No Build Alternative from the Level I (CAL3QHC) modeling. Under the 2006 No Build Alternative, the maximum one-hour and eight-hour concentrations are 7.1 ppm and 5.0 ppm, respectively, at receptor 29. Under the 2016 No Build Alternative, the maximum onehour and eight-hour concentrations are 4.2 ppm and 2.9 ppm, respectively, at receptor 29. Table D7-4 shows the maximum predicted one-hour and eight-hour average CO concentrations at all the receptor locations at the intersection of East Tremont Avenue/Devoe Avenue/177th Street, for the 2006 and 2016 Build Alternative from the Level I (CAL3QHC) modeling. Under the 2006 Build Alternative, the maximum one-hour and eight-hour concentrations are 6.1 ppm and 4.3 ppm, respectively, at receptor 31. Under the 2016 Build Alternative, the maximum one-hour and eighthour concentrations are 4.2 ppm and 2.9 ppm, respectively, at receptor 30.

***CONCLUSIONS OF DISPERSION MODELING RESULTS***

The maximum one-hour and eight-hour average concentrations that are comparable to the air quality standards for the year 2006 and 2016 No Build and Build Alternatives are in compliance with the one-hour CO NAAQS of 35 ppm and the eight-hour CO NAAQS of 9 ppm, and therefore, the Proposed Project would not result in any adverse air quality impacts. No further study is required.

**D. LEAD EMISSIONS**

Emissions of lead from motor vehicles have decreased significantly as a result of lead being phased out as an additive in motor vehicle fuels. The FHWA has advised that microscale lead analyses for highway projects is not needed or warranted. Lead emissions from highways have been virtually eliminated as a result of the regulation and legislation prohibiting the manufacture, sale, or introduction into commerce of any engine requiring leaded gasoline since model year 1992, sale of only unleaded gasoline, and the requirement for reformulated gasoline to contain no heavy metals (such as lead).

**E. PARTICULATE MATTER (PM)**

The Proposed Project has been classified as a Categorical Exclusion as listed in FHWA's regulatory definition provided as 23 CFR 771.117 (c) and (d), and determined to be a Non-Type II SEQRA EA Action as defined and listed in the NYSDOT SEQRA regulations provided as 17 NYCRR Part 15, but has been determined to result in no increased traffic volumes. The Proposed Project's actions do not individually or cumulatively have a significant effect on PM emissions. It can therefore be concluded that the project will have no significant adverse impact on ambient PM levels.

**Bronx River Greenway**

**TABLE D-7-3**  
**ONE-HOUR AND EIGHT-HOUR AVERAGE CO CONCENTRATIONS (PPM)**  
**FOR THE NO BUILD ALTERNATIVE, CAL3QHC MODELING (LEVEL I)**

Receptor	CO (ppm) - 2006 No Build			CO (ppm) - 2016 No Build		
	1-hour	8-hour	Wind Dir.	1-hour	8-hour	Wind Dir.
Site 1: East Tremont Ave/Devoe Ave/177th St						
R1	5.5	3.8	115	3.3	2.3	105
R2	5.9	4.1	150	3.5	2.4	160
R3	6.2	4.3	215	3.7	2.6	210
R4	5.8	4.1	230	3.4	2.4	240
R5	5.9	4.1	290	3.7	2.6	300
R6	4.8	3.4	240	3.1	2.2	230
R7	5.2	3.6	35	3.1	2.2	115
R8	5.0	3.5	165	3.0	2.1	150
R9	5.0	3.5	65	3.0	2.1	320
R10	5.0	3.5	65	3.1	2.2	75
R11	4.9	3.4	115	3.1	2.2	225
R12	4.9	3.4	120	3.1	2.2	125
R13	5.0	3.5	135	3.2	2.2	125
R14	5.2	3.6	120	3.2	2.2	125
R15	5.3	3.7	110	3.3	2.3	180
R16	5.1	3.6	190	2.9	2.0	195
R17	4.7	3.3	165	2.8	1.9	130
R18	4.3	3.0	190	2.5	1.7	200
R19	4.1	2.9	210	2.5	1.7	185
R20	4.1	2.9	195	2.5	1.7	210
R21	4.0	2.8	210	2.4	1.7	215
R22	4.2	2.9	215	2.6	1.8	215
R23	4.7	3.3	220	2.8	1.9	225
R24	4.2	2.9	220	2.6	1.8	235
R25	5.2	3.6	255	3.1	2.2	255
R26	4.8	3.4	230	3.0	2.1	120
R27	4.9	3.4	125	3.2	2.2	105
R28	4.8	3.4	145	3.1	2.2	110
R29	7.1	5.0	280	4.2	2.9	290
R30	6.3	4.4	70	4.0	2.8	80
R31	6.1	4.3	75	3.7	2.6	85
R32	5.6	3.9	80	3.6	2.5	295
R33	5.7	4.0	285	3.5	2.4	295
R34	4.7	3.3	290	2.9	2	295
R35	4.8	3.4	345	2.9	2	300
R36	4.7	3.3	230	2.8	1.9	0
R37	4.5	3.1	230	2.8	1.9	5
R38	4.4	3.1	240	2.7	1.9	255

**TABLE D-7-3 (CONT'D)**  
**ONE-HOUR AND EIGHT-HOUR AVERAGE CO CONCENTRATIONS (PPM)**  
**FOR THE NO BUILD ALTERNATIVE, CAL3QHC MODELING (LEVEL I)**

Receptor	CO (ppm) - 2006 No Build			CO (ppm) - 2016 No Build		
	1-hour	8-hour	Wind Dir.	1-hour	8-hour	Wind Dir.
Site 1: East Tremont Ave/Devoe Ave/177th St						
R39	4.7	3.3	235	2.8	1.9	240
R40	4.4	3.1	245	2.7	1.9	250
R41	4.6	3.2	245	3.0	2.1	245
R42	4.9	3.4	255	3.0	2.1	135
R43	4.3	3.0	250	2.7	1.9	140
R44	4.5	3.1	135	2.9	2.0	235
R45	4.7	3.3	135	3.0	2.1	130
R46	4.7	3.3	130	3.1	2.2	135
R47	4.7	3.3	130	3.1	2.2	135
R48	4.2	2.9	315	2.7	1.9	0
R49	4.2	2.9	95	2.7	1.9	0
R50	4.2	2.9	100	2.7	1.9	105
R51	4.2	2.9	110	2.7	1.9	105
R52	4.2	2.9	0	2.8	1.9	290
R53	4.4	3.1	5	2.9	2.0	10
R54	5.1	3.6	30	3.1	2.2	35
R55	5.3	3.7	140	3.2	2.2	125
R56	5.0	3.5	75	3.2	2.2	70
R57	4.8	3.4	80	3.0	2.1	75
R58	4.5	3.1	80	2.8	1.9	85
R59	4.5	3.1	85	2.8	1.9	70
PS167-1	3.8	2.7	140	2.5	1.7	130
PS167-2	3.7	2.6	110	2.5	1.7	140
PS167-3	4.0	2.8	15	2.6	1.8	45
PS167-4	4.1	2.9	75	2.7	1.9	0
PS167-5	4.3	3.0	75	2.7	1.9	70
PS167-6	3.8	2.7	50	2.4	1.7	0

**Bronx River Greenway**

**TABLE D-7-4**  
**ONE-HOUR AND EIGHT-HOUR AVERAGE CO CONCENTRATIONS (PPM)**  
**FOR THE BUILD ALTERNATIVE , CAL3QHC MODELING (LEVEL I)**

Receptor	CO (ppm) – 2006 Build			CO (ppm) – 2016 Build		
	1-hour	8-hour	Wind Dir.	1-hour	8-hour	Wind Dir.
Site 1: East Tremont Ave/Devoe Ave/177th St						
R1	5.2	3.6	180	3.1	2.2	245
R2	5.2	3.6	190	3.2	2.2	260
R3	5.1	3.6	215	3.1	2.2	105
R4	5.2	3.6	230	3.1	2.2	110
R5	5.0	3.5	60	3.1	2.2	45
R6	5.1	3.6	235	3.2	2.2	235
R7	5.0	3.5	50	3.1	2.2	45
R8	5.1	3.6	165	3.0	2.1	140
R9	5.0	3.5	60	3.1	2.2	65
R10	5.1	3.6	80	3.0	2.1	50
R11	5.0	3.5	70	3.3	2.3	75
R12	5.0	3.5	245	3.1	2.2	225
R13	4.8	3.4	120	3.0	2.1	120
R14	4.8	3.4	120	3.1	2.2	120
R15	5.0	3.5	165	3.2	2.2	125
R16	5.2	3.6	210	3.2	2.2	250
R17	4.6	3.2	195	2.9	2.0	110
R18	4.6	3.2	160	2.9	2.0	125
R19	4.1	2.9	150	2.5	1.7	230
R20	4.1	2.9	215	2.4	1.7	115
R21	4.0	2.8	155	2.4	1.7	210
R22	3.9	2.7	210	2.5	1.7	240
R23	4.2	2.9	230	2.6	1.8	235
R24	4.4	3.1	215	2.9	2.0	240
R25	4.2	2.9	195	2.6	1.8	180
R26	5.7	4.0	230	3.2	2.2	115
R27	5.6	3.9	245	3.3	2.3	255
R28	5.4	3.8	255	3.2	2.2	105
R29	5.2	3.6	250	3.2	2.2	260
R30	5.0	3.5	280	4.2	2.9	280
R31	6.1	4.3	295	3.9	2.7	80
R32	5.8	4.1	75	3.7	2.6	80
R33	5.6	3.9	80	3.4	2.4	75
R34	5.5	3.8	75	3.3	2.3	65
R35	4.8	3.4	290	2.9	2.0	285
R36	5.1	3.6	305	3.0	2.1	300
R37	5.0	3.5	295	3.0	2.1	320
R38	4.7	3.3	235	2.9	2.0	325

Table D-7-4 (cont'd)  
One-Hour and Eight-Hour Average CO Concentrations (ppm)  
for the Build Alternative, CAL3QHC Modeling (Level I)

Receptor	CO (ppm) – 2006 Build			CO (ppm) – 2016 Build		
	1-hour	8-hour	Wind Dir.	1-hour	8-hour	Wind Dir.
Site 1: East Tremont Ave/Devoe Ave/177th St						
R39	4.5	3.1	240	2.9	2.0	240
R40	5.0	3.5	245	3.1	2.2	250
R41	4.5	3.1	245	2.9	2.0	255
R42	4.6	3.2	240	2.8	1.9	240
R43	4.8	3.4	255	3.1	2.2	145
R44	4.6	3.2	255	2.8	1.9	225
R45	5.4	3.8	265	3.2	2.2	265
R46	5.5	3.8	285	3.4	2.4	280
R47	4.5	3.1	280	2.7	1.9	265
R48	4.4	3.1	280	2.8	1.9	250
R49	4.2	2.9	320	2.8	1.9	330
R50	4.6	3.2	315	2.7	1.9	0
R51	4.7	3.3	330	2.8	1.9	320
R52	4.7	3.3	340	3.0	2.1	350
R53	4.6	3.2	280	2.8	1.9	0
R54	4.8	3.4	290	3.0	2.1	290
R55	5.1	3.6	30	3.2	2.2	25
R56	4.8	3.4	140	3.1	2.2	125
R57	5.7	4.0	75	3.6	2.5	80
R58	4.6	3.2	90	2.9	2.0	75
R59	4.4	3.1	90	2.8	1.9	80
R60	4.6	3.2	80	2.8	1.9	85
PS167-1	5.1	3.6	90	3.2	2.2	85
PS167-2	3.8	2.7	130	2.6	1.8	140
PS167-3	4.2	2.9	80	2.6	1.8	45
PS167-4	4.2	2.9	80	2.7	1.9	0
PS167-5	4.2	2.9	60	2.7	1.9	65
PS167-6	3.9	2.7	165	2.4	1.7	0

## F. CONSTRUCTION

Airborne particles will be controlled through wetting of soil surfaces, covering of trucks and other dust sources. These requirements will be included as part of the specifications of the construction contract. This project would not have any significant traffic diversions or detours.

## G. SUMMARY

The air quality analysis has followed the proper procedures listed in the EPM. CO microscale air quality analysis indicated the proposed intersection improvements would not cause any potential exceedances of the CO NAAQS. Therefore, the project would not have a significant adverse air quality impact. It complies with the requirement of CAAA90 and the final rule on transportation conformity. As the project is a NEPA Categorical Exclusion and SEQ R Non-Type II Action, the Proposed Project would have no significant adverse effect on ambient PM levels.

**Chapter D-8:**

**A. INTRODUCTION**

This chapter addresses the Proposed Project's potential effects on natural resources. The chapter provides descriptions of natural resources within the Project Site; assesses the future conditions without the Proposed Project; and assesses the project's potential impacts to natural resources during both construction and operation. Measures to reduce potential effects to natural resources are also discussed. Attachment D-A1 summarizes the federal, state, and local regulations that apply to activities that affect natural resources.

**B. EXISTING CONDITIONS**

The Project Site covers approximately 10 hectares (HA) (25 acres) along a one-mile stretch of the lower Bronx River. There are approximately 1.35 HA (3.33 acres) of impermeable surface, primarily associated with two auto-related operations. The remaining acreage is vegetated. Vegetated areas include riparian vegetation (trees and brush) on both banks with successional woodlands on the east side extending from the river to the AMTRAK railroad tracks, or other developed land uses. A segment of the multi-use path may pass through Starlight Park, an approximately 3.6 HA (8.9-acre) park located between East 172nd and 174th Streets on the western shore, if cleanup activities are complete when construction activities are initiated for the Proposed Project. Starlight Park is currently denuded as a result of on-going hazardous materials remediation due to historic uses of the property.

**UPLAND RESOURCES**

Tree cover is more extensive on the east shoreline of the river. Tree species observed within the Project Site include American elm (*Ulmus americana*), black birch (*Betula lenta*), black locust (*Robinia pseudoacacia*), black cherry (*Prunus serotina*), boxelder (*Acer negundo*), weeping willow (*Salix babylonica*), and Norway maple (*Acer platanoides*). Shrub and herb species include multiflora rose (*Rosa multiflora*), Japanese knotweed (*Polygonum cuspidatum*), deer tongue (*Panicum clandestinum*), and mugwort (*Artemisia vulgaris*).

A patch of successional old field is located within the Project Site immediately southwest of the MTA bus depot, covering the majority of the project area west of the dirt path, continuing under the overpass for East 174th Street. A successional old field is a meadow dominated by forbs (herbaceous plants other than grasses) and grasses that occurs on sites that have been cleared and then abandoned. The herbaceous groundcover in this community type within the project area includes Japanese knotweed (*Polygonum cuspidatum*), mugwort (*Artemisia vulgaris*), curly dock (*Rumex crispus*), fall panicum (*Panicum dichotomiflorum*), common goldenrod (*Solidago juncea*), common reed (*Phragmites australis*), and Timothy grass (*Phleum pratense*). Shrubs include staghorn sumac (*Rhus typhina*), raspberry (*Rubus* spp.), and multiflora rose (*Rosa multiflora*). Another patch, dominated by common reed and interspersed with staghorn sumac, is located just south of the area where the ramp will be graded up to the proposed pedestrian bridge that will pass over the railroad tracks at East 172nd Street.

**WETLANDS**

The New York State Department of Environmental Conservation (NYSDEC) and U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) identify wetlands within the Project Site (Figures D-8-1 and D-8-2). No freshwater wetlands are mapped within the Project Site. The NYSDEC tidal wetland map, prepared from infrared aerial photographs taken in 1974, identifies the entire stretch of the



## **Bronx River Greenway**

Bronx River below East Tremont Avenue as littoral zone [tidal waters with depths below 1.8 m (6 feet)]. Depths at the Project Site are generally below 1.8 m (6 feet) at low tide. The NWI map was prepared by stereoscopic analysis of high altitude aerial photographs taken in 1980 and classifies the river as riverine, permanent tidal, open water (R1OWV) wetlands from approximately East Tremont Avenue to a point between East 174th and East 172nd Streets. A weir crosses the river just above East 172nd Street. Proceeding south, the river is classified as estuarine, subtidal, open water (E1OWL) wetlands. No other tidal wetlands are identified on the NWI map in the project area.

A field survey of tidal wetlands in the northern portion of the Project Site was conducted on March 9, 2001. The entire shoreline on both sides of the river from East Tremont Avenue to East 172nd Street was characterized by a functional armor stone riprap. South of East 172nd Street (below the weir) to the railroad track crossing, the eastern shoreline was characterized as a combination of natural rock shoreline, and riprap. Intertidal mudflats were observed in the river along both shores, although these are not indicated on either the NWI or NYSDEC wetland maps. Wetland vegetation observed along the east bank of the river south of Starlight Park included purple loosestrife (*Lythrum salicaria*), yellow flag iris (*Iris pseudacorus*), tidalmarsh amaranth (*Amaranthus cannabinus*), fall panic grass (*Panicum dichotomiflorum*), and common reed. This assemblage reflects the variability in salinity and tides within the Project Site. Two of the plant species (purple loosestrife and yellow flag iris) are generally found in freshwater systems, while the remaining three are primarily associated with estuarine systems. Both of the freshwater species are non-native of European origin. Of the three estuarine species, fall panic grass is indigenous but considered invasive in the northeast, and common reed may be indigenous but is considered a noxious weed. Non-native and/or invasive species such as Japanese knotweed, a non-native noxious weed, and common reed were concentrated on the riprap and banks.

A field survey of tidal wetlands in the area between the AMTRAK Bridge and East 172nd Street was conducted in December 2000. Dominant plant species in the wetland area included American elm, black birch, and smooth cordgrass (*Spartina alterniflora*).

### **EXECUTIVE ORDER 11990 WETLANDS FINDING**

A Wetlands Finding per Executive Order 11990, has been prepared as part of the project, and is included in Attachment D-A4 to the EA. It is determined that there is no practicable alternative to the proposed new construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

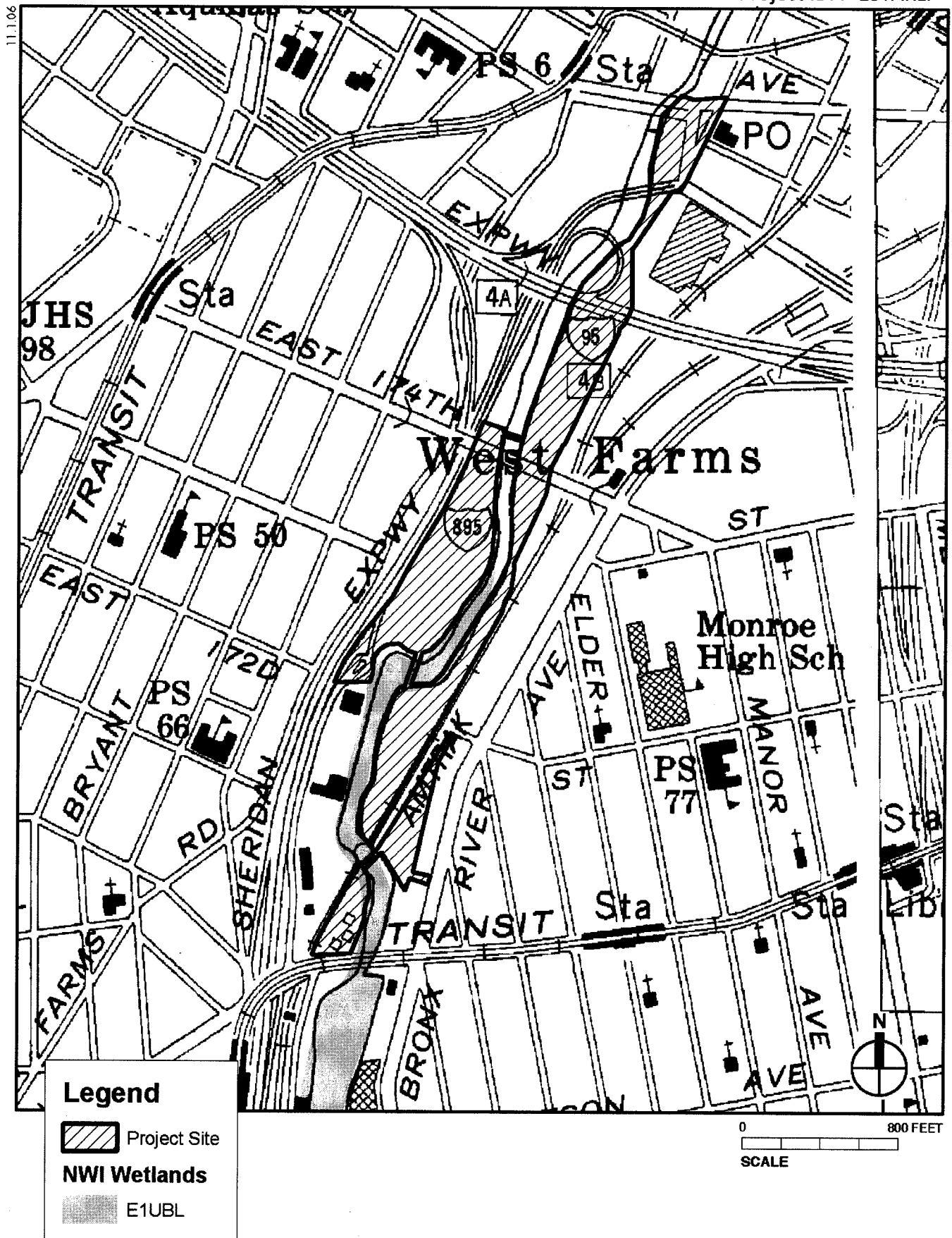
### **AVIFAUNA AND MAMMALS**

Wading birds that have been observed along the shorelines of the lower Bronx River include snowy egrets (*Egretta thula*), great egrets (*Ardea alba*), great blue herons (*Ardea herodias*), black-crowned night-heron (*Nycticorax nycticorax*), and glossy ibis (*Plegadis falcinellis*) (Rachlin 2002, 2004). Wading birds are more common south of the Project Site near Soundview Park where there are large mudflats (Rachlin Pers Comm. 2004). Mallards (*Anas platyrhynchos*) and Canada geese (*Branta canadensis*) were observed on the water at the Project Site during the site visit in March 2004. Other waterbirds that may use the lower Bronx River include various shorebirds (e.g., plovers and sandpipers), cormorants (*Phalacrocorax auritus*), swans (*Cygnus* sp.), swallows, belted kingfishers (*Ceryle alcyon*), and a variety of gulls (Rachlin 2002).

The New York State Breeding Bird Atlas Project, conducted by the New York State Department of Environmental Conservation (NYSDEC), is an ongoing project to document the presence of avian breeders throughout New York State. The first Atlas was completed in 1988 based on data collected from The New



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York State Breeding Bird Atlas Project, conducted by the New York State Department of Environmental Conservation (NYSDEC), is an ongoing project to document the presence of avian breeders throughout New York State. The first Atlas was completed in 1988 based on data collected from 1980 through 1985 (Andrle and Carroll 1988). Avian surveys are currently being conducted for the second Atlas, and the results for years 2000 through 2003 have been tabulated and are available. The Project Site is located in the southeast corner of block 5852D. Other green spaces in this block include a large portion of Bronx Park, Crotona Park, Claremont Park, and a portion of Inwood Hill Park. The New York State Breeding Bird Atlas reported 58 species of birds as confirmed, possible, or probable breeders between 2000 and 2003 (Table D-8-1). In general, the bird species listed in Table D-8-1 are associated with open woodlands or forest habitat. The open woodlands present within the Project Site are not wide enough to provide habitat for forest interior-dwelling birds.

Vegetation on the Project Site may also be used by bird species passing through the area during migratory periods in the spring and autumn. Small mammals such as squirrels, mice, chipmunks, raccoons, opossums, and feral cats may also use the wooded and shrubby areas of the Project Site.

### AQUATIC RESOURCES

#### MACROINVERTEBRATES

Macroinvertebrates known to occur in the lower Bronx River include crabs (horseshoe crab (*Limulus polyphemus*), blue crab (*Callinectes sapidus*), green crab (*Carcinus*), Pacific grapsid shore crab (*Hemigrapsus*), hermit crab (*Pagurus*), and fiddler crab (*Uca* sp.), shrimp (sand shrimp (*Crangon*), grass shrimp (*Palaemonetes*), mantis (*Squilla empusa*), sponges (*Microciona* sp.), anemones (*Haliplanella* sp.), comb jellies (*Mnemiopsis* sp.), limpets (*Acmaea* sp.), periwinkles (*Littorina* sp.), mussels (*Mytilus* and *Modiolus* sp.), oysters (*Crassostrea* sp.), clams (*Spisula* and *Mya* sp.), and sand worms (*Nereis* sp.) (Rachlin 2004).

#### FISH

Recent surveys indicate the lower Bronx River serves as a breeding ground and nursery to estuarine and anadromous fish such as striped bass (*Morone saxatilis*), Atlantic menhaden (*Brevoortia tyrannus*), bluefish (*Pomatomus saltatrix*), gizzard shad (*Dorosoma cepedianum*), Atlantic silversides (*Menidia menidia*), and winter flounder (*Pseudopleuronectes americanus*). Naked goby (*Gobiosoma boscii*) and seaboard goby (*Gobiosoma ginsburgi*) were recorded in the lower Bronx River in surveys conducted during the summer of 2002 (Rachlin 2002).

Fish species collected within the Project Site using a push net around East Tremont Avenue and to the north included estuarine species such as mummichog (*Fundulus heteroclitus*), and fourspine stickleback (*Apeltes quadracus*), freshwater species such as tessellated darter (*Etheostoma olmstedii*), blacknose dace (*Rhinichthys atratulus*), and white sucker (*Catostomus commersoni*), and a catadromous species (living in freshwater and migrating to salt water to spawn), the American eel (*Anguilla rostrata*) (Rachlin 2004). Salinity within the Project Site above the weir is generally low, measuring 0-2.5 ppt around East Tremont Avenue (Rachlin Pers. Comm. 2004). This may limit the presence of some estuarine and marine species that prefer higher salinity waters.

**Bronx River Greenway**

**TABLE D-8-1**

**NYSDEC 2000-2003 BREEDING BIRD ATLAS RESULTS FOR BLOCK 5852D**

Common Name	Scientific Name
<b>Confirmed Breeders</b>	
Green Heron	<i>Butorides virescens</i>
Canada Goose	<i>Branta canadensis</i>
Mute Swan	<i>Cygnus olor</i>
Wood Duck	<i>Aix sponsa</i>
Mallard	<i>Anas platyrhynchos</i>
Cooper's Hawk	<i>Accipiter cooperii</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
American Kestrel	<i>Falco sparverius</i>
Ring-necked Pheasant	<i>Phasianus colchicus</i>
Rock Dove	<i>Columba livia</i>
Mourning Dove	<i>Zenaida macroura</i>
Great Horned Owl	<i>Bubo virginianus</i>
Downy Woodpecker	<i>Picoides pubescens</i>
Hairy Woodpecker	<i>Picoides villosus</i>
Eastern Phoebe	<i>Sayornis phoebe</i>
Eastern Kingbird	<i>Tyrannus tyrannus</i>
Warbling Vireo	<i>Vireo gilvus</i>
Red-eyed Vireo	<i>Vireo olivaceus</i>
American Crow	<i>Corvus brachyrhynchos</i>
Fish Crow	<i>Corvus ossifragus</i>
Tree Swallow	<i>Tachycineta bicolor</i>
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>
Black-capped Chickadee	<i>Poecile atricapillus</i>
Carolina Wren	<i>Thryothorus ludovicianus</i>
House Wren	<i>Troglodytes aedon</i>
American Robin	<i>Turdus migratorius</i>
Gray Catbird	<i>Dumetella carolinensis</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
European Starling	<i>Sturnus vulgaris</i>
Cedar Waxwing	<i>Bombycilla cedrorum</i>
Yellow Warbler	<i>Dendroica petechia</i>
Chipping Sparrow	<i>Spizella passerina</i>
Song Sparrow	<i>Melospiza melodia</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Common Grackle	<i>Quiscalus quiscula</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Baltimore Oriole	<i>Icterus galbula</i>
American Goldfinch	<i>Carduelis tristis</i>
House Sparrow	<i>Passer domesticus</i>

**TABLE D-8-1 (CONT'D)**  
**NYSDEC 2000-2003 Breeding Bird Atlas Results for Block 5852D**

Common Name	Scientific Name
<b>Probable Breeders</b>	
Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>
Chimney Swift	<i>Chaetura pelagica</i>
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>
Northern Flicker	<i>Colaptes auratus</i>
Eastern Wood-Pewee	<i>Contopus virens</i>
Great Crested Flycatcher	<i>Myiarchus crinitus</i>
Blue Jay	<i>Cyanocitta cristata</i>
Barn Swallow	<i>Hirundo rustica</i>
Tufted Titmouse	<i>Baeolophus bicolor</i>
Wood Thrush	<i>Hylocichla mustelina</i>
Pine Warbler	<i>Dendroica pinus</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
House Finch	<i>Carpodacus mexicanus</i>
<b>Possible Breeders</b>	
Spotted Sandpiper	<i>Actitis macularia</i>
Monk Parakeet	<i>Myiopsitta monachus</i>
Eastern Screech-Owl	<i>Megascops asio</i>
White-breasted Nuthatch	<i>Sitta carolinensis</i>
Orchard Oriole	<i>Icterus spurius</i>
<b>Sources:</b> <a href="http://www.dec.state.ny.us/website/dfwmr/wildlife/bba/index.html">http://www.dec.state.ny.us/website/dfwmr/wildlife/bba/index.html</a>	

### *ESSENTIAL FISH HABITAT (EFH)*

Attachment D-A2, "Essential Fish Habitat Assessment," provides a detailed discussion of EFH designations for the lower Bronx River in the vicinity of the Project Site, and potential impacts to these designations from the construction and operation of the Proposed Project. The location of the Bronx River Greenway on the lower Bronx River is within a portion of the Hudson River estuary EFH that is situated in the NMFS 10' x 10' square with coordinates (North) 40°50.0' N, (East) 73°50.0' W, (South) 40°40.0' N, (West) 74°00.0' W. This square includes the following waters: Atlantic Ocean waters within the square within the Hudson River Estuary affecting the following: Manhattan Island, New York City, College Pt., NY, Long Island City, NY, Brooklyn, NY, Port Morris, NY, Unionport, NY, Flushing Bay, Astoria, NY, LaGuardia Airport, Badland Isl., Rikers Isl., Roosevelt Isl., Wards Isl., and Hells Gate, along with the East River, the Harlem River, and the Bronx River. This area has been identified as EFH for 17 species of fish: pollock, red hake, winter flounder, windowpane, Atlantic herring, bluefish, Atlantic butterfish, Atlantic mackerel, summer flounder, scup, black sea bass, king mackerel, Spanish mackerel, cobia, sand tiger shark, dusky shark, and sandbar shark. Marine species that would not be expected to occur within the Project Site include: Spanish mackerel, king mackerel, cobia, sand tiger shark, dusky shark, and sandbar shark.

**Bronx River Greenway****THREATENED AND ENDANGERED SPECIES AND HABITATS OF SPECIAL CONCERN**

No threatened or endangered species or habitats of special concern under the responsibility of the USFWS are known to occur within the Project Site (Clough 2004). The New York State Department of Environmental Conservation New York Natural Heritage Program (NYNHP) identified 11 NY State recognized threatened or endangered plant species (see Table D-8-2) that were historically observed on the grounds of the Bronx Park, which is located approximately 1,000 feet to the north-northeast of the Project Site. None of these species is listed as threatened or endangered under the Federal Endangered Species Act of 1973. All of the recorded observations of these species are historical, dating from the late 1800s to 1962. Table D-8-2 lists the 11 threatened or endangered plant species reported for the Bronx Park, their state legal status, their Global and State Rank, date last seen within Bronx Park, and habitat preferences.

**Table D-8-2**

**HISTORICAL RECORDS OF NY STATE RECOGNIZED THREATENED OR ENDANGERED PLANT SPECIES IDENTIFIED AS OCCURRING IN BRONX PARK TO THE NORTH OF THE PROJECT SITE**

<b>Species</b>	<b>NY Legal Status,</b>	<b>Global and State Status and Date Last Seen</b>	<b>General Habitat</b>
Yellow giant-hyssop <i>Agastache nepetoides</i>	Threatened	G5, S2S3 Confirmed for Bronx County, Historical Record 1901-09-26	occurs in moist, open woodland areas on rich soils and calcareous bedrock , thickets, woodland borders, and disturbed areas such as along railroad tracks, fencerows, floodplains, and disturbed woodlands. Present June-November, Flowers July-September, Fruits September-November.
Woodland agrimony (Beaked agrimony) <i>Agrimonia rostellata</i>	Threatened	G5, S2, Probable for Bronx County, Historical Record 1899-09-01	in New York region usually occurs in non-wetlands but may occasionally be found in wetland areas; in the Sterling Forest (in the Hudson Highlands) this species was found on oak-hickory slopes; generally a woodland species. Flowers July-September, Fruits October.
Willdenow's sedge <i>Carex willdenowii</i>	Threatened	G5, S3, Probable for Bronx County, Historical Record 1897-06-13	moist to dry deciduous forest, mostly acidic soils, can occur in association with hemlocks. Flowers May-July, Fruits August.
Rattlebox <i>Crotolaria sagittalis</i>	Endangered	G5, S1, Probable for Bronx County, Historical Record, 1896-08-19	prairies, glades, open wooded slopes, sand or rocky open ground, fields, railroads. Flowers July-September, Fruits October-November.

Table D-8-2 (cont'd)

**HISTORICAL RECORDS OF NY STATE RECOGNIZED THREATENED OR ENDANGERED PLANT SPECIES IDENTIFIED AS OCCURRING IN BRONX PARK TO THE NORTH OF THE PROJECT SITE**

Species	NY Legal Status	Global and State Status and Date Last Seen	General Habitat
Slender crabgrass <i>Digitaria filiformis</i>	Threatened	G5, S2, Probable for Bronx County, Historical Record, 1896-09-03	in full sun in sterile sandy soils; can be found in successional and disturbed areas. Flowers August, Fruits August-September.
Slender spikerush <i>Eleocharis tenuis</i> var <i>pseudoptera</i>	Endangered	G5T5, S1, Confirmed for Bronx County, Historical Record, 1897-05-27	in the New York region usually occurs in wetlands; found in bogs and along streambanks. Flowers July-August, Fruits September.
Carolina cranesbill (Carolina geranium) <i>Geranium carolinianum</i>	Threatened	G5T4, S2, Probable for Bronx County, Historical Record, 1947-06-18	usually found in open and wooded areas that receive partial sunlight; often found along roadsides or other areas of mild disturbance; in some northeast states it is considered an invasive weed
Rough avens (Pale avens) <i>Geum virginianum</i>	Endangered	G5, S2, Probable for Bronx County, Historical Record, 1896-06-27	upland, dry forests; also dry-mesic forests with black, white, and red oak, bramble and hickory species, gray dogwood. Flowers June-September.
Velvet panic grass (Velvet panicum) <i>Panicum scoparium</i> ( <i>Dichanthelium oligosanthes</i> var <i>scribnerianum</i> )	Endangered	G5, S1, Confirmed for Bronx County, Historical Record, 1953-07-23	in New York region generally occurs in wetlands; usually in wooded areas, but also in wooded-open edge situations; usually found in moist or boggy areas (along streams creeks, in swales, etc.). Flowers June, Fruits July-October.
Tall flat panic grass (Red top panicum) <i>Panicum stipitatum</i> ( <i>Panicum rigidulum</i> var. <i>elongatum</i> )	Endangered	G4G5, SH, Probable for Bronx County, Historical Record, 1906-09-20	in New York region usually occurs in wetlands; wet meadows and prairies, damp woods, in roadside ditches, along streams, around ponds and lakes. Flowers July, Fruits August-September.
Field beadgrass (Field paspalum) <i>Paspalum laeve</i>	Endangered	G4G5, S1, Confirmed for Bronx County, Historical Record, 1962-06-25	in New York region can occur in wetland or nonwetland habitats; moist depressions, swamps, ponds, lakes, sloughs, pastures, streambanks, cultivated areas, old fields, ditches, disturbed sites, roadsides, railroads; considered a troublesome weed species in New Jersey. Fruits August-October.

**Notes:** G4=Apparently secure throughout its range (but possibly rare in parts), G5=Demonstrably secure throughout its range (but possibly rare in parts), S1=Critically imperiled in New York State because of extreme rarity (5 or fewer sites or very few remaining individuals, or extremely vulnerable to extirpation from NY State due to biological factors, S2=Imperiled in NY State because of rarity (6-20 sites or few remaining individuals) of highly vulnerable to extirpation from NY State due to biological factors, S3=Rare in New York State (usually 21-35 extant sites), SH =historical, no existing sites known in New York State in the last 20 years but it may be rediscovered, species are listed as given in the NYNHP report, changes in species scientific names are indicated in parentheses as indicated in Young, S and T.W. Weldy. 2004. New York Natural Heritage Program Rare Plant Status List. New York Natural Heritage Program, New York State Department of Environmental Conservation.



## **Bronx River Greenway**

The NYNHP was contacted to confirm whether any of the 11 NY State-recognized threatened or endangered plant species reported as historically occurring in the Bronx Park is likely to occur within the Project Site. Of the 11 threatened and endangered species, two species were deemed the only plants having the potential to occur onsite by NYNHP endangered plant specialists, including rattlebox and field beadgrass. A Threatened and Endangered Species Survey was performed in July and August 2005. After a thorough investigation of areas of potential occurrence, neither rattlebox nor field beadgrass were found on the Project Site.

### *INVASIVE SPECIES*

On February 2, 1999, President Clinton issued Executive Order 13112, "Invasive Species." This Executive Order is designed to prevent introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause.

NYSDOT has conducted a preliminary site inventory of the Project Site due to the presence of Japanese knotweed, a New York State Priority Plant also listed on the federal invasive species list. In response to concerns about this plant in the Bronx River corridor, NYSDOT has implemented a stand-alone invasive species control project. It is expected that the plans will be completed by the spring of 2005 and control measures will be implemented over the course of the next three growing seasons. Upon completion of this phase of control, any remaining plants will be inventoried and controlled as part of the Greenway contract. Future control postGreenway construction will be the responsibility of NYCDPR, as they will be responsible for long term management of the site.

## **C. PROBABLE IMPACTS**

### **NO ACTION**

It is assumed there will be minimal changes to the Project Site without the Proposed Project. Once the cleanup of Starlight Park is completed, the remaining portions of the park can be developed. The New York City Department of Parks and Recreation (NYCDPR) Natural Resources Group has sponsored stream rehabilitation projects all along the lower Bronx River in recent years and has plans to continue this work in the near future (Larson 2004). The projects include shoreline naturalization, wetland planting, and removal of debris, and will contribute to improved water quality and aquatic habitat in the lower river. The ongoing water quality improvements occurring throughout the New York Harbor Estuary should continue to result in some enhancement of habitat for aquatic biota. Furthermore, the development of some green space should lead to some habitat enhancements for birds and other terrestrial species.

### **PROPOSED PROJECT**

#### *CONSTRUCTION*

Project elements that have the potential to affect natural resources include:

- Upland construction activities such as construction of the multi-use path, four pedestrian bridges (three over water, one upland), removal of impermeable surfaces, Starlight Park, the amphitheater and concessions area, retaining walls, and the boathouse; and
- In-water activities such as dredging for construction of the floating dock (if required), driving of piles for construction of the floating dock, construction of the fixed platform, removal of bulkheads and other engineered shorelines and regrading during shoreline naturalization, and construction of the combined sewer overflow (CSO) outfall extension.

The project design will retain as many of the native trees that are already on the Project Site where practicable, and will include removal of invasive vegetation (primarily Japanese knotweed) under the direction of New York State Department of Transportation (NYSDOT), where possible. Removal of nonnative invasive species within the one mile stretch of the river including the Project Site is anticipated to begin in spring 2004 and continue through the construction period. Only registered herbicides will be used as part of these control efforts, and only those herbicides registered for use near surface waters will be applied near the river. Use of herbicides will follow all safety precautions to prevent drift and runoff to the river to minimize potential effects to non-target plants and wildlife. Erosion control measures and temporary seeding will meet the requirements of the NYCDPR, NYCDEP, and NYSDEC.

As discussed above, of the 11 threatened and endangered species, two species were deemed the only plants having the potential to occur onsite by NYNHP endangered plant specialists, including rattlebox and field beadgrass. A Threatened and Endangered Species Survey was performed in July and August 2005. After a thorough investigation of areas of potential occurrence, neither rattlebox nor field beadgrass were found on the Project Site.

The proposed improvements to the traffic intersections, and bridges, the amphitheater and concessions area, retaining walls, and multi-use path will be constructed in uplands and will not be expected to impact wetlands. Extension or removal of the CSO during a future project by NYCDEP will, in either case, extend the east bank into the Bronx River by 9 m (30 feet). This will impact 0.016 HA (0.04 acres) of littoral zone wetland. NYSDOT will mitigate for the loss of littoral zone through the creation of wetlands within the Project Site (most likely high marsh). The type of wetland creation will be determined during the design phase of the Proposed Project. Wetland restoration activities, including invasive species removal and native species planting, will also improve the quality of wetlands within the Project Site.

Approximately 120 cubic meters (157 cubic yards) of material in mudflat and/or littoral zone wetlands will have to be dredged for installation of the floating dock. Potential impacts associated with dredging include localized and temporary increases in suspended sediments and the temporary loss of benthic macroinvertebrates in the area dredged. Water quality changes associated with these increases in suspended sediment are expected to be minimal and temporary, limited to the immediate area of the activity. Suspended sediments would dissipate shortly after the dredging is completed and the piles that will support the dock are driven into place. An increase in littoral zone area and possibly loss of some small mudflat area may also occur from the construction of the floating dock.

The benthic community will be expected to reestablish within a short period of time as organisms colonize the area from adjacent areas. Estuarine species have behavioral and physiological mechanisms for dealing with variable concentrations of suspended sediment. Life stages of estuarine-dependent and anadromous fish species, bivalves and other macroinvertebrates are fairly tolerant of elevated suspended sediment concentrations and have developed behavioral and physiological mechanisms for dealing with variable concentrations of suspended sediment (Birtwell et al. 1987, Dunford 1975, Levy and Northcote 1982 and Gregory 1990 in Nightingale and Simenstad 2001, LaSalle et al. 1991). Fish are mobile and generally avoid unsuitable conditions in the field such as increases in suspended sediment and noise (Clarke and Wilber 2000), and also have the ability to expel materials that may clog their gills when they return to cleaner, less sediment laden waters. Most shellfish are adapted to naturally turbid estuarine conditions and can tolerate short-term exposures by closing valves or reducing pumping activity. More mobile benthic invertebrates that occur in estuaries have been found to be tolerant of elevated suspended sediment concentrations. In studies of the tolerance of crustaceans to suspended sediments that lasted up to two weeks, nearly all mortality was caused by extremely high suspended sediment concentrations (greater than 10,000 mg/L) (Clarke and Wilber 2000) which will not occur from the limited dredging that will occur as a result of the Proposed Action. The area of dredging will be small and the period of disturbance short.

**Bronx River Greenway**

Therefore activity associated with dredging for the floating dock, should it be required, will not be expected to result in significant adverse impacts to water quality or fish populations of the Bronx River.

Bulkhead and riprap will be removed, where feasible, along the New York City Marshall Impound Lot (aka PDJ Simone) and Apex Auto property shorelines [total of 244 m (802 feet)], and the shorelines graded, naturalized, and stabilized with plantings. Results of the boring program (e.g., depth to bedrock) will be used to determine how and where regrading and naturalization will be feasible. Stormwater from the Project Site will be managed to reduce direct discharges to the Bronx River. A stormwater pollution prevention plan (SWPPP) will be developed in accordance with NYSDEC's State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity Permit No. GP02-01. There will be potential for on-site erosion and sedimentation at construction sites where soils will be disturbed (i.e., bulkhead and riprap removal, installation of landscaping, construction of retaining walls, removal of impervious surfaces, etc.). Where these activities are located adjacent to the waterway, there will be potential for localized, temporary increases in suspended sediment. The SWPPP will include erosion and sediment control measures that comply with the "New York Standards and Specifications for Erosion and Sediment Control" such as hay bales, silt fencing, vegetative covers, and slope and soil stabilization. Planting of the graded, naturalized shorelines with native vegetation will reduce the potential for erosion and sedimentation in these areas. The SWPPP will also include measures to manage stormwater following construction in accordance with the "New York State Stormwater Management Design Manual."

Areas temporarily disturbed during construction and restoration work will be restored to their original condition through proper grading, and all temporary structures and materials will be removed following construction. Designated wetland areas to be protected will be prominently marked or barricaded.

No significant adverse impacts to essential fish habitat or managed fish stocks are anticipated from construction of the Proposed Project. A detailed discussion of EFH species is included in Attachment D-A2.

**OPERATION**

Conversion of paved industrial properties to green space [approximately 1.35 HA (3.33 acres)] will result in an increase in the available terrestrial habitat on the site. A gently graded meadow, to be planted with native grasses and/or wildflowers, will be created in the vicinity of East 174th Street. This small meadow will provide habitat for grassland birds, butterflies and other insects, and small mammals. Starlight Park, which is currently denuded due to on-going clean-up activities, will be developed into an active recreation area with playfields, grassy areas, a boat house, and the floating dock. Landscaping will include native tree, shrub, and herbaceous species that will have the potential to provide habitat for wildlife. Nonnative and invasive species control will also improve terrestrial habitat at the Project Site for wildlife.

The bridges considered for the three pedestrian crossings over the river are 17 feet wide with 1 foot to either side for railings. Shading of water by the three pedestrian bridges over the Bronx River will be approximately 0.08 HA (0.195 acres). The cantilevered overlooks would shade approximately 0.012 HA (0.03 acres). The floating dock and fixed platform have the potential to shade 0.22 HA (0.055 acres) of water. Shading is of concern because it can affect the habitat of some species of fish and lower productivity of primary producers. Studies of fish under very large piers [approximately 2.1 HA (5.3 acres)] indicate that shading could cause an impact on the habitat for certain fish species because of these species' dependence on sight and light for feeding (Able et al. 1999). The bridge (Bridge #1) between Westchester Avenue and the AMTRAK railroad tracks will shade approximately 0.004 (0.01 acres) of proposed high marsh on the west bank, 0.008 (0.02 acres) of littoral zone, and a small amount of mudflat on the east bank

However, the areas of the three bridges and overlooks are very small and light will still be able to penetrate from the sides of these relatively narrow structures. The proposed 5.2 m (17foot) width is narrower than what is considered optimal for multi-use paths 6.7 m (22 feet) which reduces the potential impacts due to shading by the bridge structures. The small amount of shading resulting from the Proposed Project will not be expected to result in significant adverse impacts to aquatic biota or wetlands.

Naturalization of shorelines will help to improve stormwater retention, resulting in improved water quality, and will improve habitat for birds and mammals that use riparian and wetland habitats. The intertidal wetlands created during shoreline naturalization will provide habitat for macroinvertebrates and fish. During low tides, exposed intertidal habitat will provide feeding and resting areas for wading and shorebirds.

Recreational boats visiting the park will be limited to small personal watercraft such as kayaks and canoes. These watercraft have shallow drafts and will not disturb the river bottom. Their use in the Bronx River will not result in significant adverse impacts to aquatic biota.

## **D. REFERENCES**

Andrle, R.F. and J.R. Carroll. 1988. The Atlas of the Breeding Birds of New York State. Cornell University Press. Ithaca, NY.

Birtwell, I.K., M.D. Nassichuk, H. Beune, and M. Gang. 1987. Deas Slough, Fraser River Estuary, British Columbia: General Description and Some General Characteristics. Can. Fish. Mar. Serv. Man. Rep. No 1464.

Clarke, D.G., D.H. Wilber. 2000. Assessment of Potential Impacts of Dredging Operations Due to Sediment Resuspension. DOER Technical Notes Collection (ERDC TN-DOER-E9), US Army Engineer Research and Development Center, Vicksburg, MS.

Clough, M.W. 2004. Letter from Mark W. Clough (U.S. Fish and Wildlife Service, Cortland, NY) to Sandra Collins (AKRF, Inc., Hanover, MD), March 25, 2004.

Dunford, W.E. 1975. Space and Food Utilization by Salmonids in Marsh Habitats of the Fraser River Estuary. University of British Columbia.

Gregory, R.S. 1990. Effects of turbidity on benthic foraging and predation risk in juvenile Chinook salmon (*Oncorhynchus tshawytscha*). Can. J. Fish. Aquat. Sci. 50(2):241-246.

Houle, C. 2004. Letter from Charlene Houle (New York Natural Heritage Program, Albany, NY) to Sandra Collins (AKRF, Inc., Hanover, MD), April 14, 2004.

Larson, M. 2004. Stream rehabilitation in the highly urbanized Bronx River. 2004 Northwest Stream Restoration Design Symposium. February 3-5, Stevenson, WA.

LaSalle, M.W., D.G. Clarke, J. Homziak, J.D. Lunz, and T.J. Fredette. 1991. A framework for assessing the need for seasonal restrictions on dredging and disposal operations. Department of the Army, Environmental Laboratory, Waterways Experiment Station, Corps of Engineers, Vicksburg, MS.

Levy, D.A., and T.G. Northcote. 1982. Juvenile salmon residency in a marsh area of the Fraser River estuary. Can J. Fish. Aquat. Sci. 39(2):270-276.

**Bronx River Greenway**

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Nightingale, B. and C.A. Simenstad. 2001. Dredging Activities: Marine Issues. White Paper, Research Project T1803, Task 35. Prepared by the Washington State Transportation Center (TRAC), University of Washington. Prepared for the Washington State Transportation Commission, Department of Transportation and in Cooperation with the U.S. Department of Transportation, Federal Highway Administration.

Rachlin, J.W. 2002. The Bronx: a thriving river runs through it. CUNY Matters. Summer 2002. Available: [http://www1.cuny.edu/evens/cunymatters/2002\\_october/bronxriver.html](http://www1.cuny.edu/evens/cunymatters/2002_october/bronxriver.html).

Rachlin, J.W. 2004. Personal communication with J.M. Wallin (AKRF, Inc., Hanover, MD), April 2004. Lehman College Laboratory for Marine and Estuarine Research, Bronx, NY.

Rachlin, J.W. 2004. Field data from Lehman College's Laboratory for Marine and Estuarine Research study of the Bronx River Estuary, 2002-2003. Bronx, NY.

Young, S.M., and R.W. Weldy. 2004. New York Natural Heritage Program Rare Plant Status List. New York Natural Heritage Program, New York State Department of Environmental Conservation.

**A. INTRODUCTION**

This chapter addresses the Proposed Project's potential effects on surface water quality and floodplains. This chapter also addresses navigation. Specifically, the analysis assesses the project's potential impacts to surface water and floodplains during both construction and operation. Appendix 1 summarizes the federal, state, and local regulations that apply to activities that affect surface water quality and floodplains.

**B. EXISTING CONDITIONS****SURFACE WATER QUALITY***WATER QUALITY*

The Proposed Project is located on the lower Bronx River, a tributary to the Upper East River and part of the New York Harbor Estuary. The Bronx River is tidally influenced within the Project Site. The head of the tide occurs at a dam at the southern end of Bronx Park approximately one-quarter mile north of the northern end of the Project Site (East Tremont Avenue). Freshwater flows range from approximately 5 to 10 cubic feet per second (cfs) during dry conditions and from approximately 20 to 70 cfs during wet conditions (LMS 1994). Salinity near the confluence with the East River generally ranges from approximately 15 to 32 ppt, with an average of about 25 ppt (NYCDEP 2004). Salinity recorded within the Project Site near East Tremont Avenue north of the weir located just north of East 172nd Street is much lower, between 0 and 2.5 ppt (Rachlin Pers. Comm. 2004).

The NYSDEC classifies the lower Bronx River as Use Class I. The best usages for Class I saline surface waters are as secondary contact recreation and fishing. These waters must be suitable for fish propagation and survival. The water quality of the New York Harbor Estuary and its tributaries such as the Bronx River is strongly affected by human activity upstream and the densely populated and industrialized land uses that surround it. Historically, water quality problems included low dissolved oxygen (DO) content, high nutrient concentrations, algal blooms, excessive numbers of coliform bacteria, and the presence of floatables. The construction and upgrading of wastewater treatment facilities (WWTF), and implementation of water pollution control programs that have occurred within the New York Harbor since the 1970s has greatly reduced nutrient inputs and improved water quality (Brosnan and O'Shea 1995). Despite these overall improvements in water quality of the Harbor, the water quality of the lower Bronx River is impaired due to pathogen concentrations and oxygen demand (NYSDEC 2002 303d list and 2004 draft 303d list).

Average fecal coliform concentrations for the Upper East River—Western Long Island Sound area, which includes the lower Bronx River, showed a dramatic decline from the 1970s, dropping from more than 2,000 cells per 100 milliliters (cells/100 mL) to around 50 cells/100mL in recent years, below the standard for Use Class I. This decline is attributed to the construction and upgrading of WWTF, and the city's water pollution control programs (NYCDEP 2003). The closest monitoring station for the NYCDEP Harbor Survey is located near the mouth of the Bronx River. Fecal coliform measurements taken between 1999 and 2003 at the Bronx River sampling station ranged from 1 to 1,940 cells/100 mL and averaged 205 cells/100 mL in top waters, never exceeding the Class I criteria.

DO measurements taken between 1999 and 2003 at the Bronx River sampling station ranged from 3.4 to 14.3 mg/L for surface waters, and averaged 6.3 mg/L. Bottom water DO concentrations were generally slightly lower than surface water concentrations, but were usually above the 4.0 milligram per liter (mg/L)

**Bronx River Greenway**

standard (NYCDEP 2004). DO has the potential to drop below the standard during periods in the summer. A similar pattern is expected for the Project Site, given the shallow water depths. DO measurements taken in the northern portion of the Project Site in March through May of 2003 ranged from 9.4 to 11.4 mg/L (Rachlin Pers. Comm. 2004). Areas with DO concentrations less than 4.0 mg/L are often avoided by finfish, although most estuarine organisms can tolerate much lower concentrations for short periods.

Other indicators of water quality recorded for the Bronx River station in the Upper East River— Western Long Island Sound area include chlorophyll *a*, water transparency, suspended sediment, and pH. The concentration of chlorophyll *a* (used to estimate phytoplankton biomass) between 1999 and 2003 ranged from 0.9 to 129 µg/L and averaged 10.6 µg/L. Water transparency, measured with a Secchi disk, between 1999 and 2003 ranged from 2 to 8 feet and averaged 4.5 feet (NYCDEP 2004). Turbidity appears to be slightly increasing in this area. Within the lower New York Harbor Estuary, surface and bottom water pH ranges from 7.0 to 8.0 throughout the year (Brosnan and O'Shea 1995).

The project corridor is not in a Sole-source-, Primary-, or Principal- aquifer area. Groundwater in Bronx County is not a source of potable water.

**SEDIMENT QUALITY**

Complex flow patterns lead to widely variable sediment characteristics throughout the area, varying from coarse sands and gravels in high-energy areas to fine-grained silts and clays in low-energy areas (USACOE 1999). As is typical of urban watersheds, New York Harbor Estuary sediments are contaminated due to a history of industrial uses in the area. Contaminants found throughout the New York Harbor Estuary include pesticides such as chlordane and DDT, metals such as mercury, cadmium, lead, and copper, PCBs and various polycyclic aromatic hydrocarbons (Rohmann and Lilienthal 1987). Adams et al. (1998) found the mean sediment contaminant concentration for 50 of 59 chemicals measured in sediment samples from the New York/New Jersey Harbor Estuary to be statistically higher than other coastal areas on the East Coast. Within the New York/New Jersey Harbor Estuary, Adams et al. (1998) ranked Newark Bay as the most degraded area on the basis of sediment chemistry, toxicity, and benthic community, followed by the Upper Harbor, Jamaica Bay, Lower Harbor, Western Long Island Sound and the New York Bight Apex. Biological effects, identified based upon the benthic invertebrate community, were found to be associated with the chemical contamination. While the sediments of the New York Harbor Estuary are contaminated, the levels of most sediment contaminants (e.g., dioxin, DDT, and mercury) have decreased on average by an order of magnitude over the past 30 years (Steinberg et al. 2002).

**FLOODPLAINS**

The Bronx River is designated as a regulatory floodway by NYSDEC Environmental Conservation Law. Within in the Project Site, the entire shoreline on both sides of the river is characterized by hard shoreline stabilization structures. From East Tremont Avenue to East 172nd Street the shoreline is characterized by a functional armor stone riprap. South of East 172nd Street to the railroad track crossing, the eastern shoreline is characterized by a combination of natural rock shoreline and artificial broken rock riprap. South of the railroad bridge the shoreline is characterized by a combination of sheetpile and concrete bulkhead, and riprap. Between East Tremont Avenue to approximately 300 feet south of I-95 (Cross Bronx Expressway), the 100-year floodplain is primarily limited to the banks of the Bronx River (Figure D-9-1). South of this point the 100-year floodplain varies from 0 to about 200 feet on either side of the river. The loss of most of the river's natural floodplain coupled with the large amount of impervious surfaces bordering the river have resulted in flashy surface water flows and low ground water recharge.

**NAVIGABLE WATERS**

Commercial boating is not important on the Bronx River because of its shallow depths and the location of a weir between East 172nd Street and East 174th Street. Commercial vessels have not used this portion of the river since the 1920s. Although formerly a lift bridge, Westchester Avenue over the Bronx River is a fixed concrete superstructure that prevents the passage large ocean-going and commercial vessels. In addition, the AMTRAK Bridge, which is a lift bridge, is no longer capable of lifting and prevents passage of large vessels. Therefore, pedestrian Bridge #1, which would have a lower clearance than Westchester Avenue and a higher clearance than the AMTRAK Bridge, would not impact the navigation of ocean-going or commercial vessels.

**C. PROBABLE IMPACTS****NO ACTION**

It is assumed there will be minimal changes to the Project Site without the Proposed Project. Once the cleanup of Starlight Park is completed, the ball fields and other facilities proposed for the park could be constructed. The New York City Department of Parks and Recreation (NYCDPR) Natural Resources Group has sponsored stream rehabilitation projects all along the lower Bronx River in recent years and has plans to continue this work in the near future (Larson 2004). The projects include shoreline naturalization, wetland planting, and removal of debris, and will contribute to improved water quality in the lower river. The ongoing water quality improvements that are under way throughout the New York Harbor, such as combined sewer outfall (CSO) upgrades and repairs, are expected to continue and to result in enhanced water quality in the river. The Bronx River shorelines in the area will continue to be structurally stabilized shoreline (riprap and bulkheads). Therefore, no changes to the floodplain are expected.

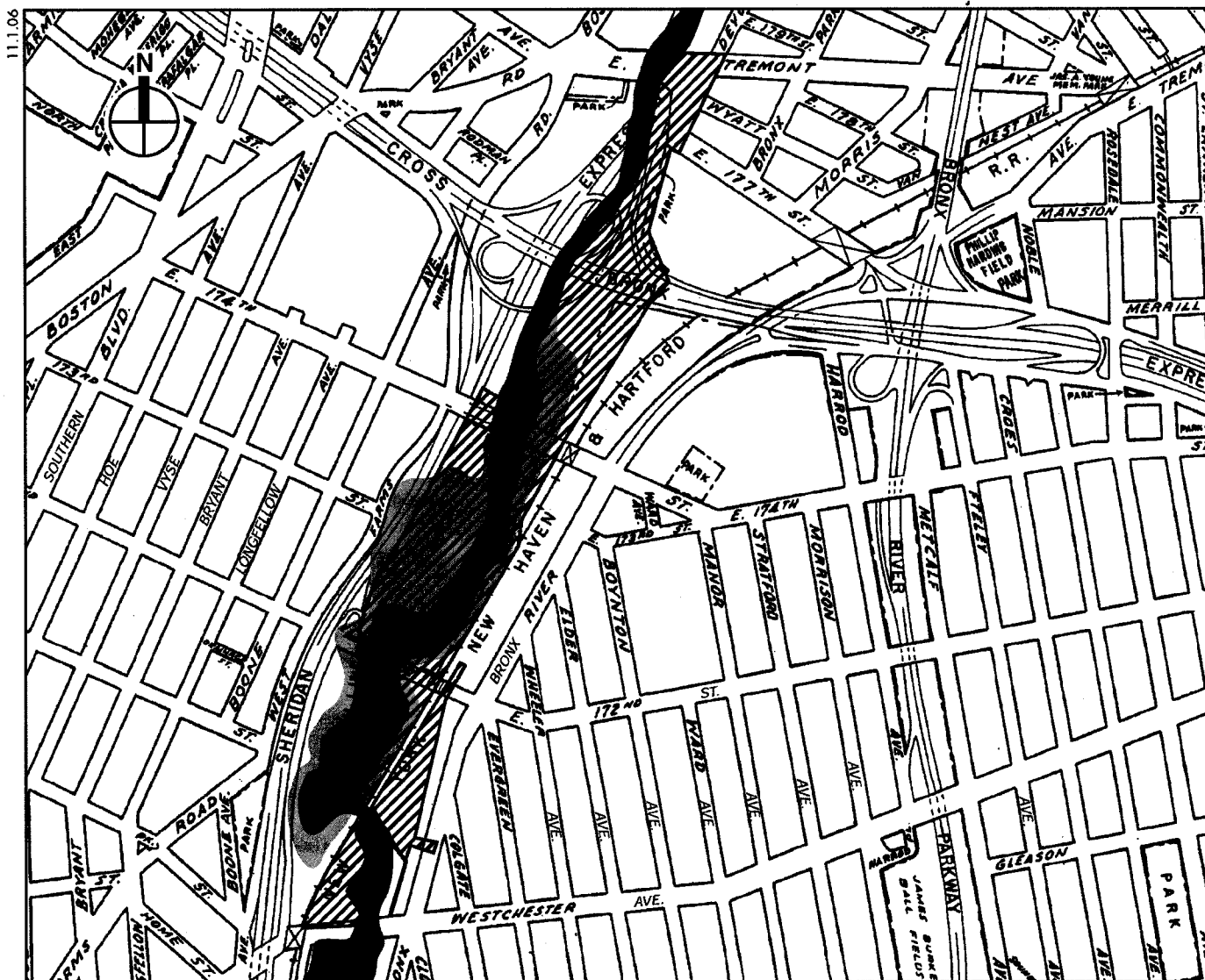
**PROPOSED PROJECT****CONSTRUCTION***Surface Water Quality*

Project elements that have the potential to affect water quality include:

- In-water activities such as dredging for construction of the floating dock (if required), driving of piles for construction of the floating dock, construction of the fixed platform, removal of bulkheads and other engineered shorelines and regrading during shoreline naturalization, construction of the CSO extension; and
- Upland construction activities such as construction of the multi-use path, four pedestrian bridges, Starlight Park, the amphitheater and concessions area, retaining walls, and the boathouse.

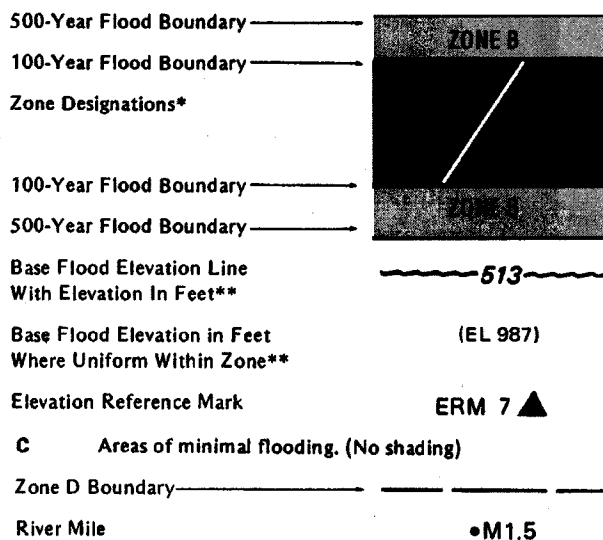
Results from the bathymetry study will be used to assist in determining the location of the dock so as to minimize the amount of dredging required and the amount of mudflat disturbed. Potential impacts associated with dredging for the floating dock include possible resuspension of sediment-associated contaminants and temporary increases in turbidity. Resuspension of sediments will be localized to the immediate area around the dredging and will be temporary. The floating dock will be designed with the smallest practical dimensions to meet applicable safety and accessibility regulations and minimize obstruction of river flow, shading, and dredging.





 Project Site Area

0 1000 FEET  
SCALE



\*\*Referenced to the National Geodetic Vertical Datum of 1929

**BRONX RIVER GREENWAY**

**Flood Insurance Rate Map**  
**Figure D-9-1**

**Bronx River Greenway**

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The CSO extension will deck over approximately 0.016 hectares (HA) (0.04 acres) of littoral zone wetland [waters less than 1.8 m (6 feet) deep] pending NYCDEP construction. Fill activities will have the potential to cause temporary increases in suspended sediment in the immediate area where the fill is placed. Activities associated with bulkhead and riprap removal during restoration of natural shorelines also have the potential to result in localized, temporary increases in suspended sediments. Sediment control measures will be taken to minimize the amount of resuspended sediment and could include such measures as the use of turbidity curtains.

Stormwater from the Project Site will be managed to reduce direct discharges to the Bronx River. A stormwater pollution prevention plan (SWPPP) will be developed in accordance with NYSDEC's State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity Permit No. GP-02-01. There will be potential for on-site erosion and sedimentation at construction sites where soils will be disturbed (i.e., bulkhead and riprap removal, installation of landscaping, construction of retaining walls, removal of impervious surfaces, etc.). The SWPPP will include erosion and sediment control measures that comply with the "New York Standards and Specifications for Erosion and Sediment Control" such as hay bales, silt fencing, vegetative covers, and slope and soil stabilization. The abutments for the four pedestrian bridges, the multi-use path, and retaining walls will be built in upland areas. The construction of these components will be managed under the SWPPP and will not be expected to result in significant adverse impacts to water quality. Planting of the graded, naturalized shorelines with native vegetation will reduce the potential for erosion and sedimentation in these areas. The SWPPP will also include measures to manage stormwater following construction in accordance with the "New York State Stormwater Management Design Manual."

Starlight Park has a separate stormwater management plan to manage stormwater and reduce discharges to the Bronx River. Silt fences have been placed along the Bronx River shoreline adjacent to the park in preparation for remediation activities. Therefore, construction of the park will not be expected to adversely impact water quality.

*Floodplains*

Construction of the upland project elements (pedestrian bridges, multi-use path, amphitheater, etc.) and in-water project elements (floating dock and CSO extension) will not impede flood waters or result in increased flooding in areas adjacent to the Project Site. The naturalized shorelines will be constructed so as to not increase flooding or erosion on the site or the surrounding area.

*Navigable Waters*

Construction of the upland project elements (pedestrian bridges, multi-use path, amphitheater, etc.) and in-water project elements (floating dock and CSO extension) will not impede navigation in the Bronx River. This portion of the Bronx River is not used by ocean-going or commercial vessels.

**OPERATION***Surface Water Quality*

Starlight Park has a separate stormwater management plan to manage stormwater and reduce discharges to the Bronx River. Recreational boats visiting the park will be limited to small personal watercraft such as kayaks and canoes. These watercraft have shallow drafts and will not disturb the river bottom. Their use in the Bronx River will not result in significant adverse impacts to water quality. Therefore, operation of the park will not be expected to result in significant adverse impacts to water quality.

Naturalization of shorelines and planting of wetland areas with native wetland species will be expected to result in improvements to water quality. Installation of the CSO tide gate, increased green space, reduced impervious surfaces, and reductions in direct discharges to the river will result in additional benefits to water quality in the lower Bronx River. Therefore, operation of the Proposed Project will not be expected to result in significant adverse impacts to water quality.

### *Floodplains*

Per Executive Order 11988 and 23 CR 650, a Floodplain Analysis was conducted to ensure that the planned Greenway development that lies within the floodplain is the only practicable alternative for the proposed project (see Attachment D-A3).

Conversion of 1.35 HA (3.33 acres) of impervious surfaces to green space and improved stormwater management practices will improve the water retention and detention ability of the lands within the Project Site. This should result in increased infiltration and detention of stormwater, delaying the discharge of surface runoff to the Bronx River and reducing the volume of stormwater contributing to the potential for flooding. Shoreline naturalization will not impede flood waters and will be expected to slow the movement of floodwaters during extreme precipitation events. Therefore, operation of the Proposed Project will not be expected to result in significant adverse impacts to floodplains.

### *Navigable Waters*

The floating dock in the river will promote non-motorized recreational boating on the river, including kayaking and canoeing. The use of these types of small non-motorized watercraft will not be expected to result in adverse impacts to the aquatic environment or surrounding land and water uses. As the river is too shallow to allow for passage of commercial and ocean-going vessels and the passage of such vessels is also limited by the fixed bridges and weir, the Proposed Project will not create conflicts among recreational, ocean-going, or commercial vessels.

## **D. REFERENCES**

Brosnan, T.M. and M.L. O'Shea. 1995. New York Harbor Water Quality Survey: 1994. New York City Department of Environmental Protection, Marine Sciences Section, Wards Island, NY.

Larson, M. 2004. Stream rehabilitation in the highly urbanized Bronx River. 2004 Northwest Stream Restoration Design Symposium. February 3-5, Stevenson, WA.

Lawler, Matusky and Skelly Engineers (LMS). 1994. East River Combined Sewer Overflow Facility Planning Project Contract II. Task 14.7 – Water Quality Modeling of Bronx River. Draft. Performed under Subcontract to URS Consultants, Paramus, NJ. December 1994.

New York City Department of Environmental Protection (NYCDEP). 2003. 2002 Harbor Water Quality Survey Summary. New York, NY.

New York City Department of Environmental Protection (NYCDEP). 2004. New York Harbor Water Quality Survey Data for 1999 - 2003.

Rachlin, J.W. 2004. Personal communication with J.M. Wallin (AKRF, Inc., Hanover, MD) April 2004. Lehman College Laboratory for Marine and Estuarine Research, Bronx, NY.

Rachlin, J.W. 2004. Field data from Lehman College's Laboratory for Marine and Estuarine Research study of the Bronx River Estuary, 2002-2003. Bronx, NY

**A. LEGAL FRAMEWORK**

The Bronx River Greenway Project is located within New York City's Coastal Zone Boundary as outlined in the Department of City Planning's Coastal Zone Boundary of New York City, June 1986. As such, this chapter discusses the Proposed Project with respect to coastal zone management.

The federal Coastal Zone Management (CZM) Act of 1972 was established to support and protect the distinctive character of the waterfront, and set forth standard policies for reviewing proposed development projects along coastlines. In response to the CZM Act, New York State adopted its Coastal Management Program, designed to balance economic development and preservation by promoting waterfront revitalization and water-dependent uses while protecting fish and wildlife, open space and scenic areas, public access to the shoreline and farmland, and minimizing adverse changes to ecological systems and erosion and flood hazards.

The program encourages coordination among all levels of government to promote sound waterfront planning and requires consideration of the program's goals in making land use decisions. It also provides for local implementation when a municipality adopts a local waterfront revitalization program, as is the case in New York City. The New York State Department of State (NYSDOS) administers the program at the State level, and the New York City Department of City Planning (DCP) administers it in the City.

The *New York City Waterfront Revitalization Program* (WRP) is the City's principal coastal zone management tool. The WRP was originally adopted in 1982 and approved by NYSDOS for inclusion in the New York State Coastal Management Program. The WRP establishes the City's policies for development and use of the waterfront and provides a framework for evaluating discretionary actions in the coastal zone. WRP was revised and a new WRP approved by the City Council in October 1999. In August 2002, the New York State Department of State and Federal (i.e., the U.S. Army Corps of Engineers) authorities adopted the City's 10 WRP policies for projects located within the City boundaries. This chapter reviews the 10 New York City coastal zone policies of the WRP, and assesses, where applicable, the general consistency of the project with these policies. NYSDOS issued its determination of General Concurrence for the Proposed Project on December 9, 2004.

**B. LOCAL WATERFRONT REVITALIZATION PROGRAM (LWRP) CONSISTENCY DETERMINATION**

New York City's WRP includes 10 policies designed to maximize the benefits derived from economic development, environmental preservation, and public use of the waterfront, while minimizing the conflicts among those objectives. Each policy is presented below, followed by a discussion of the Proposed Project's applicability to, and consistency with, the policy.

**Policy 1:** Support and facilitate commercial and residential development in areas well-suited to such development.

*Policy 1.1: Encourage commercial and residential redevelopment in appropriate coastal zone areas.*

The Proposed Project does not include any commercial or residential development. Therefore, this policy does not apply.

*Policy 1.2: Encourage non-industrial development that enlivens the waterfront and attracts the public.*

**Bronx River Greenway**

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Goals of the Proposed Project include enhancement of public access to the Bronx River and provision of a quality facility for people to cycle, walk, run, or skate for transportation, recreation, or exercise. The provision of open space, visual access, upland connections, and water-related uses by the Proposed Project will be consistent with this policy.

*Policy 1.3: Encourage redevelopment in the coastal area where public facilities and infrastructure are adequate or will be developed.*

The Proposed Project is a public open space that does not include redevelopment activities. Therefore, this policy does not apply.

**Policy 2:** Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.

*Policy 2.1: Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.*

The Proposed Project is not located in a Significant Maritime and Industrial Area; therefore, this policy is not applicable.

*Policy 2.2: Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas.*

The Proposed Project does not include a working waterfront use. Therefore, this policy does not apply.

*Policy 2.3: Provide infrastructure improvements necessary to support working waterfront uses.*

The Proposed Project does not include a working waterfront use. Therefore, this policy does not apply.

**Policy 3:** Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation centers.

*Policy 3.1: Support and encourage recreational and commercial boating in New York City's maritime centers.*

One goal of the Proposed Project is to improve public access to the Bronx River waterfront. The construction of a canoe and kayak floating dock in the river will promote recreational boating on the river. Commercial boating is not important on this river due to its shallow depths and the location of a weir between East 172nd Street and East 174th Street. Commercial vessels have not used the river since the 1920s. Therefore, the Proposed Project will be consistent with this policy.

*Policy 3.2: Minimize conflicts between recreational, commercial, and ocean-going freight vessels.*

For the reasons noted above, the Bronx River is not an important waterbody for commercial boats. The river is too shallow to allow passage of commercial or oceangoing vessels. Therefore, the Proposed Project will not create conflicts among recreational, ocean-going, or commercial vessels and will be consistent with this policy.

*Policy 3.3: Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.*

Recreational boats that will use the proposed floating dock include small personal watercraft such as kayaks and canoes. The use of these types of small watercraft will not be expected to result in adverse impacts to the aquatic environment or surrounding land and water uses. Therefore, the Proposed Project will be consistent with this policy.

**Policy 4:** Protect and restore the quality and function of ecological systems within the New York City coastal area.

*Policy 4.1: Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas, Recognized Ecological Complexes and Significant Coastal Fish and Wildlife Habitats.*

The Project Site is not located within a Special Natural Waterfront Area, Recognized Ecological Complex, or Significant Coastal Fish and Wildlife Habitat. Therefore, this policy is not applicable.

*Policy 4.2: Protect and restore tidal and freshwater wetlands.*

There are no freshwater wetlands on the Project Site. Tidal wetlands on the Project Site include littoral zone, mudflats, and vegetated areas with native and introduced wetland species. In addition to the anticipated water quality improvements which will benefit wetland areas (described in detail in the response to Policy 5), other elements of the Proposed Project include removal of bulkheads and restoration of natural shoreline with native wetland plantings, where feasible, and removal of invasive/noxious species such as Japanese knotweed and common reed. Therefore, the Proposed Project will be consistent with this policy.

*Policy 4.3: Protect vulnerable plant, fish, and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.*

Except for occasional transient individuals, no federally-listed or state-listed or proposed endangered or threatened species, or rare ecological communities are known to exist in the project area.

*Policy 4.4: Maintain and protect living aquatic resources.*

Improvements to water quality of the Bronx River resulting from the reduction in stormwater runoff and restoration of wetland habitats associated with the Proposed Project will improve conditions for living aquatic resources in the lower Bronx River. All work in wetland areas will be designed to minimize impacts to adjacent areas. Therefore, the Proposed Project will be consistent with this policy.

**Policy 5:** Protect and improve water quality in the New York City coastal area.

*Policy 5.1: Manage direct or indirect discharges to waterbodies.*

All construction activities will be carefully monitored to avoid and/or minimize discharges to the lower Bronx River. Stormwater from the Project Site will be managed to reduce direct discharges to the Bronx River. A stormwater pollution prevention plan (SWPPP) will be developed in accordance with NYSDEC's State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity Permit No. GP-02-01. Best management practices (BMPs), such as silt fences, will be implemented on site in accordance with NYSDEC's technical standard for erosion and sediment control presented in "New York Standards and Specifications for Erosion and Sediment Control" (January 2004) and will minimize potential

**Bronx River Greenway**

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impacts to surface waters. Conversion of approximately 1.35 hectares (HA) (3.33 acres) of paved areas to green space will also decrease direct runoff to the river. Therefore, the Proposed Project will be consistent with this policy.

*Policy 5.2: Protect the quality of New York City's waters by managing activities that generate non-point source pollution.*

Implementation of the SWPPP will minimize discharges to the river during construction. Stormwater management measures implemented following construction decrease the amount of stormwater runoff and non-point source pollution from the Project Site. Therefore, the Proposed Project will be consistent with this policy.

*Policy 5.3: Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes or wetlands.*

As described above, an SWPPP will be prepared and implemented in accordance with NYSDEC's guidance. The SWPPP will contain measures to minimize areas of disturbance and impacts to adjacent habitat, and to manage stormwater discharged to the Bronx River. Areas temporarily disturbed during construction and restoration work will be restored to their original condition through proper grading, and all temporary structures and materials will be removed following construction. Designated wetland areas to be protected will be prominently marked or barricaded. Results of the bathymetry study will be used to minimize the amount of dredging required for construction of the floating dock. Extension of the CSO by 9 m (30 feet) will adversely impact 0.016 HA (0.04 acres) of littoral zone wetland. NYSDOT will mitigate for the loss of littoral zone through the creation of wetlands within the Project Site. Therefore, the Proposed Project will be consistent with this policy.

*Policy 5.4: Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.*

As described above, the Proposed Project will decrease stormwater discharges to the lower Bronx River and should result in improved water quality. The Proposed Project will not be expected to affect groundwater. Water is continuously flowing from an underground source just north of the East 174th Street viaduct. If this water is determined to be from a natural source, the project will retain and enhance the spring and associated small stream as a feature of the park and Greenway. Therefore, the Proposed Project will be consistent with this policy.

**Policy 6:** Minimize the loss of life, structures, and natural resources caused by flooding and erosion.

*Policy 6.1: Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the condition and use of the property to be protected and the surrounding area.*

The entire shoreline of the Bronx River within the Project Site is stabilized with riprap or bulkhead. There is a small area of natural rock-lined shoreline. Conversion of approximately 1.35 HA (3.33 acres) of impervious surfaces to green space will improve the water retention and detention within the Project Site which should reduce the potential for flooding. Restoration of natural shorelines where bulkheads currently exist in the vicinity of the currently paved properties will be conducted where feasible. The Proposed Project will not impede flood waters or result in increased flooding of adjacent areas. All disturbed and graded areas will be planted to minimize erosion. In accordance with the SWPPP, measures to reduce erosion will be implemented during construction. Therefore, the Proposed Project will be consistent with this policy.

*Policy 6.2: Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.*

As described above, various elements of the Proposed Project will have the potential to decrease the discharge of stormwater to the Bronx River, which may decrease the potential for flooding along the river. Therefore, the Proposed Project will be consistent with this policy.

*Policy 6.3: Protect and preserve non-renewable sources of sand for beach nourishment.*

There are no non-renewable sources of sand on or near the Project Site; therefore, this policy does not apply.

**Policy 7: Minimize environmental degradation from solid waste and hazardous substances.**

*Policy 7.1: Manage solid waste material, hazardous wastes, toxic pollutants, and substances hazardous to the environment to protect public health, control pollution and prevent degradation of coastal ecosystems.*

Due to historical uses of the Project Site, contaminated soils exist in portions of the site, including Starlight Park. Starlight Park is currently undergoing cleanup, which is anticipated to be complete prior to construction of the project. The greatest potential for exposure to any site contamination would occur during demolition of existing structures and during any soil disturbance associated with development of the Greenway. Samples collected from each of the twenty-six locations contained at least one type of contaminant (SVOCs, VOCs, PCBs, or Metals) at levels that exceed either STARS or RSCO guidance values; and therefore, any soils disturbed along the project site during construction should be considered as potentially contaminated. With the exception of the Apex Auto site, soils across the site did not exhibit hazardous waste characteristics based on TCLP analysis. However, the RCRA hazardous waste level for lead was exceeded in several samples collected from the southwest region of the Apex Auto site. Soils to be excavated in this area should be considered as potentially contaminated and hazardous. It is possible that other areas of significant contamination exist on the Apex site in areas not accessible for sampling due to surface obstructions and daily operations.

Areas identified with surface soil (top two feet below final grade) contamination will be addressed in one of the following ways: excavate and dispose of in accordance with applicable rules and regulations; fence to restrict Greenway user access; or cover with impervious surface (e.g., asphalt) or at least two feet of clean soil to eliminate future exposure pathways.

During the final design of the project, provisions will be included in the contract documents to ensure any contaminated and/or hazardous sediments, soil or groundwater will be handled, transported, and disposed of in accordance with all applicable federal, state and local regulations. A site-specific Environmental Health and Safety Plan (HASP) will be prepared and implemented to protect workers, the community and the river from impacts from known or potential contaminated soil or groundwater. The HASP will include procedures to: minimize the generation of dust (and both work zone and community dust monitoring); properly remove and dispose of contaminated soil and procedures to address contamination (including tanks, drums, etc.) unexpectedly encountered; and manage any groundwater, should dewatering be required.

Solid wastes generated during construction will be disposed of by a licensed waste hauler at an appropriate licensed facility (to be determined). As discussed above, the Proposed Project will include pollution prevention measures such as reduction of direct discharges to the Bronx River. Therefore, the Proposed Project will be consistent with this policy.



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*Policy 7.2: Prevent and remediate discharge of petroleum products.*

As discussed above under Policy 7.1, soil sampling will be completed prior to construction to better determine the nature and extent of any contamination. If the soil sampling program reveals the presence of petroleum products within the Project Site, or if petroleum products are encountered during construction activities, such products will be handled, remediated, and/or disposed of in accordance with all applicable laws, rules, and regulations. As a result, the Proposed Project will be consistent with this policy.

*Policy 7.3: Transport solid waste and hazardous substances and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.*

All solid waste generated by the Proposed Project will be transported by a licensed waste hauler according to applicable laws and regulations. As a result, the Proposed Project will be consistent with this policy.

**Policy 8: Provide public access to and along New York City's coastal waters.***Policy 8.1: Preserve, protect and maintain existing physical, visual, and recreational access to the waterfront.*

The Proposed Project will facilitate access to the waterfront by providing a bike and pedestrian path along the Bronx River, three new bridges crossing the river, a new waterfront open space between Westchester and East Tremont Avenues, and a canoe and kayak floating dock. The Proposed Project will not create any new significant visual obstructions to the Bronx River. Therefore, the Proposed Project will be consistent with this policy.

*Policy 8.2: Incorporate public access into new public and private development where compatible with proposed land use and coastal location.*

As discussed in response to Policy 8.1, public access to the Bronx River will be provided as part of the Proposed Project via the pathway, new waterfront open space between Westchester and East Tremont Avenues, and non-motorized watercraft dock. Therefore, the Proposed Project will be consistent with this policy.

*Policy 8.3: Provide visual access to coastal lands, waters, and open space where physically practical.*

As discussed in response to Policy 8.1, the Proposed Project will improve visual access to the Bronx River waterfront and will be consistent with this policy.

*Policy 8.4: Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.*

The Proposed Project will open up the waterfront for recreational activities and create recreational opportunities available at Starlight Park. Therefore, the Proposed Project will be consistent with this policy.

*Policy 8.5: Preserve the public interest in and use of lands and waters held in public trust by the State and City.*

The Proposed Project will not interfere with the continued use or ownership of land and waters held in the public trust. Therefore, the Proposed Project will be consistent with this policy.

**Policy 9:** Protect scenic resources that contribute to the visual quality of the New York City coastal area.

*Policy 9.1: Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.*

The Proposed Project is not within an area suitable for working waterfront activities. However, several project elements will improve the visual quality associated with the Bronx River waterfront. These improvements include: construction of the new amphitheater park at the northern portion of the Project Site, viewing platforms, naturalization and planting of shorelines where feasible, increased landscaping at the improved street intersections, and the removal of garbage and debris from the shorelines and upland areas. Therefore, the Proposed Project will be consistent with this policy.

*Policy 9.2: Protect scenic values associated with natural resources.*

The scenic value of the Project Site will be significantly increased by the removal of garbage and debris from the river and shorelines, the increase in green space, the restoration of natural shorelines, the removal of invasive species from wetland and other natural areas, and planting with native species. Therefore, the Proposed Project will be consistent with this policy.

**Policy 10:** Protect, preserve, and enhance resources significant to the historical, archaeological, and cultural legacy of the New York City coastal area.

*Policy 10.1: Retain and preserve designated historic resources and enhance resources significant to the coastal culture of New York City.*

The Westchester Avenue station of the New York, New Haven and Hartford Railroad, located next to the AMTRAK tracks is eligible for New York City Landmarks designation. However, in a letter dated March 24, 2005, the State Historic Preservation Office (SHPO) determined that the station does not meet the State/National Register (S/NR) criteria due to its deteriorated state and loss of some historic features. The U.S. Post Office, West Farms Station on Devoe Avenue has been determined to be eligible for S/NR listing as part of a thematic nomination of U.S. post offices built between 1858 and 1943. However, neither the Westchester Avenue train station nor the post office building are close enough to project construction activities to be affected by the Proposed Project.

The AMTRAK bridge and the No. 6 subway viaduct are eligible for S/NR listing. To avoid adverse impacts from construction activities, NYSDOT will implement construction protection plans for the AMTRAK and No. 6 subway bridges in consultation with SHPO and the New York City Landmarks Preservation Committee (LPC). Therefore, the Proposed Project will be consistent with this policy.

*Policy 10.2: Protect and preserve archaeological resources and artifacts.*

Archaeological Documentary Study was prepared for the Proposed Project December 2004. This study evaluates the possible presence of both potential Native American and 19th century archaeological resources within the archaeological area of potential effect (APE) (Figure D-11-2).

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SHPO and LPC reviewed and concurred with the 2004 Archaeological Documentary Study's determinations and recommendation of a series of soil borings in the four potentially sensitive areas prior to any archaeological field investigations. A soil boring program was completed in March 2005 and its results made an Addendum to the Study. It concluded that Areas 1, 2, 3, and 4 of the Project Site are indeed potentially sensitive for Native American and 19th-century archaeological resources, not having experienced extensive subsurface disturbance, with natural soils below fill in some areas and continuous natural strata from the surface down in others.

NYSDOT will conclude the Section 106 process during Final Design by following the State Education Department (SED) Work Scope and established Section 106 procedures between FHWA, NYSDOT and SHPO. NYSDOT's next step will be immediately to implement its plan for shovel pits and mechanical trenches to determine the presence, nature and extent of any potential archaeological resources, evaluate their S/NR eligibility and any develop any required mitigation. NYSDOT will then combine this information with that concerning Architectural resources, make a determination of effect for the project as a whole and forward its Finding with Summary Documentation to SHPO/LPC/FHWA for their review and concurrence. Therefore, the Proposed Project will be consistent with this policy.

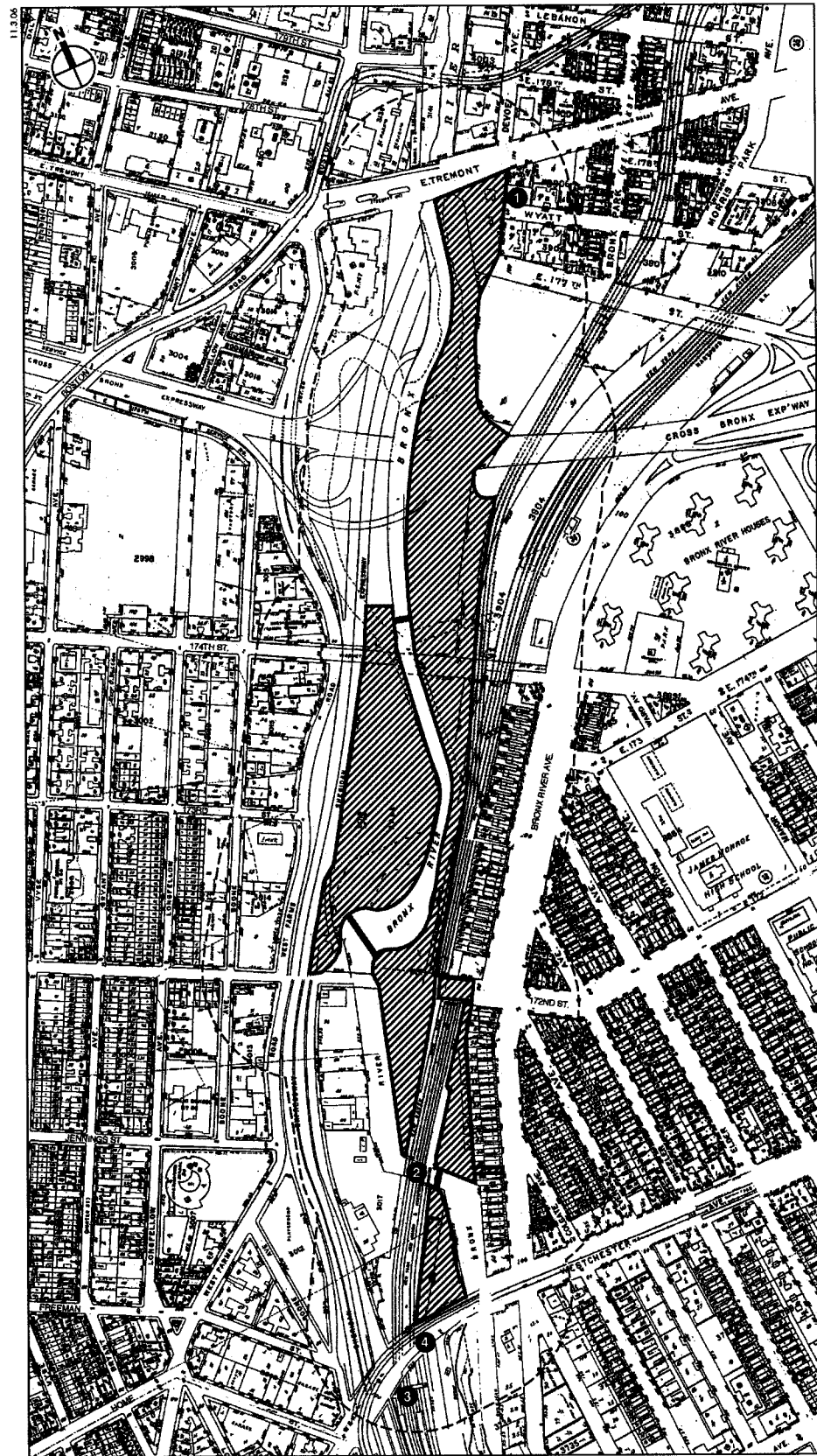
**Chapter D-11:****A. INTRODUCTION**

This chapter considers the potential effects of the proposed Bronx River Greenway multi-use path. It was prepared in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as implemented by 36 Code of Federal Regulations (CFR) Part 800. These regulations require that federal agencies consider the effects of their actions on any properties listed on or determined eligible for listing on the State and National Registers of Historic Places (S/NR), and that they afford the federal Advisory Council on Historic Preservation the opportunity to comment. S/NR-listed properties and properties determined eligible for S/NR listing can include archaeological resources, as well as historic resources, which can include buildings, structures, objects, sites, and districts. Further, these laws require the opportunity for public comment on the project's effects on cultural resources. The project's public outreach program was developed to comply with the National Environmental Policy Act (NEPA) and the NHPA with regard to public participation.

**Area of Potential Effect:** The Area of Potential Effect (APE) for archaeological resources is the area that will be disturbed for project construction. This is, horizontally, the Project Site itself (see Figures D-11-1 and 2) and, vertically, within this area to a depth of approximately 3m (10 feet), the deepest anticipated excavation for construction. Study areas for architectural resources are determined based on the area of potential effect for construction-period impacts, such as ground-borne vibrations, and on the area of potential effect for visual or contextual effects, which is usually a larger area. For this project, the APE for architectural resources has been defined as the area within an approximately 122 m (400-foot) radius of the Project Site (see Figure D-11-1). Within the latter APE, architectural resources that were analyzed include properties listed on the State and National Registers of Historic Places or S/NR-eligible properties, National Historic Landmarks (NHLs), New York City Landmarks (NYCLs) and Historic Districts, and properties determined eligible for landmark status. In addition, other properties in the study area were evaluated for their potential S/NR or NYCL eligibility.

**Evolution of Project Limits and Associated Section 106 Coordination:** Historic and cultural resource research, coordination and documentation needs have changed over the course of this project. The location and design of specific work to be performed by NYSDOT as one among several state and local agencies involved in a coordinated effort with the community to realize its longstanding goal of environmental improvement and revitalization of the Bronx River.

The Proposed Project's vision of non-motorized transportation and park improvements along the length of the Bronx River from Soundview Park north to East Tremont Avenue was to be implemented by the various agencies through a set of separate but coordinated contracts. Originally, since the NYC Department of Environmental Protection (NYCDEP) planned a multimillion dollar subsurface water storage facility at 172nd Street, it agreed in April, 2000 to prepare environmental documentation for the entire northern section of the project area from 172nd Street to Tremont Avenue. This was a CEQR Environmental Assessment (EA), but developed in concert with NYSDOT to simultaneously satisfy SEQR and NEPA requirements for any work NYSDOT planned in this segment. Under the same PIN, X027.05, NYSDOT was to design and construct the needed improvements for the remainder of the corridor from 172nd Street south to Soundview Park, for which it would do separate environmental documentation. Cultural resources coordination with involved agencies initially proceeded based on these limits.



 Project Site Area  
 Study Area Boundary (400-Foot Perimeter)

- Architectural Resources**
- ① West Farms Station, U.S. Post Office
  - ② Amtrak Bridge
  - ③ Westchester Avenue Station
  - ④ IRT Number 6 Subway Truss Bridge

0 500 FEET  
 SCALE

**Architectural Resources**  
 Figure D-11-1



Areas of Potential Archaeological Sensitivity  
Figure D-11-2

## **Bronx River Greenway**

Subsequent to these efforts, the project and interagency responsibilities in the corridor underwent significant change. NYCDEP postponed its 172nd Street-to-Tremont CSO project to 2012 and with that, its EA for the northern portion of the project area. The New York City Parks Department (NYCDPR) obtained Federal Enhancements funds for the portion of the Greenway on the east bank of the Bronx River from Westchester Avenue to the Bruckner Expressway and so took this work over from NYSDOT, and NYSDOT determined that, due to an upcoming Bruckner-Sheridan interchange project, any work from the Bruckner expressway south would best be done under that future project. NYSDOT then redefined its project limits as from Westchester Avenue north to Tremont Avenue, taking over all environmental documentation responsibilities from NYCDEP and NYCDPR for this portion of the City's Greenway system. It is within this new project area, between Westchester and Tremont Avenues, that NYSDOT proposes to build a 1.8km (1.14 mi) multi-use pathway and four bridges as a critical link in the City's Greenway system, including numerous incidental park and engineering features such as retaining walls, plantings, benches, etc.

## **B. EXISTING CONDITIONS**

### **BACKGROUND HISTORY**

The project site falls within the overlapping Bronx neighborhoods of West Farms, East Tremont, and Crotona Park East. The immediate project area (the APE for archaeological resources) south of East 172nd Street straddles the Bronx River and is generally comprised of paved, fenced parking/commercial lots behind bulkheads, with AMTRAK rail lines on the west and the very busy Westchester Avenue with its raised subway line to the south. The wider context (to the 400-foot limit describing the APE for architectural resources) consists of residential apartment buildings and city streets to the east and industrial uses and the Sheridan Expressway to the west. The central part of the site, from 172nd Street to the Cross Bronx Expressway (CBE), lies between the River and the AMTRAK rail lines and is generally unpaved and vegetated, varying from successional forest in the south, to mature forest just south of 174th Street, to old field meadows north of 174th Street with some remnant pavements and fences. In the larger context, the project area is lower than adjacent residential apartment buildings and city streets to the east and will be connected with new bridges to the extensive park development of Starlight Park on the west bank. North of the CBE, the project is a narrow riparian border with a successional forest, threading between ramps of the CBE, the Sheridan Expressway on the west and an extensive paved MTA bus depot on the east to 177th Street, then continuing briefly, to East Tremont Avenue. Both 177th Street and East Tremont Avenue will be extensively reconfigured.

In 1639 the Dutch West India Company purchased what would become the Bronx from the Lenape Indians. The first Europeans to settle in the area were the family of the Swedish sea captain Jonas Bronck, who bought a 500-acre tract of land between the Harlem and Bronx Rivers in 1641. Bronck's house, believed to have been located east of the Third Avenue Bridge in the vicinity of Lincoln Avenue and 132nd Street, was the site of a 1642 peace conference with the Wiechquaesgeck Indians. Around 1700, the remaining Native Americans left the southern Bronx. After 1775, the British Army controlled the Bronx, finally relinquishing control in 1783.

Although the Bronx remained largely rural and agricultural through the early 19th century, numerous industrial enterprises were located by 1812 along the Bronx River within the project area. An early industry was a saw and grist mill established at the end of the 17th century just to the south of East 180th Street. The mill continued to operate under different ownerships until the end of the 19th century, during which time it was enlarged and reconstructed into a large mill complex. Incorporating the industrialized riverfront, the village of West Farms became a town in 1846. After the end of the Civil War, West Farms became a bustling river port, and landfilling occurred along the western shoreline of

the river between 1846 and the 1870s. The project area was incorporated into New York City as part of the Annexed District in 1874.

In 1841 the New York and Harlem Railroad opened a station in Tremont to the west of West Farms, and although a village quickly developed around the station, with East Tremont acquiring township status in 1861, the larger area around the project site remained primarily rural until the 1890s. The latter half of the 19th century witnessed the opening of additional rail lines through the project area, and after the extension of the Third Avenue elevated line in the 1890s, the area underwent rapid development, with apartment buildings constructed along the elevated rail line corridor. A trolley line along Tremont Avenue soon connected the railroad station and the Third Avenue elevated line.

The development boom in the project area continued through the early 20th century with industrial complexes operating along the river that included coal yards, bleacheries, iron works, and a gas factory, and residential construction occurring in the surrounding area. In 1904, the original IRT subway line reached West Farms with stations at West Farms Square (East Tremont Avenue at Boston Road) and East 180th Street at Morris Park Avenue. The City purchased land along the eastern shoreline of the Bronx River north of 172nd Street and constructed the 180th Street IRT subway service yard near the river. The Westchester Avenue Station (discussed below) on the New York, New Haven & Hartford Rail Road line that runs along the river opened in 1908. An amusement park, Starlight Park, was built on the western shoreline in the 1910s that operated until the 1940s. Construction of the Cross Bronx Expressway (completed in 1955) cut a large swath through the project area, and construction of the Sheridan Expressway between 1958 and 1962 caused the Bronx River to be straightened and moved slightly eastward.

## ARCHAEOLOGICAL RESOURCES

**Previous Project Coordination:** In June 2001, the New York State Historic Preservation Office (SHPO) reviewed an earlier version of the Proposed Project that would have constructed a Greenway between Soundview Park and East 172nd Street. That project area overlaps with the southern portion of the Project Site. It is important to note that the documentation sent to SHPO by NYSDOT was a copy of a State Education Cultural Resources Survey prepared in 1987 for another project, Hunt's Point Access (X730.17), whose project limits overlapped only a small part of those for NYSDOT's project as defined at that time. It was not expected that this would be all the documentation needed; rather, NYSDOT only sought to open discussion with SHPO and the City of New York Landmarks Preservation Commission (LPC) concerning the Proposed Project as defined at that time. Without discussion or further review, however, in a letter dated June 28, 2001 SHPO determined that the previous version of the project would have No Impact upon S/NR-listed or S/NR-eligible cultural resources. LPC reviewed the same materials in June 2001 and issued two "Environmental Review" letters, both dated June 19, 2001, determining that the Project Site had no archaeological or architectural significance.

These materials and opinions were forwarded to the Federal Highway Administration (FHWA) who responded on July 25, 2003 with its concurrence that the project would have "No Effect" on cultural resources and its indication that the requirements of 36 CFR had been met.

In parallel coordination for the northern segment, NYCDEP commissioned the consulting firm of URS to perform a Phase IA Archaeological survey and Documentary Research Study for the East River CSO (April 2000) for the area from 172nd Street to Tremont Avenue. The report recommended Phase 1B archaeological testing, specifically 4 backhoe trenches (two on each side of the Bronx River between 172nd to 174th Street) and shovel test pits on both sides of the River from 177th to 179th Streets for potential revolutionary war remains.



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When NYCDEP postponed its CSO project and NYSDOT redefined its project limits as described above, further coordination with SHPO, LPC and FHWA was required. NYSDOT's cultural resources coordination up to that time had applied to a project area largely south of the redefined current project limits.

**Ongoing Project Coordination:** The redefined project limits included a large area that had not been thoroughly investigated for archaeological sensitivity under prior studies. Therefore, NYSDOT sent letters to SHPO and LPC on April 21, 2004 alerting both to the location shift and asking whether SHPO's original opinion and LPC's determinations were still valid or whether additional information was needed.

SHPO responded on June 9, 2004 confirming its No Impact opinion but LPC, in an Environmental Review letter dated May 6, 2004, found that there is the potential for the recovery of Native American and 19th-century archaeological resources on the project site, based on a review of historic maps and archaeological sensitivity models. Accordingly, LPC recommended that an archaeological documentary study be performed for the Project Site to clarify the initial sensitivity assessment and to provide a threshold for the next level of archaeological review, if necessary. Therefore, as requested by LPC, an Archaeological Documentary Study was prepared for NYSDOT by Historical Perspectives, Inc. in December 2004. That report was submitted both to SHPO and LPC on March 7, 2005 for review and comment, and in a letter dated March 24, 2005 LPC concurred with the recommendations presented in the report. SHPO also concurred with the report's recommendations, per correspondence dated May 25, 2005.

**Archaeological Documentary Study Summary:** The Archaeological Documentary Study evaluates the possibility that archaeological resources may exist on the Project Site. As requested by LPC, it focuses on both potential Native American archaeological resources and on those from the 19th century. An assessment of the Project Site's archaeological sensitivity was based on the presence of known archaeological sites in the vicinity, a review of prior archaeological studies and soil borings (including the previously described URS investigations performed for DEP as well as the study performed for the Hunts Point Access project (X730.17) to the south), site file research at SHPO and the New York State Museum, a consideration of the area's former and current topographic and physiographic characteristics, cartographic research, and a review of documentary materials. The report acknowledges that no prior investigations adequately covered the portion of the redefined project's APE between the Cross Bronx Expressway and Westchester Avenue. In addition to documentary research, an initial pedestrian reconnaissance and photographic record was conducted in October 2004, noting areas of obvious ground disturbance. The following discussion summarizes the report's findings.

In general, the Project Site has a high potential sensitivity for Native American archaeological resources, because a Native American presence is well documented for the Bronx and the area immediately surrounding the Project Site. A known Native American path ran along the Bronx River with a section following East Tremont Avenue, and several inventoried archaeological sites have been identified in the vicinity of the Project Site. Of those sites, shell middens depicted on the Westchester County Historical Society's Map of Westchester County Showing Indian Occupation (1978) and three sites recorded in 1922 by former state archaeologist Arthur C. Parker may have been located within the Project Site. Because of the altered course of the river and the unreliability of older maps, however, it cannot be said conclusively that these were within the archaeological APE.

Typically, Native American resources are encountered within several feet of the historic land surface, but resources can be buried much deeper adjacent to a river with alluvial floodplain, such as the Bronx River, and the accretion of alluvial deposits can serve to protect potential resources from subsequent

historic disturbance. While the project site has a high potential for Native American resources, sections of it have experienced extensive prior disturbance. In some areas, this disturbance may have been deep enough to negate the potential for resources to have remained undisturbed on the Project Site.

The Archaeological Documentary Study divides the large Project Site into seven areas to facilitate the discussion of the site's record of subsurface disturbance, 19th-century occupational history, and potential archaeological sensitivity for Native American and 19th-century resources (see Figure D-11-2). From north to south, the areas are as follows:

- Area 1 is the northernmost portion of the Project Site, bounded by East Tremont Avenue and the Cross Bronx Expressway;
- Area 2 is roughly bounded by the Cross Bronx Expressway and East 174th Street;
- Area 3 is located on the east side of the Bronx River between East 174th and East 172nd Streets;
- Area 4 is a small triangular section of the Project Site, which is bounded by the Bronx River on the west, East 172nd Street on the north, the AMTRAK rail line on the east, and the AMTRAK bridge over the river on the south;
- Area 5 is adjacent to Area 4 on the east side of the rail line between East 172nd Street on the north and a bend in the Bronx River on the south;
- Area 6 is the current site of Starlight Park on the west side of the Bronx River between East 174th and East 172nd Streets; and
- Area 7 is the southernmost portion of the project site, bounded by the Bronx River on the north and east, the AMTRAK rail line on the west, and Westchester Avenue on the south.

The following discussion summarizes the potential archaeological sensitivity of the seven Project Site areas.

#### *AREA 1*

Area 1 of the Project Site is potentially sensitive for both Native American and 19th-century archaeological resources outside of the locations of modern structures that include a gas station and automobile repair facility near East Tremont Avenue. Although documentary evidence confirms that a complex of 19th-century mills owned by Philip Lydig were located north of the project site, there is the potential for a mill site to exist in Area 1.

Archaeological resources may be located within Area 1 at depths of up to 6 to 9 feet below grade, although it is possible that archaeological resources, if they exist, may have been disturbed by previous construction for Exposition Park (an amusement park) in 1917, Starlight Park that took over and expanded Exposition Park in the late 1920s, and a U.S. Army vehicle maintenance facility that was located on the site between 1942 and 1946. It cannot be clearly determined whether documented disturbances related to prior construction have exceeded the depths at which archaeological resources—both Native American and 19th-century resources— may be identified.

A 2001 Phase 1A survey of the East River CSO Facility reviewed soil borings taken prior to the construction of the Cross Bronx Expressway and for the proposed construction of the Bronx River CSO Conduit. The site evaluated in that Phase 1A survey overlapped a small portion of Area 1 at the intersection of East 177th Street and Devoe Avenue. An analysis of boring logs collected between the Cross Bronx Expressway and East 177th Street found that bedrock was buried between three and 17 feet

## **Bronx River Greenway**

below grade. Fill of varying thickness above sand and gravel sediments was identified above bedrock. The Phase 1A survey concluded that potential Native American deposits may be found in the vicinity of the borings between six and nine feet below grade.

### ***AREA 2***

Area 2 is potentially sensitive for archaeological resources. Since Area 2 was historically about 500 feet east of the Bronx River, any undocumented mills associated with the Lydig estate would not have been located within Area 2. The only documented 19th-century development within Area 2 was the Alexander Smith Carpet Factory (1851-1860s) that may or may not have been located within Area 2, as it was depicted adjacent to the river on historic maps. This particular factory was the early site of a nationally-significant carpet enterprise and, although foundations of the factory may not provide much of an archaeological footprint, the associated buried features on the grounds may be revealing of the workers at the complex. In addition, three late-19th-century buildings once stood adjacent to the northeast corner of Area 2, but this area was subsequently disturbed by the extensive engineering efforts required to meet the necessary grade of the New York, Westchester, and Boston Railway. Furthermore, the Cross Bronx Expressway and support structures were built in this vicinity.

Area 2 experienced extensive 20th-century construction disturbance for Starlight Park and the Cross Bronx Expressway that may have disturbed any potential archaeological resources, if they existed on the Project Site. However, since it is possible that fill was added to the area, as is evident in soil borings collected for the construction of the Cross Bronx Expressway, shaft features (e.g., privies) associated with the carpet factory may exist beneath the fill. Isolated areas of Native American archaeological resources may also exist.

### ***AREA 3***

Area 3 is potentially sensitive for both the footprint and associated shaft features of a factory, as well as potential Native American resources. A lack of 20th-century development in Area 3 suggests that portions are potentially sensitive for remnants of a mid- to late-19th-century factory that was later used as a dwelling and ice house. Since the factory stood prior to the availability of sewer and water lines, which were laid in Westchester Avenue in the late 19th century and on Bronx River Avenue between 1921 and 1927, there is the potential for shaft features to exist within Area 3. Further, since Area 3 lacked extensive historical land manipulation, it is possible that Native American resources could remain within undisturbed portions of this section of the Project Site.

### ***AREA 4***

Area 4 is considered potentially sensitive for Native American resources, because of the probable accretion of alluvial deposits and because it did not experience historical development. Documentary and cartographic research indicates that Area 4 was not developed historically, and, therefore, has no potential for 19th-century resources. Although this portion of the Project Site was lower-lying than the areas to the north and was probably never utilized for extended Native American habitation, it is possible that Area 4 was utilized for resource procurement and/or processing and that potential remains from those uses may exist within this section of the Project Site. Most likely, this low-lying area experienced repeated flooding that would have deposited deep levels of alluvial strata over potential Native American resources that could include shell middens and resource procurement stations.

*AREA 5*

Area 5 is not considered sensitive for Native American or 19th-century archaeological resources. Development in the 1940s of the Bronx Iron and Metal Corporation complex and the Bronx River bulkhead would have disturbed any potential Native American resources. Further, Area 5 experienced virtually no 19th-century development, other than that of the railroad to the west. By 1898, a house stood beyond Area 5 with three small wood outbuildings within the Project Site, but these structures were razed by 1927 and their location was subsequently developed with the Bronx Iron and Metal Corporation complex and a parking lot. The site of the parking lot has been graded and leveled. Topographic maps show that the site previously sloped downward to the river—the parking lot is currently level.

*AREA 6*

Area 6 (the current Starlight Park) is not considered sensitive for archaeological resources, and in any case it is currently being disturbed for the remediation of hazardous materials. By 1872, Area 6 was partially developed with a gas works that remained on the site through the mid-20th century, although it was inactive by the 1890s. Remnants of the gas works would likely only entail building foundations, piping supports, and footings, as all above-grade facilities and equipment have been removed. Since the coal-to-gas process in the 19th century is well studied, little would be gained by archaeologically investigating any building footprints, should they exist. Potential shaft features from privies for company workers were most likely located on-site, as the gas works predated the availability of sewer and water lines. However, subsequent subsurface disturbance would have destroyed any shaft features, if they existed. In the 1940s, all of Area 6 was landscaped and turned into a City park, which is now being remediated for hazardous materials. Similarly, the location of several wooden buildings that were associated with building material yards once located in Area 6 were later disturbed by the development of Starlight Park.

Although Area 6 may have once been sensitive for Native American resources given its proximity to the Bronx River, the majority of the site has experienced subsurface disturbance with the construction and demolition of the gas works and other commercial structures, the realignment of the river, the realignment of West Farms Avenue, and the creation of Starlight Park. Therefore, Area 6 is not considered potentially sensitive for Native American resources.

*AREA 7*

Area 7 is not considered sensitive for archaeological resources. This portion of the Project Site never appeared to contain historical dwellings or structures that would yield archaeological deposits, having only been developed with a series of warehouses and storage buildings in the 20th century. Any Native American archaeological resources would have been destroyed by extensive 20th-century construction episodes associated with an existing graded and leveled parking area, construction and reconstruction of the rail line and bridge over the Bronx River, filling and leveling for a new bulkhead, and multiple replacements of the bridge at Westchester Avenue. All of these actions disturbed the original stratigraphy of Area 7, and it is therefore highly unlikely that any potential Native American deposits, which may have once been located along the river, would have remained undisturbed.

**Subsurface Testing:** To date, aside from the analysis of boring logs, no subsurface testing specifically for archaeology (shovel pits, mechanical excavation) has been performed within the APE. The 1987 study reviewed by SHPO and LPC for the prior project limits included shovel tests, but none of those locations fall within the current archaeological APE.

**Bronx River Greenway****ARCHITECTURAL RESOURCES**

There are four known architectural resources in the architectural APE (see Figure D-11-1). The U.S. Post Office, West Farms Station at 362 Devoe Avenue has been determined eligible for S/NR listing as part of a thematic nomination of United States Post Offices built in New York State between 1858 and 1943. Constructed in 1935 as a public works project, the West Farms Station is a 2-story, brick Colonial Revival-style building. It is located at the northeast corner of the intersection with Wyatt Street, with the main façade fronting on Devoe Avenue. The building is symmetrically and simply designed with windows with stone sills and lintels and a recessed entrance flanked by stone Doric columns supporting an entablature. "United States Post Office" is carved in the frieze above the entrance. The roof is gabled with a stone cornice. The date "1935" is applied in metal numbers to the gable fronting on Wyatt Street. Decorative metal lanterns are affixed to both street facades above the first floor. There is a similarly designed onestory wing with a loading dock at the building's rear. In the immediate vicinity of the post office building, the Project Site consists of an overgrown paved area surrounded by chain link fencing that contains trees, parked cars, and garbage.

Three architectural resources that meet the eligibility criteria for S/NR listing and/or NYCL designation were identified in the field survey of the APE conducted for this project (see Figure D-11-1) and were included in the Cultural Resources section of NYSDOT's newly-revised Design Report that was based on NYCDEP's prior Draft Environmental Assessment. In accordance with Section 106 of the NHPA, information on the three potential architectural resources was submitted to the SHPO on March 7, 2005 for evaluation and determination of National Register eligibility. In addition, information on the three potential architectural resources was submitted to LPC for evaluation and determination of NYCL eligibility. LPC, on March 24, 2005, requested photographs, which were subsequently sent.

Approximately 500 feet north of Westchester Avenue, the AMTRAK Northeast Corridor Line traverses the Bronx River on a Scherzer-type bascule bridge. This steel bridge was constructed in 1907 and is one of a small number of bascule bridges in New York City. In a letter dated March 24, 2005, SHPO determined that this bridge meets S/NR eligibility Criterion C in the area of engineering and as an example of a surviving early 20th century Scherzer-type bascule bridge. It is one of only twelve bascule bridges in New York City. The bridge crosses an industrial stretch of the river that is characterized by junk yards and auto repair garages. LPC concurred.

The Westchester Avenue Station of the New York, New Haven & Hartford Rail Road is located at the southeast corner of the intersection of Westchester and Whitlock Avenues. Constructed in 1908, it is abandoned and deteriorating. Designed by Cass Gilbert in an eclectic Beaux Arts style, the station is a richly decorated terra cotta building that still extends over the tracks below, which are now operated by AMTRAK. Although in a poor state of disrepair, the building still retains much of its original multi-colored terra cotta ornamentation of rosettes, foliage, wheels, and the letters "NYH." Other remaining features include tiles on the hipped roof, a terra cotta chimney, terra cotta arches on the south and north facades, brackets supporting the roof eaves, and metal letters reading "Westchester Avenue. NY-NH-&-H-RR" over the north arched entrance. In 1958, construction of the Arthur Sheridan Expressway exit ramp immediately adjacent to the station removed the original entrance portico. Covered stairs leading from the extension to the tracks are no longer extant and all the windows and entrances have been infilled with concrete blocks. In a letter dated March 24, 2005, SHPO determined that the station does not meet the National Register criteria due to its deteriorated state and loss of some historic features. This opinion, together with the requested photographs, was forwarded to LPC who asked for a site visit. This took place on April 19, 2005. Although this building is deteriorated and has lost some of its original features, LPC has determined, in a letter dated April 29, 2005, that the station appears eligible for NYCL designation.

Where it curves from a north-south alignment to an east-west one over the Bronx River, the IRT No. 6 subway viaduct is carried on a multiple-span truss bridge. Constructed around 1920, the bridge runs above and parallel to Westchester Avenue. The western span crosses over the AMTRAK right of way (ROW), and it is a Pratt through-truss. The eastern span over the river is a Parker truss. While the Pratt truss is a common bridge type, the Parker truss is more uncommon. In a letter dated March 24, 2005, SHPO determined that the bridge is eligible for S/NR listing under Criterion C in the area of engineering. LPC concurred.

## **C. PROBABLE IMPACTS**

### **NO ACTION**

#### *ARCHAEOLOGICAL RESOURCES*

Without the Proposed Project, it is assumed that there will be no subsurface disturbance to most of the Project Site. Starlight Park is currently being disturbed for contaminated materials remediation. However, since it has been determined that the site of Starlight Park is not archaeologically sensitive, no resources will be disturbed in any case.

#### *ARCHITECTURAL RESOURCES*

The only project planned or under construction in the study area with an anticipated completion date before the project build year is the contaminated materials remediation of Starlight Park. This project is not located in the vicinity of any of the four architectural resources.

### **PROPOSED PROJECT**

#### *CONSTRUCTION*

##### *Archaeological Resources*

As described above, the Archaeological Documentary Study found four areas of the Project Site (Areas 1, 2, 3, and 4) to be potentially sensitive for archaeological resources. The study was submitted to both the SHPO and LPC on March 7, 2005 for review and comment, and the SHPO and LPC have concurred with the report's sensitivity determinations and recommendations, as written in letters dated May 25, 2005 and March 24, 2005, respectively. Where the Proposed Project would involve excavation in sensitive areas, it could result in adverse effects to archaeological resources should they exist on the Project Site. Therefore, to further investigate the presence of significant archaeological resources, the documentary study recommended that a series of soil borings be taken in the four potentially sensitive areas prior to any archaeological field investigations. A soil boring program was completed in March 2005. Borings were taken in the four areas of the Project Site identified as having potential archaeological sensitivity—deep borings were taken at the locations of the proposed pedestrian bridge piers and borings less than 33 feet deep were taken in locations where shallow excavation and surface work was proposed. The boring logs were reviewed by a professional archaeologist, and the findings were summarized in an Addendum to the Archaeological Documentary Study<sup>2</sup>. The Addendum also presented recommendations for further archaeological testing, and was submitted to the SHPO and LPC for review on June 20, 2005 with an indication that NYSDOT would complete testing (further excavation) during Final Design.

Based on a review of the soil borings, the Addendum concluded that Areas 1, 2, 3, and 4 of the Project Site are potentially sensitive for Native American and 19th-century archaeological resources. In each of the four areas, soil borings did not indicate extensive subsurface disturbance that would have

## **Bronx River Greenway**

destroyed any potential archaeological resources. Where fill layers were encountered, the boring logs revealed natural soils below. Other boring logs revealed levels of natural strata from the surface down to the bottom of the soil boring. The Addendum concluded that potential archaeological resources may be buried within the alluvial levels observed on the Project Site and that the depth of potential sensitivity varies depending on the depth of surface fill.

Section 4(f) applies to archaeological resources that warrant preservation in place. Any archaeological resources on the Project Site would be important because of what can be learned by data recovery. Therefore, Section 4(f) does not apply.

### *Architectural Resources*

It is not expected that the Proposed Project will have impacts to architectural resources during the Construction period. Two such resources—the AMTRAK bascule bridge and the No. 6 subway bridge—are located close enough (within 90 feet) to proposed construction activities to potentially be affected by them. To avoid impacts to the resources from construction-period vibrations, subsidence or other accidental damage, NYSDOT will implement construction protection plans for the AMTRAK and No. 6 subway bridges in consultation with the SHPO and LPC. Per correspondence dated March 24, 2005, the SHPO has recently determined the AMTRAK bascule bridge and the No. 6 subway bridge to be eligible for the S/NR. No determination of effect has been made. Neither the U.S. Post Office, West Farms Station nor the Westchester Avenue Station are located close enough to proposed construction activities to potentially experience construction-related effects.

It is possible that indirect impacts to the context or visual setting of the four architectural resources could result during construction. Grading, removal of retaining walls, construction of lookouts and pedestrian bridges, and other construction activities that will be visible from the surrounding bridges and transportation corridors could result in a temporary loss of context for the architectural resources nearby. However, any such impacts will only be temporary during the construction period.

### *OPERATION*

The Greenway segment between Westchester Avenue and East 172nd Street will not have adverse contextual or visual impacts to the Westchester Avenue Station, the No. 6 subway bridge, and the AMTRAK Bridge. Replacing the paved auto yard between the AMTRAK ROW and the west bank of the river and the paved Apex Auto facility on the river's east bank with a multi-use path and a naturalized shoreline will enhance the visual setting of the three resources. In addition, the Greenway will create new viewer groups for the AMTRAK Bridge, which is only slightly visible from Westchester Avenue, as well as new vantage points for viewing the historic resources away from busy roadways. Further, the two new pedestrian bridges located in this segment will be in keeping with the study area where there are numerous bridges over the Bronx River.

The northernmost segment of the Greenway will not have adverse contextual or visual impacts to the U.S. Post Office, West Farms Station. The new amphitheater and seating area—combined with the reconfigured intersection at East 177th Street, Devoe Avenue, and East Tremont Avenue—will be a visual improvement over the overgrown paved lot used for parking that is located across the street from the post office. In addition, trees will be planted in this area to create an entrance to the Greenway and a planted pedestrian island will be constructed in the intersection. These features will not block views of the post office and will improve the pedestrian environment around the historic resource, whose historic setting has been altered by construction of the nearby MTA bus facility, the Arthur Sheridan Expressway, and the large car wash building. Overall, it is not expected that operation of the Proposed Project will have adverse contextual or visual impacts to architectural resources, which will, in fact, be enhanced by the Proposed Project.

**D. STEPS TO CONCLUDE THE SECTION 106 PROCESS**

NYSDOT will conclude the Section 106 process during Final Design by following the State Education Department (SED) Work Scope and established Section 106 procedures between FHWA, NYSDOT and SHPO.

NYSDOT's next step will be to immediately implement its plan for shovel pits and mechanical trenches to determine the presence, nature and extent of any potential archaeological resources, evaluate their S/NR eligibility and develop any required mitigation. NYSDOT will then combine this information with that concerning architectural resources, make a determination of effect for the project as a whole and forward its Finding with Summary Documentation to SHPO/LPC/FHWA for their review and concurrence.



**Chapter D-12:**

**A. INTRODUCTION**

This section presents the findings of the contaminated materials assessment and identifies potential issues of concern that could pose a hazard to workers, the community, and/or the environment during or after construction of the Greenway.

Conditions at the site resulting from previous and existing uses of the site and the surrounding areas were determined from a review of four documents, all prepared by Lawler, Matusky & Skelly Engineers LLP: *Surface Soils Investigation for the Environmental Assessment Statement in the Northern Portion of the Bronx River Greenway*, dated September 2001; *Environmental Investigation Report: Westchester Avenue Site – Southern Portion of the Proposed Bronx River Greenway*, dated March 2003; *Environmental Investigation Report: Apex Auto Site – Southern Portion of the Proposed Bronx River Greenway*, dated March 2003; and, *PCB Assessment Report – Northern Portion of the Proposed Bronx River Greenway*, dated July 2003. A Contaminated Materials Investigation and Asbestos Survey were completed as part of the project.

**B. EXISTING CONDITIONS**

**NORTHERN PORTION OF THE BRONX RIVER GREENWAY**

*SUBSURFACE CONDITIONS*

The depth to bedrock varies from less than 10 feet below ground surface in the central portion to approximately 35 feet in the northern portion of the site. Overlying the bedrock is silty sand, above which is man-made fill, including gravel, boulders, reinforced concrete, and other construction and demolition debris.

*SITE/AREA HISTORY AND SUBSURFACE INVESTIGATION*

By 1954, the area was highly developed with residential/commercial structures: the NY Coliseum bus depot was present and I-95 (Cross Bronx Expressway) and Starlight Park (which had been the site of an earlier junk yard and auto repair facility) were under construction. The earlier Northern Union Gas Company facility (on the west side of the river near 173rd Street at Starlight Park) was owned by Con Edison and no longer contained tanks. By 1966 the I-896 (Arthur Sheridan Expressway) was present and other expressways, streets, river crossings, and railroads were in approximately their current configurations.

Sixteen surface soil samples were collected and analyzed for volatile and semivolatile organic compounds (VOCs and SVOCs), pesticides, polychlorinated biphenyls (PCBs) and metals. In addition, five borings were completed in the vicinity of the proposed New York City Department of Environmental Protection (NYCDEP) combined sewer overflow (CSO). The laboratory analytical data from the samples were compared to New York State Department of Environmental Conservation (NYSDEC) Recommended Soil Cleanup Objectives (RSCOs) as presented in NYSDEC Technical Administrative Guidance Memorandum (TAGM) 4046. The only exceedences of RSCOs were: certain SVOCs in selected samples, but at levels typically found in urban fill materials; a very slight exceedences (21 parts per billion versus the RSCO of 20 ppb) for one pesticide (heptachlor epoxide) at one location; and several metals though all but two (copper and zinc) were found at levels within the Eastern USA background range, as cited in TAGM 4046 (copper and zinc levels were well below levels associated with adverse human health effects, based on United States Environmental Protection Agency (EPA) generic soil screening levels).

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Currently under the jurisdiction of the New York City Department of Parks and Recreation (NYCDPR), Starlight Park is undergoing remediation by Con Edison for contamination due to the past uses on the property. It is anticipated that remediation will be completed by 2006.

**WESTCHESTER AVENUE SITE***SUBSURFACE CONDITIONS*

The Westchester Avenue (New York City Marshall Impound Lot) site is bounded to the north and east by the river, to the west by AMTRAK tracks and to the south by Westchester Avenue. Beneath the asphalt paving, there is approximately two feet of decomposed concrete. Beneath the concrete, sand, gravel, and decomposed schist bedrock are present mixed with manmade fill (including coal ash and construction and demolition debris). Groundwater, which appears to be tidally influenced, was encountered at 11 to 14 feet below ground.

*SITE/AREA HISTORY AND SUBSURFACE INVESTIGATION*

In 1915, the site included a structure for storage of building materials (with a railroad spur). By 1950, the structure had been demolished and by 1954 at least three new structures had been constructed, but portions of the site appeared covered by debris or surface scarring. By 1984, no structures were evident, but by 1994 structures were present along the western and southern site boundaries. The 1996 Sanborn map indicated the site as vacant. The site is currently used as a school bus depot, with two structures (a small office and a garage).

A subsurface investigation was performed consisting of six soil borings. At three of the six locations, a temporary monitoring well was installed so that a groundwater sample could be collected. The laboratory analytical data from the soil samples were compared to the RSCOs. The only exceedences of RSCOs were: certain SVOCs in selected samples, but at levels typically found in urban fill materials; and several metals though all but four (copper, mercury, nickel and zinc) were found at levels within (or no more than 20 percent above) the Eastern USA background range, as cited in TAGM, but well below levels associated with adverse human health effects, based on EPA generic soil screening levels.

Results from the three groundwater samples were compared to NYSDEC Class GA Standards and Guidance Values. Although the Class GA classification applies to almost all groundwater in the State, the standards and guidance values are based on a scenario that the groundwater is used as drinking water. All drinking water in the Bronx originates in the upstate reservoir system and groundwater in the Bronx can not be used as a source of drinking water. The project corridor is not in a Sole-source-, Primary-, or Principal- aquifer area. Exceedences of GA standards or guidance values were as follows: methyl tertiary butyl ether (MTBE) was found in one well at 28 ppb (compared to the guidance value of 10 ppb); and seven metals (chromium, copper, iron, lead, magnesium, manganese and sodium) were found above GA values in at least one of the three samples. MTBE is a recent gasoline additive, commonly encountered in urban groundwater, and its presence could be related to either on-site or off-site gasoline releases. Iron, magnesium, manganese and sodium are common minerals, not likely indicative of site contamination. The highest levels of chromium, copper, and lead encountered were less than ten times the GA standard and may well be an artifact of the high levels of particulate associated with the shallow temporary wells. Even were these levels to truly represent groundwater conditions, the levels encountered do not present a threat to human health or the river.

## **APEX AUTO SITE**

### ***SUBSURFACE CONDITIONS***

The Apex Auto parts site is bounded by the river to the south west, the railroad tracks to the west and the backyards of Bronx River Avenue houses to the east. The subsurface includes silty sand, crushed schist, and gravel as well as fill materials such as coal ash, wood, and glass. Bedrock was encountered at depths ranging from two to nine feet below ground.

### ***SITE/AREA HISTORY AND SUBSURFACE INVESTIGATION***

By 1954, four structures were present along the eastern property boundary as well as surface scarring and possible soil/debris piles. By 1966, the site was more heavily developed with numerous vehicles present. The site is currently used for automobile/metal reclamation.

A subsurface investigation was performed consisting of four soil borings. At one of the four locations, a temporary monitoring well was installed so that a groundwater sample could be collected. The laboratory analytical data from the soil samples were compared to the RSCOs. The only exceedences of RSCOs were: certain SVOCs in selected samples, but at levels typically found in urban fill materials; two pesticides (alpha-BHC and beta-BHC) at one location slightly above the RSCO; and, several metals, six of which (arsenic, cadmium, copper, mercury, nickel and zinc) were found at levels above the Eastern USA background range, as cited in TAGM 4046. However, all but arsenic were well below levels associated with adverse human health effects (based on EPA generic soil screening levels). Only one soil sample contained arsenic at levels associated with adverse human health effects. Because this sample was found at 0.61 to 1.22 m (2 to 4 ft) below grade and only slightly above the most stringent guidance levels it does not represent a significant concern.

Results from the groundwater sample were compared to NYSDEC Class GA Standards and Guidance Values. Exceedences of GA standards or guidance values were as follows: MTBE was found in one well at 35 ppb (compared to the guidance value of 10 ppb); and four metals (iron, lead, manganese and sodium). MTBE is a recent gasoline additive, commonly encountered in urban groundwater, and its presence could be related to either on-site or off-site gasoline releases. Iron, manganese, and sodium are common minerals, not likely indicative of site contamination. The level of lead was less than four times the GA standard and may well be an artifact of the high levels of particulate associated with the shallow temporary well. Even were this level to truly represent groundwater conditions, the level encountered does not present a threat to human health or the river.

## **PCB ASSESSMENT REPORT**

Three abandoned railroad structures in the vicinity of the proposed Greenway between 172nd and 74th Streets were identified as potentially PCB-containing: a catenary tower, a transformer shed, and a concrete structure. To assess potential impacts from these structures, surface soil samples were collected at a total of seven locations as were one chip sample and four wipe samples from the transformer shed. Two of the seven soil samples (1.1 ppm in the floor of the shed and 5.5 ppm along the east side of the shed, i.e., beneath the catenary tower) exceeded the PCB surface soil RSCO of 1 ppm. The chip and wipe sample results were below EPA criteria.

## **CONTAMINATED MATERIALS INVESTIGATION**

Soil samples were collected for laboratory analysis from nineteen sampling locations across the project site from March 2005 to May 2005. Samples collected from each of the nineteen locations contained at least one type of contaminant (SVOCs, VOCs, PCBs, or Metals) at levels that exceed either STARS or RSCO guidance values; and therefore, any soils disturbed along the project site during construction

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should be considered as potentially contaminated. Excluding samples collected from the Apex Auto site and the Marshall Property site, the levels of SVOCs detected across most of the project site are indicative of urban fill material commonly found in New York City, and not likely associated with onsite sources of contamination. With the exception of sample location B-7 at the Apex Auto site, soils across the site did not exhibit hazardous waste characteristics based on TCLP analysis. TCLP testing on sample B-7 at Apex Auto resulted in a lead concentration of 9.14 milligrams per liter (mg/l), which exceeds the RCRA hazardous waste level for lead of 5.0 mg/l.

Fifteen soil samples were collected on February 23, 2006 from seven soil borings advanced on the Apex Auto site in the vicinity of former boring B-7 to better define the extent of the hazardous lead impacted soil. The seven borings were advanced to 12 feet below grade or bedrock, whichever occurred first. Bedrock was encountered at depths ranging from approximately 6 feet to greater than 12 feet below grade. Samples were analyzed for RCRA metals, TCLP RCRA metals, PCBs, Semi-Volatile Organic Compounds / Base Neutrals (SVOCs/BNs), and Volatile Organic Compounds (VOCs). Various metals, including lead, were detected at concentrations above RSCO values in soil samples from each boring location. Total lead was detected at concentrations ranging from 122 mg/kg to 3,010 mg/kg. TCLP lead was detected in the samples at concentrations exceeding the RCRA hazardous waste limit ranging from 6.69 mg/l to 26.6 mg/l. No additional metals were detected above their respective hazardous waste limits. VOCs and SVOCs were also detected in February 2006 above their respective reference values at each of the seven boring locations. PCBs were detected just slightly above the RSCO for PCBs of 1.0 mg/kg in samples collected from Apex Auto at five of the seven boring locations at concentrations ranging from 1.1 mg/kg to 2.9 mg/kg. Detailed findings of the contaminated material investigations are available in the Contaminated Material Investigation Report, Bronx River Greenway from Westchester Avenue to East Tremont Avenue, June 2005, EPM, Inc., and the Final Environmental Investigation Findings Report, Apex Auto Site, July 2006, EPM, Inc.

**STARLIGHT PARK**

Soil samples were collected for laboratory analysis from Starlight Park over the period 2002 to 2004 by GEI Consultants, Inc. during a remedial investigation at the Starlight Park site on behalf of the Consolidated Edison Company of New York (Con Edison), the detailed results of which are reported in the *Focused Remedial Investigation, East 173<sup>rd</sup> Street Works, Bronx, New York, April 24, 2003*; and the *Supplemental Remedial Investigation, East 173<sup>rd</sup> Street Works (Starlight Park) Operable Unit No. 2, February 11, 2005*. The Starlight Park site is the location of a former Manufactured Gas Plant (MGP) and is listed as an Inactive Hazardous Waste Disposal Site by the NYSDEC for having contaminated soils, sediment, and groundwater resulting from the former MGP operation.

During the remedial investigation, soils samples were collected from soil borings and test pits located in close proximity to the proposed Bronx River Greenway improvements. Sampling of shallow soils (up to 20 feet below grade) in this area did not reveal significant levels of contamination. However, deeper soils in this area, as well as soils located adjacent to the north of the Bronx River Greenway project were found to be significantly contaminated with SVOCs, VOCs, and metals. Soil samples were collected from the Starlight Park site during the March – May 2005 Contaminated Materials Investigation from boring B-31, located at the proposed location of the new bridge touchdown on Starlight Park. The soil sample collected from B-31 contained relatively low levels of several SVOCs, and one metal (Mercury) above regulatory reference values. The former manufactured gas plant operation on Starlight Park was located north of the proposed Bronx River Greenway site, therefore significant contamination on the Starlight site appears to be located to the north of the proposed limits of excavation for the project. The remediation work in Starlight Park is the responsibility of Con Edison, and is being performed by Con Edison under the supervision of the NYSDEC.

## **BRONX RIVER SEDIMENT QUALITY**

Sediment samples were collected for laboratory analysis from the Bronx River by GEI Consultants, Inc. during the remedial investigation at the Starlight Park. Analysis on the river sediment samples collected in the immediate vicinity of the proposed boat dock indicated the presence of various metals and SVOCs above regulatory reference values.

## **ASBESTOS**

The greatest potential for exposure to any site contamination would occur during demolition of existing structures associated with the development of the Greenway. A survey for the presence of asbestos containing materials (ACMs) in association with the Bronx River Greenway Project was conducted for NYSDOT. The asbestos surveys included the Apex Auto parcel at 1235 Bronx River Avenue, the New York City Marshall Impound Lot property at 1363 Westchester Avenue, and ten structures located within the project corridor limits between East 172nd Street and East 177th Street that could be affected by construction activities.

The purpose of the asbestos survey was to identify the nature, location, quantity and asbestos content of all materials suspected of containing asbestos (greater than 1% as measured by Polarized Light Microscopy (PLM), and Transmission Electron Microscopy (TEM) as applicable) in accordance with New York State Industrial Code Rule 56.

A total of 385 asbestos bulk samples were collected from the project area and submitted for laboratory analysis of asbestos content. Out of the 343 bulk samples, 214 samples have been demonstrated by laboratory analysis to contain >1% asbestos by weight, and are therefore defined as asbestos containing materials (ACMs).

The types of asbestos containing materials identified included: plasters, window glazing, floor tiles and mastic, door insulation, roofing, flashing, coping stone and parapet wall mastic, and various electrical equipment components, mainly at the structures of Apex Auto and the New York City Marshall Impound Lot.

## **C. PROBABLE IMPACTS**

### **NO ACTION**

This analysis assumes that without the Proposed Project, remediation of Starlight Park will be completed. The park could then be constructed by NYCDPR and opened to the public. The other sites would continue in their current usage. Currently, there are no known significant health or environmental risks associated with these uses. Likewise, there would be no significant risks in the future without the project. Sampling of sediments in the mudflat areas in the vicinity of the proposed dredging for the floating docks will also be performed.

### **PROPOSED PROJECT**

The greatest potential for exposure to any site contamination would occur during demolition of existing structures and during any soil disturbance associated with development of the Greenway. Samples collected from each of the twenty-six locations contained at least one type of contaminant (SVOCs, VOCs, PCBs, or Metals) at levels that exceed either STARS or RSCO guidance values; and therefore, any soils disturbed along the project site during construction should be considered as potentially contaminated. With the exception of the Apex Auto site, soils across the site did not exhibit hazardous waste characteristics based on TCLP analysis. However, the RCRA hazardous waste level for lead was

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exceeded in several samples collected from the southwest region of the Apex Auto site. Soils to be excavated in this area should be considered as potentially contaminated and hazardous. It is possible that other areas of significant contamination exist on the Apex site in areas not accessible for sampling due to surface obstructions and daily operations. The final contract documents, which will be prepared during final design of the project, will include provisions for the testing of the potentially hazardous or contaminated areas that were inaccessible during the design phase. This testing will occur during the construction phase of the project, before any excavation work is done in these areas.

Prior to any demolition activities:

- Provisions will be made for the abatement of the identified asbestos containing materials in the Contract Plans and Specifications, in accordance with the New York State Department of Labor (NYSDOL) Industrial Code Rule 56, as well as applicable local and federal regulations.
- Activities with the potential to disturb lead-based paint will be performed in accordance with the applicable Occupational Safety and Health Administration regulation (OSHA 29 CFR 1926.62 - Lead Exposure in Construction).
- Disposal of PCB-containing or suspect PCB-containing items (including debris and building materials) will be in accordance with applicable federal, state and local requirements.
- During the final design of the project, provisions (including any special specifications, notes, drawings, and estimates) will be included in the contract documents to ensure that any contaminated and/or hazardous soil, sediments, and groundwater will be handled, transported, and disposed of in accordance with all applicable federal, state, and local rules and regulations. The final design documents will include requirements for additional testing of soils at previously inaccessible areas at the Apex Auto site to confirm actual conditions prior to excavation of the material.

As part of the construction of the Greenway:

- A site-specific Environmental Health and Safety Plan (HASP) will be prepared and implemented to protect workers, the community and the river from impacts from known or potential contaminated soil, sediments or groundwater. The HASP will include procedures to: minimize the generation of dust (and both work zone and community dust monitoring); properly remove and dispose of contaminated soil and procedures to address contamination (including tanks, drums, etc.) unexpectedly encountered; and manage any groundwater, should dewatering be required.
- A Storm Water Pollution Prevention Plan (SWPPP), which is required for all construction projects exceeding one acre of disturbance, will be prepared to address measures to prevent adverse impacts to the river or area sewers. It will include detailed measures for erosion control and soil stockpile management.
- Areas identified with surface soil (top two feet below final grade) contamination will be addressed in one of the following ways: excavate and dispose of in accordance with applicable rules and regulations; fence to restrict Greenway user access; or cover with impervious surface (e.g., asphalt) or at least two feet of clean soil to eliminate future exposure pathways.

With these measures, no adverse impacts related to hazardous materials are expected to occur either during or following development of the Greenway.

## **A. INTRODUCTION**

This chapter describes the potential energy effects related to the construction and operation of the Bronx River Greenway.

## **B. EXISTING CONDITIONS**

With the exception of the New York City Marshall Impound Lot (also referred to as PDJ Simone) and Apex Auto lot, little energy is currently used at the Project Site. Lighting exists that is associated with the roads and road intersections, and there is minimal lighting at Starlight Park. Energy is currently supplied to New York City by Con Edison.

## **C. PROBABLE IMPACTS**

According to the New York State Department of Transportation (NYSDOT) *Draft Energy Analysis Guidelines for Project-Level Analysis*, November 2003, detailed energy analysis is generally not needed for small scale projects. The transportation modes to be used on the Proposed Project, a multi-use path for walking, running, skating, and cycling, will not be energy intensive. The Proposed Project will not result in an increase in motorized vehicle miles traveled (VMT). Energy supply was not identified as an issue during the scoping process. Further, the Proposed Project is not located in an area with energy problems and will not place excessive demands on local energy supplies. Therefore, a qualitative assessment of potential energy impacts was performed.

All new buildings and major reconstructions in New York State must meet the requirements of New York State Energy Conservation Construction Code. Adherence to this code makes building energy efficient and generally precludes significant adverse energy impacts. On June 10, 2001, Governor George Pataki issued Executive Order 111. This Executive Order requires that new building and major reconstruction undertaken by the State of New York must achieve energy efficiency that is 20 percent greater than that required by the Energy Conservation Construction Code. Future proposed buildings to be constructed include restrooms, a boathouse, and concessions stand will conform to these standards. Further, this building is likely to be occupied only seasonally, reducing annual energy usage.

Other energy uses on the Project Site will include lighting of the multi-use path, overlooks, amphitheater, boathouse, floating dock and fixed platform, and concessions area. Outdoor lighting will likely follow the same patterns as the local streetlights, coming on at dusk and turning off at dawn. Path lighting will utilize efficient New York City Lighting Standards fixtures and require minimal energy consumption.

As discussed in Chapter D-6, "Noise," construction of the Bronx River Greenway is anticipated to provide a non-motorized transportation corridor with the potential to reduce local vehicle trips. Reduced vehicle trips will result in reduced energy consumption. Further, street intersection improvements will be expected to improve the flow of traffic in the area and relieve congestion, reducing energy resources consumed by vehicles. Therefore, the Proposed Project will not be expected to result in adverse impacts to energy supply or usage in the project area.

## **A. INTRODUCTION**

This chapter considers the Proposed Project's effects on the visual character of the Project Site and the surrounding area. Due to the inaccessibility of the shoreline and flanking development, pedestrian views of the Bronx River are primarily limited to the bridges that cross the river. Therefore, the study area for visual resources has been defined as the area within 122 meters (400 feet) of the Project Site. This chapter assesses views of the proposed Greenway from surrounding locations and the multiple transportation corridors in the area that include I-895 (Arthur Sheridan Expressway) and I-95 (Cross Bronx Expressway), the AMTRAK Northeast Corridor line, and the elevated Nos. 2, 5, and 6 subway lines.

## **B. EXISTING CONDITIONS**

### **PROJECT SITE AND SURROUNDING AREA**

Extending for approximately one mile along the Bronx River between Westchester and East Tremont Avenues, the 10-hectare (HA) 25-acre Project Site passes through urban areas characterized by transportation corridors and a mix of residential and industrial buildings. The major transportation corridors include the AMTRAK Northeast Corridor rail line that runs along and over the Bronx River, the north-south Arthur Sheridan Expressway that runs adjacent to and near the west bank of the river, the east-west Cross Bronx Expressway that crosses over the northern portion of the Project Site, and the Nos. 2, 5, and 6 subway elevated lines.

In this primarily industrial and transportation-related corridor, most development abutting the Project Site and river consists of the AMTRAK Right-of-Way (ROW) and non-descript, low-rise industrial buildings housing auto-related uses. However, early-20th-century brick residential rowhouses and apartment buildings are located at the southeast and northeast corners of the Project Site. Moving east and west from the Project Site, streets of brick rowhouses, apartment buildings, and schools characterize the surrounding areas.

The Arthur Sheridan Expressway, the AMTRAK ROW, and abutting industrial development prevent pedestrian access to the river's immediate vicinity and block most views of the river. Since the area largely consists of low-rise buildings, there are long views over the river's open, wooded landscape. These views are of buildings in the distance on higher ground, tall modern apartment buildings outside the study area, bridges and viaducts crossing the river, and transmission pylons along the AMTRAK ROW.

The following discussion provides more detailed descriptions of the visual character of the Project Site segments and surrounding areas.

#### ***WESTCHESTER AVENUE TO EAST 172ND STREET***

Between Westchester Avenue and East 172nd Street, the Bronx River is located at a lower elevation than the flanking urban areas that are largely defined by transportation and industrial uses. South of Westchester Avenue, the river banks are sloped and covered in vegetation, with the shoreline consisting of a mix of rock, retaining walls, and riprap. Partially collapsing wood fishing piers are located on the west bank, as is an abandoned cement plant outside the study area.



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The AMTRAK Northeast Corridor rail line (formerly the New York, New Haven & Hartford Rail Road) runs parallel to the river along the west bank at a higher elevation. The AMTRAK ROW is bordered by various fence types, and it contains numerous tall steel pylons carrying electrical transmission lines. An abandoned station is located over the rail line at the intersection of Westchester and Whitlock Avenues. Approximately 500 feet north of Westchester Avenue, the rail line crosses the river on a bascule bridge to run north-south along the river's east bank. At the location of the bridge are two tall transmission towers composed of double pylons. The river bank around the AMTRAK bridge consists of tall, stone retaining walls with timber facing, and some stretches of mudflats. At this location, paved auto yards and warehouses are built to the edge of the retaining walls that form the river's edges, creating a canyon-like effect.

South of Westchester Avenue, the Arthur Sheridan Expressway runs parallel to the AMTRAK ROW at the same elevation. It passes under Westchester Avenue and then rises to the elevation of the surrounding streets. An exit ramp from the expressway connects to the avenue in front of the abandoned station. From a roughly north-south alignment, Westchester Avenue crosses over the river on a beam and girder bridge bordered by railings and chain link fencing. The elevated IRT No. 6 subway runs above Westchester Avenue, with footings in the street bed, and crosses over the ROW with a Pratt truss bridge and over the river with a Parker truss bridge.

The neighborhood on the west side of the river between Westchester Avenue and East 172nd Street is developed with a mix of residential buildings, schools, and auto-related industrial buildings. In the vicinity of Westchester Avenue, the street grid consists of streets intersecting at various angles, creating irregularly shaped blocks. The elevated subway is a dominant presence amidst the mix of mid-rise brick apartment buildings from the early 20th century, carwashes, and non-descript one-story commercial structures. Most buildings at the intersection of Westchester Avenue and Home Street house auto-related businesses.

The Arthur Sheridan Expressway creates a physical and visual barrier between the river and the neighborhood to the west between Westchester Avenue and the Cross Bronx Expressway six blocks to the north. Tall metal streetlights are located along the expressway, which is bordered with metal railings on both sides. The narrow strip of land between the expressway and the river is developed with auto-related warehouses and junk yards. These buildings and paved lots are built directly on the stone retaining walls that form the river's edge. The neighborhood to the west of the expressway contains several seven-story, early 20th-century brick apartment buildings, a paved playground overlooking the expressway, and several schools at Jennings Street. I.S. 84 is a modernist, circular five-story stone building with strip windows set in a paved parking lot. Across Jennings Street to the north is the five-story, U-shaped brick English Gothicstyle P.S. 66. From Jennings Street, West Farms Road runs north-south parallel to the Arthur Sheridan Expressway. It contains street trees and is lined by a mix of non-descript, one-story industrial buildings and scattered rowhouses from the late 19th or early 20th centuries, which have been altered with modern synthetic siding. The topography rises sharply upward on schist outcroppings between West Farms Road and Boone Avenue to the west.

The neighborhood on the east side of the river between Westchester Avenue and East 172nd Street is primarily residential. In this area, the AMTRAK ROW runs along the river. Bronx River Avenue is the major north-south thoroughfare, and it is a wide, four-lane north-south road with wide sidewalks. Under the shadow of the elevated subway line, the intersection of Westchester and Bronx River Avenues is defined by non-descript, one-story gas stations, carwashes, and auto parts stores that are all set within paved parking lots. Several tall signs are located in the parking lots around the intersection. To the south, Bronx River Avenue is lined by similar, non-descript one-story auto-related buildings.

North of Westchester Avenue, the visual character of the area on the east side of the river changes. Attached two-story, two-family houses line both sides of Bronx River Avenue. The buildings on the avenue's west side abut the Apex Auto property—a paved yard that occupies the narrow space between the AMTRAK ROW and the houses—with small yards enclosed with walls. Built in the early 20th century, these buildings create a unified streetscape of modest brick houses decorated with brick paneling, inset cast stone ornament, and stepped parapets. They all have stoops, many have awnings, and the house pairs are separated by narrow driveways that lead to garages. Several of the houses have been reclad with modern synthetic siding. Street trees are located along the avenue, as are tall metal streetlights and wood utility poles. The entrance to Apex Auto is through a driveway marked by signage at the southern end of the avenue. The auto yard entrance only slightly breaks the residential streetscape. At East 172nd Street, several buildings contain ground-floor storefronts.

The only pedestrian views of the Bronx River and the Project Site between Westchester Avenue and East 172nd Street are obtainable from the Westchester Avenue bridge over the river. Abutting development along the river precludes other viewpoints. Motorists have only passing views from the avenue bridge. Riders on the No. 6 subway line and on the AMTRAK Northeast Corridor Line have more opportunities for river views, but they are passing views.

#### *EAST 172ND STREET TO EAST 174TH STREET*

East 172nd Street does not traverse the river. On the side east, East 172nd Street dead ends at a metal barricade and chain link fence above the AMTRAK ROW. Car parts are located at the dead end, and transmission pylons are prominent from the street. Tree growth within the ROW obscures views of the river. North of East 172nd Street, the neighborhood on the east side of the river is characterized by two-story brick, two-family houses that resemble those lining Bronx Park Avenue to the south. Street trees and wood utility poles runs along both sides of the avenue.

Starlight Park borders the west bank of the river between East 172nd and East 174th Streets. The park is currently a large construction site undergoing hazardous materials remediation. The dirtcovered property contains construction trailers and equipment, and it is bordered by chain link fencing. Access is currently blocked from the pedestrian ramps that lead down from the East 174th Street bridge. The Arthur Sheridan Expressway runs along Starlight Park creating a visual and physical barrier to the park and river from the neighborhood to the west. West Farms Road parallels the expressway and there is a planted median between the street and expressway, as well as a chain link fence and metal barricades. Non-descript brick garages of one and two stories line the west side of West Farms Road, where there is a wide sidewalk. There are also some paved parking lots. To the west of the road, the topography rises sharply—tall schist outcroppings emphasize the dramatic rise in elevation—and the neighborhood along Boone and Longfellow Avenues (outside the study area) consists of tall, early 20th-century brick apartment buildings and rowhouses.

The shoreline of the Bronx River between East 172nd and East 174th Streets consists of riprap with erosion netting. The river banks slope upward and are wooded. The East 172nd Street deadend on the east side of the river affords the only pedestrian views of the river from this segment of the study area. The Arthur Sheridan Expressway (and the closed park) on the west side and residential development and the AMTRAK ROW on the east side prevent accessibility to the shoreline and block views. Motorists on the Arthur Sheridan Expressway have passing or no views of the river.

#### *EAST 174TH STREET TO THE CROSS BRONX EXPRESSWAY*

East 174th Street crosses the river on a Warren through-truss bridge with concrete footings and it crosses above the Arthur Sheridan Expressway and West Farms Road on a viaduct with steel columns. Pedestrian stairs lead to the bridge from West Farms Road and pedestrian ramps (currently closed) lead

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down from the bridge to the west bank of the river and Starlight Park. North of the bridge, there is a grassy area between the expressway and river that slopes down to the shoreline. Trees border the shoreline that consists of riprap.

An entrance/exit ramp between the Arthur Sheridan and Cross Bronx Expressways splits off to the northwest, and a mostly unlandscaped hill is located between the expressway and ramp. In this section of the study area, West Farms road is located at a slightly lower elevation than the expressway, and there is a grassy hill with some trees between the two. Early 20th-century houses covered in modern synthetic siding, non-descript one-story garages, two-story brick industrial buildings, and paved vehicular storage lots line the west side of West Farms Road.

On the east side of the river, there is a large, densely wooded area between the shoreline and the AMTRAK ROW. At East 174th Street, the rail line splits into two divergent paths. Numerous transmission pylons within the ROW are visible from Bronx River Avenue. The residential neighborhood of early 20th-century rowhouses ends at East 174th Street, and Bronx River Avenue becomes wider with a concrete median. To the north of the street, the New York City Marshall's Impound Lot (also referred to as PDJ Simone) occupies the land between the ROW and Bronx River Avenue. It is bordered by solid fencing and jersey barriers. North of the impound lot, a concrete plant is located along the ROW, and that property continues to the north under the Cross Bronx Expressway. Grassy medians and some large trees are located around the Cross Bronx Expressway. The Bronx River Houses—a mid-20th-century complex of nine crossshaped, 14-story brick residential towers set in landscaped lawns—occupy a large site on the east side of the avenue.

The river is heavily wooded, especially on the east bank, between East 174th Street and the Cross Bronx Expressway. The shoreline consists of riprap. The only pedestrian views of the river are from the East 174th Street Bridge, which also provides passing views to motorists. Motorists on the Arthur Sheridan Expressway have extensive, but passing, views of the river because the expressway directly borders it. Riders on the AMTRAK Northeast Corridor Line also have river views.

*CROSS BRONX EXPRESSWAY TO EAST TREMONT AVENUE*

The east-west Cross Bronx Expressway traverses West Farms Road, the Arthur Sheridan Expressway, and Bronx River Avenue on steel girder bridges supported by masonry piers and retaining walls. Several tall billboards are located along the expressway in the vicinity of West Farms Road, which is bordered by tall stone walls as it runs beneath the expressway. The west side of the road is lined with the same mix of parking lots and brick garages and industrial buildings that is found along its full alignment between the Cross Bronx Expressway and Westchester Avenue. P.S. 167 is located on the east side of the road. Also fronting on East Tremont Avenue, the school is a three-story modernist masonry building composed of largely windowless boxes set back from the surrounding streets and above the river. A paved playground bordered by a tall chain link fence is located on the south side of the school. A paved parking lot and loading area fronts on East Tremont Street. On the east side of the school, the grassy terrain is enclosed by a fence and planted with trees and flowers, and it slopes down to the river.

Northwest of the Project Site, the intersection of East Tremont Avenue, West Farms Road, and Boston Road is busy and chaotic and characterized by asphalt and masonry. East Tremont Avenue is a wide, four-lane road that runs east-west through the study area and crosses the Bronx River on a steel girder bridge supported by a stone pier in the river. The avenue has wide sidewalks and a concrete median. The Nos. 2 and 5 subway lines run north-south on a viaduct above Boston Road. The elevated subway is a dominant feature of the area. A one-story, fullblock brick building with an open roof-top parking garage is located on the north side of the avenue between Boston Road and Bronx Street, a small road that provides access to the Bronx River Park (described below). Containing a supermarket and several

storefront retail establishments, it is a late 20th-century building set far back from the street behind a wide sidewalk and parking lot. Two modern 21-story brick apartment buildings, located at the northwest corner of East Tremont Avenue and Boston Road, are visible for long distances to the south and east.

The East Tremont Avenue Bridge over the Bronx River is bordered by railings and chain link fencing, but it provides good views to the river below. On the north side of the bridge, a four-story, brick former loft building is located on the river bank. It contains the Bronx River Art Center. Between the art center and the supermarket, Bronx Street leads to the Bronx River Park. Underneath the elevated subway, the small park runs down to the river and contains trees, grassy lawns, rock outcroppings, and seating. The wooded shoreline on both sides of the river is natural in this location. The elevated subway places supports on both riverbanks. To the south, the Cross Bronx Expressway places a concrete pier in the river, as does the East 177th Street expressway ramp.

On the east side of the river, the area around the busy intersection of East Tremont Avenue, Devoe Avenue, Wyatt Street, and East 177th Street is developed with a mix of buildings. A modern boxy carwash occupies a large parcel on the north side of East Tremont Avenue between the river and Devoe Avenue. The east side of Devoe Avenue contains the Classical Revival-style West Farms Station post office and a blockfront of six-story early 20th-century apartment buildings with decorative brickwork, lightcourts, and ground-floor retail. On East Tremont Avenue and Wyatt Street, the area to the east is a mostly residential neighborhood of low-rise brick apartment buildings, tenements, and rowhouses from the early 20th century. Devoe Avenue contains a planted triangular median with a concrete bench. The east riverbank between East Tremont Avenue and the East 177th Street ramp to the Cross Bronx Expressway contains an overgrown paved parking lot, but it is also wooded. An MTA bus facility occupies a large parcel on the south side of East 177th Street between the river and the AMTRAK ROW. Bordered by a tall metal fence with masonry columns, the bus facility contains a large modernist boxy concrete building and paved parking lots for buses.

The only pedestrian views of the river from the section of the study area between the Cross Bronx Expressway and East Tremont Avenue are obtainable from the East Tremont Avenue bridge. The northernmost portion of the Project Site itself is visible on Devoe Avenue. Pedestrian views from all other locations are blocked by intervening buildings and inaccessibility to the shoreline. Motorists on the Cross Bronx Expressway and the Arthur Sheridan Expressway have more extensive, although passing, views. Riders on the Nos. 2 and 5 subway lines have views as the subway crosses above the river. From the East Tremont Avenue/West Farms Square subway station, there are only limited views of the river.

## **VISUAL RESOURCES**

The Bronx River is a visual resource in the study area, but pedestrians have highly circumscribed views of it. Pedestrian views are only obtainable from the small Bronx River Park that provides access to the shoreline and from the East Tremont Avenue, East 174th Street, and Westchester Avenue bridges over the river. The Arthur Sheridan Expressway provides more views of the river to motorists, and riders on the Nos. 2, 5, and 6 subway lines have views of the river as the subways cross above it. Further, riders on the AMTRAK Northeast Corridor Line also have views of the river.

Two additional visual resources include the East 174th Street Bridge and the elevated No. 6 subway bridge over the AMTRAK ROW and Bronx River. The Warren truss span of the East 174th Street bridge is visible for long distances north and south on West Farms Road. From the east side of the river, it is only visible from East 174th Street in the vicinity of the bridge. The bridge is also clearly visible to motorists on the Arthur Sheridan Expressway.

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The Pratt and Parker truss spans of the No. 6 subway bridge are visible for long distances from the north on West Farms Road and on Bronx River Avenue. The truss spans are also visible from Westchester Avenue and the surrounding streets intersecting the avenue, as well as from the Arthur Sheridan Expressway.

**VIEWER GROUPS AND DURATION OF VIEWS**

As described above, pedestrians have only limited views of the Project Site and Bronx River. There are no streets open to pedestrians that abut the majority of the Project Site, and most views from the surrounding areas are blocked by intervening buildings, the Arthur Sheridan Expressway, and tree coverage within the AMTRAK ROW. From West Farms Road, there are some limited views over the Arthur Sheridan Expressway of the Starlight Park portion of the Project Site. The bridges over the river allow extensive views to pedestrians who often linger to look at the river. The East 174th Street Bridge, however, appears to experience extremely limited pedestrian traffic. In addition, the Bronx River Park provides shoreline access and seating for leisurely contemplation.

As the Arthur Sheridan Expressway directly borders the Project Site and river for most of their length, it provides clear views to motorists. However, passing by quickly, this viewer group has only brief viewing spans. Similarly, motorists on the Cross Bronx Expressway and the other bridges over the river have only limited, brief views. Riders on the elevated Nos. 2, 5, and 6 subway lines have some clear passing views of the river as they cross above it. Although the Nos. 2 and 5 lines run parallel to the Project Site outside the study area to the west, there are no views from the subway due to intervening buildings, except from the immediate vicinity of the East Tremont Avenue/West Farms Square Station and then from the bridge over the river. Riders on the AMTRAK Northeast Corridor Line have clear but passing views of the Project Site and Bronx River.

**C. PROBABLE IMPACTS****NO ACTION**

The remediation of Starlight Park has turned the park into a large construction site. Previous access to the park and the river bank from the East 174th Street Bridge is currently blocked. Due to the construction activities in the park, the immediate setting of the river is visually compromised, but the park is only visible to pedestrians from the East 174th Street bridge, and partially from West Farms Road over the Arthur Sheridan Expressway.

No other projects are under construction or planned for completion within the 122-meter (400foot) visual resources study area by the project build year.

**PROPOSED PROJECT**

Overall, it is not expected that the Proposed Project will have adverse effects on visual resources. The project's goal is to enhance the Bronx River's natural qualities, thereby enhancing the visual character of the surrounding areas and visual resources, increase public access to the river, and provide a new open space and visual resource.

**CONSTRUCTION**

It is possible that construction of the Proposed Project could result in temporary, adverse indirect effects to the visual character of the Project Site and surrounding area and to the context or visual setting of the visual resources in the study area. However, any such effects will only be temporary during the construction period (e.g., construction vehicles, denuded site clear of landscaping, etc.). Further, views of

construction activities and any adversely effected visual settings will not be visible from most locations in the surrounding area. As described above, pedestrians have only circumscribed views of the Project Site from the bridges over it and from a small section of Devoe Avenue, and motorists and subway/train riders have passing views of brief duration.

Construction in Starlight Park will be visible from the surrounding area. However, Starlight Park is currently a construction site and is expected to remain so under the No Action Alternative. Therefore, there will be no change to the visual character of that section of the Project Site and the surrounding area during the construction period of the Proposed Project.

### *OPERATION*

While the Proposed Project will dramatically alter the visual character of the Project Site and the visual setting of the Bronx River by transforming the Project Site into a landscaped open space, it is not expected to have adverse effects on visual resources or on the visual character of the Project Site and surrounding areas, which will, in fact, be enhanced by the Proposed Project.

Existing industrial buildings, paved areas, and retaining walls abutting the southern segment of the Project Site will be removed and remaining undeveloped areas on the river banks north of the AMTRAK bridge will be landscaped. Naturalized shorelines will be created, and the entire Project Site—defined by a mix of industrial sites, wooded areas, and the adjacent AMTRAK ROW—will become a landscaped park with footpaths, four pedestrian bridges, stone outlooks and a viewing platform, basketball courts and a playing field at Starlight Park, natural vegetation and mudflats, a boat house and pier, and an amphitheater. In addition, an existing bridge abutment will be retained. A potential spring in the segment between East 174th Street and the Cross Bronx Expressway will also be retained if determined to be from a natural source. For a more completed description of the Proposed Project components, see Chapter D-1, "Project Description." See Appendix G for illustrative renderings of the Proposed Project.

Although the landscaped and developed Greenway will be a dramatic contrast to the existing visual character of the site and river, the project aims to enhance the river's setting and natural qualities. Significantly, the Greenway will bring people to the currently inaccessible river, which will become a defining visual resource in the area. The recreational and other built features will be designed to blend with the recreated natural shorelines, newly planted native vegetation, and retained woodlands. The pedestrian bridges—designed in a variety of truss forms, and potentially including a suspension bridge—will be in keeping with the area where numerous bridge types cross the Bronx River.

Further, the Proposed Project will enhance the settings of the visual resources in the study area—the Bronx River itself, the East 174th Street bridge, and the No. 6 subway bridge. It will also create new visual resources in the Greenway and the new pedestrian bridges. As existing truss bridges in the area are visual resources, the new truss bridges will be also.

The viewer group most affected by the Proposed Project will be the new viewer group of Greenway patrons created by the project. Since the river is currently inaccessible except to the occasional canoeist and since most pedestrian views of it are blocked from the surrounding areas, visual changes to the site and river will not be apparent from most locations in the study area. For the most part, there are no views of the Project Site from the neighborhoods on the east side of the river, and there will be no views of the Greenway except in the vicinity of Devoe Avenue. Pedestrian views from the neighborhoods west of the river will be largely limited to the area around Starlight Park. The bridges crossing the river will provide the best views of the Greenway for pedestrians. Motorists on the bridges and the Arthur Sheridan Expressway and subway/train riders will have clear, but passing, views of the Greenway. For these viewer groups, including the park patrons, it is expected that the natural and landscaped Greenway will be a visually pleasing enhancement of the Bronx River and the surrounding areas.

**Chapter D-15:****Secondary and Cumulative Impacts****A. INTRODUCTION**

This chapter evaluates secondary and cumulative effects of the project as required under the National Environmental Policy Act (NEPA). Secondary impacts are those that are "caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable" (40 CFR 1508.8). Generally, these impacts are induced directly or indirectly by the Proposed Project. Secondary effects can occur within the full range of impact types, such as changes in land use; economic vitality; neighborhood character; traffic congestion, with its associated effects on air quality and noise, water resources; and other natural resources.

Cumulative impacts result from the incremental consequences of an action (e.g., the project) when added to other past and reasonably foreseeable future actions (40 CFR 1508.7). The cumulative effects of an action may be undetectable when viewed in the individual context of direct and even secondary impacts, but nevertheless when added to other actions can eventually lead to a measurable environmental change.

**B. SECONDARY IMPACTS**

The Proposed Project would comprise approximately 10 hectares (HA) (25 acres) of parkland and open space including the Greenway and Starlight Park, and will feature a continuous multi use path along its one-mile length. The project will replace vacant and publicly inaccessible areas along the Bronx River with transportation, recreation, and maritime facilities, as well as new and enhanced ecological features. The Bronx River Greenway will create a minimal increase in pressure for development on the adjacent and surrounding properties correlating to increased pedestrian amenities and improved access.

The Bronx River Greenway will help improve the quality of the environment in the study area and may make it more attractive for development. However, any induced economic development growth would be consistent with the goals of Community District 3's 197-a Plan, "Partnership for the Future: a 197-a Plan for the Revitalization of Community District 3" in 1993, which include the following:

- (1) Re-establish the district as a dynamic, viable community;
- (2) increase the district's population to 100,000 by the year 2000;
- (3) provide a viable economic base through the provision of job training and the creation of labor intensive opportunities;
- (4) Maintain, develop, and expand the district's supporting infrastructure; and
- (5) Maintain parks and recreation areas throughout the district.

Construction and maintenance activities occurring during Greenway construction, especially construction of the new bridges, will provide additional economic growth-inducing incentives for companies in the area and the region. These economic opportunities are spurred by the increased demand that would be created by the Proposed Project's construction and operation, for labor, supplies, equipment, and goods.

For these reasons, there are not expected to be adverse secondary environmental effects from induced growth resulting from the project, either on a regional or local level.

**C. CUMULATIVE EFFECTS**

An analysis of cumulative impacts considers resources, ecosystems, and human communities that could be potentially affected by the action and whether those could also be affected cumulatively by the Proposed

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Proposed Project in combination with other reasonably foreseeable actions. To this end, this Environmental Assessment (EA) considers as the future baseline condition, or No Action Alternative, the combination of existing conditions together with known development plans, public policies, projected population and employment growth, and other general background growth. The No Action Alternative projects have been assessed in combination with the Proposed Project in Chapters D-2 through D-14 for a range of technical areas.

The following projects were considered in the No Action Alternative analyses:

- MBD New Horizons Retail Center
- Construction on Freeman Street between Bryant and Longfellow Avenues
- Construction activities on I-895 (Arthur Sheridan Expressway)
- The New York City Department of Parks and Recreation (NYCDPR)'s planned park at the former concrete plant site south of the Proposed Project
- NYCDPR's West Farms segment of the Bronx River Greenway

Two projects being considered within the vicinity of the Proposed Project were not included in the future baseline conditions because they are in the early stages of development and specific information (such as a preferred alternative) is not available to analyze their potential cumulative effects with the Bronx River Greenway. These major projects are considered to have regional cumulative effects:

- NYSDOT is conducting the Bronx Arterial Needs MIS, a study that will focus on improving I-95 (Cross Bronx Expressway) and I-87 (Major Deegan Expressway).
- Reconstruction of the interchange of NYSDOT's Bruckner-Sheridan Expressway project.

Most of the future projects' areas of potential effect would not overlap with the Proposed Project's adverse impacts. With respect to the Proposed Project's major direct construction effects the areas of concern include contaminated materials, water quality, and natural resources. While the project's proposed mitigation would avoid any significant adverse effects with respect to contaminated materials, the impacts to natural resources would lead to a loss of habitat that could result in cumulative adverse effects if not replaced. The most significant adverse effects would accrue from the loss of wetlands and impacts to water quality due to potential dredging activities. Because of the importance of these resources, and to avoid adverse cumulative effects of other projects which may also fill wetlands or alter terrestrial habitat, it is anticipated that the Bronx River Greenway will not only mitigate for the loss of wetlands, but create additional wetlands to enhance habitat. The project will also remove non-native vegetation and plant native trees, shrubs, and grasses. In its entirety, the Bronx River Greenway Corridor will not only provide a continuous transportation corridor, but will also provide a green corridor for wildlife. Removal of impervious surface and improvements to drainage infrastructure along the corridor will also improve water quality of the Bronx River, and thus improve aquatic habitat.

Another direct adverse effect of the Proposed Project would be the displacement of four industrial entities (mostly auto-related) and replacing them with a multi-use path and park space. These businesses are not water dependent, and do not contribute substantially to a defining element of the neighborhood's land use or character. As mentioned earlier, the Proposed Project is one of many segments that would ultimately result in a continuous greenway that runs from Westchester County to the East River; therefore, the four industrial properties on the Project Site are an important link within this segment. With respect to cumulative effects, an area of concern is the continued loss of manufacturing space in New York City. While the project would require the displacement of these businesses and the acquisition of two of these properties as discussed previously in Chapter D-4, "Economic Conditions," vacant industrial buildings and land are available in the area for relocation of the displaced businesses. Therefore, with respect to economic conditions, the displacement of the businesses for the construction of the Greenway would not lead to increased adverse secondary or cumulative effects.



**A. INTRODUCTION**

The following sections describe laws and regulatory programs that may be applicable to activities proposed as part of the Proposed Project. Because some of the state laws and regulatory programs were promulgated under authority of federal laws, the federal laws and regulatory programs are discussed first in the following sections.

**B. SURFACE WATER QUALITY AND FLOODPLAINS****FEDERAL REGULATIONS***THE CLEAN WATER ACT (33 USC §§ 1251 TO 1387)*

The objective of the Clean Water Act, also known as the Federal Water Pollution Control Act, is to restore and maintain the chemical, physical, and biological integrity of U.S. waters. It regulates point sources of water pollution such as discharges of municipal sewage and industrial wastewater, and non-point source pollution such as runoff from streets, agricultural fields, construction sites and mining that enter waterbodies, from other than the end of a pipe. Section 402 of the Clean Water Act establishes the National Pollutant Discharge Elimination System (NPDES) which governs the review and issuance of permits for the discharge of pollutants to surface waters. Section 402 also allows the United States Environmental Protection Agency (USEPA) to delegate authority to states to carry out the NPDES program once they have met the specified requirements. New York has been delegated authority to implement NPDES, which it does through the State Pollutant Discharge Elimination System (SPDES), as discussed below in the section on New York regulations.

Section 404 of the Clean Water Act, requires authorization from the Secretary of the Army, acting through the United States Army Corps of Engineers (USACOE), for the discharge of dredged or fill material into navigable waters and other waters of the United States. Waters of the United States is defined in 33 CFR 328.3 and includes wetlands, mudflats, and sandflats that meet the specified requirements in addition to streams and rivers that meet the specified requirements. Section 404 applies to both permanent and temporary fill that would be discharged into waters of the United States within the project study area. Issuance of a Section 404 by the USACOE requires that a Water Quality Certificate be issued by the state where the discharge occurs to acknowledge that the discharge will not cause state water quality standards to be violated.

In addition, any applicant for a federal permit or license for an activity that may result in a discharge to navigable waters must provide to the federal agency issuing a permit a certificate, either from the state where the discharge will occur or from an interstate water pollution control agency, that the discharge will comply with Sections 301, 302, 303, 306, 307, and 316 (b) of the Clean Water Act. Applicants for discharges to navigable waters in New York must obtain a Water Quality Certificate from the New York State Department of Environmental Conservation (NYSDEC).

*RIVERS AND HARBORS ACT OF 1899*

Section 10 of the Rivers and Harbor Act of 1899, requires authorization from the Secretary of the Army, acting through the USACOE, for the construction of any structure in or over any navigable water of the United States, the excavation from or deposition of material in these waters, or any obstruction or alteration in navigable water of the United States. The purpose of this Act is to protect navigation and navigable channels. Any structures placed in navigable waters such as pilings, piers, or bridge abutments up to the mean high water line would be regulated pursuant to this Act. The USACOE must evaluate the probable impacts including cumulative impacts of the proposed activity on the public interest (benefits of the proposed activity versus potential detriments).

**Bronx River Greenway***EXECUTIVE ORDER 11988, FLOODPLAIN MANAGEMENT (SECTION 6)*

The US Department of Housing and Urban Development, in conjunction with Executive Order 11988, defines the term floodplain to mean “*lowland and relatively flat areas adjoining inland and coastal waters including flood prone areas of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year.*” Executive order 11988 states that, “*each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains in carrying out its responsibilities.*”

*COASTAL ZONE MANAGEMENT ACT OF 1972 (16 USC §§ 1451 TO 1465)*

The Coastal Zone Management Act of 1972 established a voluntary participation program to encourage coastal states to develop programs to manage development within the state’s designated coastal areas to reduce conflicts between coastal development and protection of resources within the coastal area. Federal permits issued in New York must be accompanied by a Coastal Zone Consistency Determination that evaluates consistency with New York’s federally approved coastal zone management program.

**STATE REGULATIONS***PROTECTION OF WATERS, ARTICLE 15, TITLE 5, ECL, IMPLEMENTING REGULATIONS 6NYCRR PART 608*

New York State’s surface waters (rivers, streams, lakes, and ponds) are valuable for sources of drinking water, for bathing, agricultural, commercial, and industrial uses, for the fish and wildlife habitat they provide, and for educational and recreational opportunities. It is the State’s policy, as set forth in Title 5 of Article 15, ECL to preserve and protect these waters. NYSDEC is responsible for administering the Protection of Waters regulations to prevent undesirable activities on waterbodies. Under this regulatory program, all waters of the state are provided a use classification (A or AA for drinking water source, B for best usage for swimming and other contact recreation, C for waters supporting fisheries and non-contact recreation, and D the lowest use classification), and a standard designation based on existing or expected best usage (such as T for those that may support trout, or TS for those that may support trout spawning).

Streams and small waterbodies connected to streams that are designated as C(T) or higher (i.e., C(TS), B, or A) are protected streams that are subject to the stream protection provisions of the Protection of Waters regulations. The Protection of Waters Permit Program regulates five different categories of activities: disturbance of the stream bed or banks of a protected stream or other watercourse; construction, reconstruction, or repair of dams and other impoundment structures; construction, reconstruction, or expansion of docking and mooring facilities; excavation or placement of fill in navigable waters and their adjacent and contiguous wetlands; and Water Quality Certification for placing fill or other activities that result in a discharge to waters of the United States in accordance with Section 401 of the Clean Water Act.

*STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES), ARTICLE 17 TITLE 8, ECL, IMPLEMENTING REGULATIONS 6 NYCRR PARTS 750, 751, 752, 753, 754, 755, 756, 757.*

Title 8 of Article 17, ECL, Water Pollution Control, was enacted to protect and maintain surface and groundwater resources and authorized the creation of the State Pollutant Discharge Elimination System (SPDES) to regulate discharges to the state’s waters. The following activities require SPDES permits: constructing or using an outlet or discharge pipe (point source) that discharges wastewater into surface

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**Attachment 1:****Water quality, Floodplains and Natural Resources Regulations**

or groundwaters of the State; constructing or operating a disposal system (sewage treatment plant); or discharge of stormwater. Construction activities that disturb one acre or more must obtain an SPDES permit.

*FLOOD PLAIN MANAGEMENT CRITERIA FOR STATE PROJECTS (6 NYCRR 502)*

New York State's Department of Environmental Conservation (NYSDEC) Environmental Conservation Law regulations require that, in cities with a designated floodway, no portion of the project may be placed within the adopted regulatory floodway to result in any increases in flood levels. The Bronx River is the only regulatory floodway in New York City. NYSDEC regulations also require state agencies to consider alternative sites for a project that are located outside the floodplain. State projects in the 100-year floodplain must be constructed to minimize flood damage. No project may be undertaken unless it is demonstrated that the cumulative effect of the proposed project, when combined with all existing development, will not cause any material damage to such existing development. In addition, 6 NYCRR 502 contains requirements for new and replacement water supply and sanitary sewage systems.

**C. NATURAL RESOURCES****FEDERAL REGULATIONS***EXECUTIVE ORDER 11990, PROTECTION OF WETLANDS (42 FEDERAL REGISTER 26961, 25 MAY 1977)*

This Executive Order directs federal agencies to provide leadership and take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance wetland quality. New activities in wetlands, either undertaken or supported by a federal agency, are to be avoided unless there is no practicable alternative and all practical measures have been taken to minimize the potential impacts to the wetlands.

*MAGNUSON-STEVENSON ACT (16 USC §§ 1801 TO 1883)*

Section 305(b)(2)-(4) of the Magnuson-Stevens Act outlines the process for the NMFS and the Regional Fishery Management Councils (in this case, the Mid-Atlantic Fishery Management Council) to comment on activities proposed by federal agencies (issuing permits or funding projects) that may adversely impact areas designated as essential fish habitat (EFH). EFH is defined as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (16 USC §1802(10)).

*ENDANGERED SPECIES ACT OF 1973 (PL 93-205; 16 USC 1531 TO 1544)*

The Endangered Species Act of 1973 recognized that endangered species of wildlife and plants are of aesthetic, ecological, educational, historical, recreational, and scientific value to the nation and its people. The Act prohibits the importation, exportation, take, possession, and other activities involving illegally taken species covered under the Act, and interstate or foreign commercial activities. The Act also provides for the protection of critical habitats on which endangered or threatened species depend for survival. USFWS (non-marine plants and animals) and NMFS (marine plants and animals) are responsible for administering the Act. Section 7(a) of the Act requires federal agencies to consult with the Secretary of the Interior (through USFWS and/or NMFS) before project implementation to ensure that the proposed action will not jeopardize a species, or destroy or adversely modify the designated critical habitat of the species.

**Bronx River Greenway**

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*MIGRATORY BIRD TREATY ACT (16 USC §§703 TO 712)*

The Migratory Bird Treaty Act implements the United States' commitment to four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. Each of the treaties protects selected species of birds and specifies basic closed and open seasons for hunting game birds. The Act makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to federal regulations. Title 50, Section 10.13, of the Code of Federal Regulations (50 CFR 10.13) lists the bird species protected under the Act.

*EXECUTIVE ORDER 13186 OF JANUARY 10, 2001, RESPONSIBILITIES OF FEDERAL AGENCIES TO PROTECT MIGRATORY BIRDS*

This Executive Order directs federal agencies to take certain actions to further implement the Migratory Bird Treaty Act. Each federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations is directed to develop and implement a Memorandum of Understanding (MOU) with USFWS that promotes the conservation of migratory bird populations. Agencies are expected to avoid or minimize impacts to migratory bird populations, and to take reasonable steps that include restoring and enhancing habitat, preventing or abating pollution affecting birds, and incorporating migratory bird conservation into agency planning processes whenever possible.

**STATE REGULATIONS***TIDAL WETLANDS ACT, ARTICLE 25, ECL, 6NYCRR PART 661*

Tidal wetlands regulations apply anywhere tidal inundation occurs on a daily, monthly, or intermittent basis. They are found along much of the salt-water shore, bays, inlets, canals, and estuaries of Long Island, New York City and Westchester County. Tidal wetlands are valuable for marine food production, wildlife habitat, flood, hurricane, and storm control, recreation, absorption of silt and organic material, education and research opportunities, and aesthetic values. The Tidal Wetlands Act sets forth the state's policy that tidal wetlands should be preserved and protected. NYSDEC is responsible for administering the tidal wetlands regulatory program (6 NYCRR Part 661) and mapping the locations of New York's regulated tidal wetlands. The tidal wetlands are identified by category based on the types of vegetation and the presence of tide. Each category has restrictions on activities allowed in and adjacent (up to 300 feet inland from wetland boundary, or up to 150 feet inland within New York City) to wetlands falling under that category. A permit is required for almost any activity that will alter wetlands or the adjacent areas.

*ENDANGERED AND THREATENED SPECIES OF FISH AND WILDLIFE; SPECIES OF SPECIAL CONCERN, ECL, SECTIONS 11-0535[1]-[2], 11-0536[2], [4], IMPLEMENTING REGULATIONS 6 NYCRR PART 182.*

The Endangered and Threatened Species of Fish and Wildlife; Species of Special Concern Regulations prohibit the take, import, transport, possession or selling of any endangered or threatened species of fish or wildlife, or any hide, or other part of these species as listed in Section 182.6.

**A. INTRODUCTION**

Essential fish habitat (EFH) is defined under the Magnuson-Stevens Fishery Conservation Management Act (16 USC §§ 1801 to 1883), as amended by the Sustainable Fisheries Act (SFA) of 1996, as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” “Waters” include aquatic areas and their physical, chemical and biological properties that are used by fish. “Substrate” includes sediment, hard bottom, structures, and associated biological communities that are under the water column. Waters and substrates necessary for fish spawning, breeding, feeding or growth to maturity—covering all stages within the life cycle of a particular species—refers to those habitats required to support a sustainable fishery and a particular species’ contribution to a healthy ecosystem (50 Code of Federal Regulations (CFR) 600.10).

Section 303(a)(7) of the Magnuson-Stevens Act requires that the eight Regional Fishery Management Councils (RFMC) describe and identify EFH for each federally managed species, and minimize adverse impacts from fishing activities on EFH. Section 305(b) (2)-(4) of the Magnuson-Stevens Act outlines the process for providing the National Marine Fisheries Service (NMFS) within the National Oceanic and Atmospheric Administration (NOAA), and the RFMC with the opportunity to comment on activities proposed by federal agencies that have the potential to adversely impact EFH areas. Federal agencies are required to consult with NMFS (using existing consultation processes for NEPA, the Endangered Species Act, or the Fish and Wildlife Coordination Act) on any action that they authorize, fund, or undertake that may adversely impact EFH.

Adverse effects to EFH, as defined in 50 CFR 600.910(A) include any impact that reduces the quality and/or quantity of EFH. Adverse effects may include:

- Direct impacts such as physical disruption or the release of contaminants;
- Indirect impacts such as the loss of prey, reduction in the fecundity (number of offspring produced) of a managed species; and
- Site-specific or habitat-wide impacts that may include individual, cumulative or synergetic consequences of a Federal action.

An EFH assessment of a federal action that may adversely affect EFH must contain:

- A description of the proposed action;
- An analysis of the effects, including cumulative, on EFH, the managed species and associated species such as major prey species, and the life history stages that may be affected;
- The agency’s conclusions regarding the effects of the action on EFH; and
- Proposed mitigation if applicable (50 CFR 600.920(g)).

**B. PROJECT DESCRIPTION**

The Proposed Project is part of the Bronx River Greenway corridor that extends from the East River to the border of New York City with Westchester County. The Proposed Project consists of the Bronx River Greenway segment from Westchester Avenue to East Tremont Avenue and comprises a multi-use path for people to walk, bicycle, skate, or run for transportation, recreation, or exercise. Components of the project include:

- Construction of three pedestrian bridges over the Bronx River;
- Construction of a pedestrian bridge over the AMTRAK Northeast Corridor Line;
- Construction of the multi-use path;
- Parkland improvements such as lighting, control of non-native and invasive species, and planting with native species;

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**Bronx River Greenway**

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- Extension and improvements to the CSO located at East 177th Street;
- Conversion of 3.33 acres of paved areas to green space;
- Naturalization of shorelines with planting of native wetland species, where feasible;
- Development of Starlight Park into an active recreation area with playfields, grassy areas, a boat house, and a fixed platform and floating dock for small watercraft such as canoes and kayaks;
- Improvements to 3 major road intersections with provision of pedestrian crossings and landscaping; and
- Improvements to reduce direct discharges of stormwater runoff to the Bronx River.

**SITE DESCRIPTION***WATER QUALITY OVERVIEW*

The Proposed Project is located on the lower Bronx River, a tributary to the Upper East River and part of the New York Harbor Estuary. The Bronx River is tidally influenced within the Project Site. The head of the tide occurs at a dam at the southern end of Bronx Park approximately one-quarter mile north of the northern end of the Project Site (East Tremont Avenue). Freshwater flows range from approximately 5 to 10 cubic feet per second (cfs) during dry conditions and from approximately 20 to 70 cfs during wet conditions NYCDEP (2002). Salinity near the confluence with the East River generally ranges from approximately 15 to 32 ppt, with an average of about 25 ppt (NYCDEP 2004). Salinity recorded within the Project Site near East Tremont Avenue north of the weir located just north of East 172nd Street is much lower, between 0 and 2.5 ppt (Rachlin Pers. Comm. 2004).

The NYSDEC classifies the lower Bronx River as Use Class I. The best usages for Class I saline surface waters are as secondary contact recreation and fishing. These waters must be suitable for fish propagation and survival. The water quality of the New York Harbor Estuary and its tributaries such as the Bronx River is strongly affected by human activity upstream and the densely populated and industrialized land uses that surround it. Historically, water quality problems included low dissolved oxygen (DO) content, high nutrient concentrations, algal blooms, excessive numbers of coliform bacteria, and the presence of floatables. The construction and upgrading of wastewater treatment facilities (WWTF), and implementation of water pollution control programs that have occurred within the New York Harbor since the 1970s has greatly reduced nutrient inputs and improved water quality (Brosnan and O'Shea 1995). Despite these overall improvements in water quality of the Harbor, the water quality of the lower Bronx River is impaired due to pathogen concentrations and oxygen demand (NYSDEC 2002 303d list and 2004 draft 303d list).

Average fecal coliform concentrations for the Upper East River/Western Long Island Sound area, which includes the lower Bronx River, showed a dramatic decline from the 1970s, dropping from more than 2,000 cells per 100 milliliters (cells/100 mL) to around 50 cells/100 mL in recent years, below the standard for Use Class I. This decline is attributed to the construction and upgrading of WWTF, and the city's water pollution control programs (NYCDEP 2003). The closest monitoring station for the NYCDEP Harbor Survey is located near the mouth of the Bronx River. Fecal coliform measurements taken between 1999 and 2003 at the Bronx River sampling station ranged from 1 to 1,940 cells/100 mL and averaged 205 cells/100 mL in top waters, never exceeding the Class I criteria.

DO measurements taken between 1999 and 2003 at the Bronx River sampling station ranged from 3.4 to 14.3 mg/L for surface waters, and averaged 6.3 mg/L. Bottom water DO concentrations were generally slightly lower than surface water concentrations, but were usually above the 4.0 milligram per liter (mg/L) standard (NYCDEP 2004). DO has the potential to drop below the standard during periods in the summer. A similar pattern is expected for the Project Site, given the shallow water depths. DO measurements taken in the northern portion of the Project Site in March through May of 2003 ranged

from 9.4 to 11.4 mg/L (Rachlin Pers. Comm. 2004). Areas with DO concentrations less than 4.0 mg/L are often avoided by finfish, although most estuarine organisms can tolerate much lower concentrations for short periods.

Other indicators of water quality recorded for the Bronx River station in the Upper East River/Western Long Island Sound area include chlorophyll *a*, water transparency, suspended sediment, and pH. The concentration of chlorophyll *a* (used to estimate phytoplankton biomass) between 1999 and 2003 ranged from 0.9-129 µg/L and averaged 10.6 µg/L. Water transparency, measured with a Secchi disk, between 1999 and 2003 ranged from 2-8 feet and averaged 4.5 feet (NYCDEP 2004). Turbidity appears to be slightly increasing in this area. Within the lower New York Harbor Estuary, surface and bottom water pH ranges from 7.0-8.0 throughout the year (Brosnan and O'Shea 1995).

### ***SEDIMENTS OVERVIEW***

Complex flow patterns lead to widely variable sediment characteristics throughout the New York Harbor Estuary, varying from coarse sands and gravels in high-energy areas to finegrained silts and clays in low-energy areas (USACE 1999). As is typical of urban watersheds, New York Harbor Estuary sediments are contaminated due to a history of industrial uses in the area. Contaminants found throughout the New York Harbor Estuary include pesticides such as chlordane and DDT, metals such as mercury, cadmium, lead, and copper, PCBs and various polycyclic aromatic hydrocarbons (Rohmann and Lilienthal 1987). Adams et al. (1998) found the mean sediment contaminant concentration for 50 of 59 chemicals measured in sediment samples from the New York/New Jersey Harbor Estuary to be statistically higher than other coastal areas on the East Coast. Within the New York/New Jersey Harbor Estuary, Adams et al. (1998) ranked Newark Bay as the most degraded area on the basis of sediment chemistry, toxicity, and benthic community, followed by the Upper Harbor, Jamaica Bay, Lower Harbor, Western Long Island Sound and the New York Bight Apex. Biological effects, identified based upon the benthic invertebrate community, were found to be associated with the chemical contamination. While the sediments of the New York Harbor Estuary are contaminated, the levels of most sediment contaminants (e.g., dioxin, DDT, and mercury) have decreased on average by an order of magnitude over the past 30 years (Steinberg et al. 2002).

### **EFH DESIGNATIONS**

The NMFS designates EFH within 10' by 10' squares identified by latitude and longitude coordinates. The location of the Bronx River Greenway on the lower Bronx River is within a portion of the Hudson River estuary EFH that is situated in the NMFS 10' x 10' square with coordinates (North) 40°50.0' N, (East) 73°50.0' W, (South) 40°40.0' N, (West) 74°00.0' W. This square includes the following waters: Atlantic Ocean waters within the square within the Hudson River Estuary affecting the following: Manhattan Island, New York City, College Pt., NY, Long Island City, NY, Brooklyn, NY, Port Morris, NY, Unionport, NY, Flushing Bay, Astoria, NY, LaGuardia Airport, Badland Isl., Rikers Isl., Roosevelt Isl., Wards Isl., and Hells Gate, along with the East River, the Harlem River, and the Bronx River. This area has been identified as EFH for 17 species of fish.

In addition to the 17 fish species, the lower Bronx River has been identified as Essential Fish Habitat (EFH) for the juvenile and adult life stage for three skate species, including the clearnose skate, little skate, and winter skate. Table D-A2-1 lists these species and life stages for which EFH has been designated for all 20 species.

**Bronx River Greenway**

**TABLE D-A2-1**

**ESSENTIAL FISH HABITAT DESIGNATED SPECIES FOR THE LOWER BRONX RIVER**

Species	Eggs	Larvae	Juveniles	Adults
Pollock ( <i>Pollachius virens</i> )			X	X
Red hake ( <i>Urophycis chuss</i> )		X	X	X
Winter flounder ( <i>Pseudopleuronectes americanus</i> )	X	X	X	X
Windowpane ( <i>Scophthalmus aquosus</i> )	X	X	X	X
Atlantic herring ( <i>Clupea harengus</i> )		X	X	X
Bluefish ( <i>Pomatomus saltatrix</i> )			X	X
Atlantic butterfish ( <i>Peprilus triacanthus</i> )		X	X	X
Atlantic mackerel ( <i>Scomber scombrus</i> )			X	X
Summer flounder ( <i>Paralichthys dentatus</i> )		X	X	X
Scup ( <i>Stenotomus chrysops</i> )	X	X	X	
Black sea bass ( <i>Centropristis striata</i> )			X	X
King mackerel ( <i>Scomberomorus cavalla</i> )	X	X	X	X
Spanish mackerel ( <i>Scomberomorus maculatus</i> )	X	X	X	X
Cobia ( <i>Rachycentron canadum</i> )	X	X	X	X
Sand tiger shark ( <i>Odontaspis taurus</i> )		X		
Dusky shark ( <i>Carcharinus obscurus</i> )		X		
Sandbar shark ( <i>Carcharinus plumbeus</i> )		X		X
Clearence skate ( <i>Raja eglanteria</i> )				X
Little skate ( <i>Leucoraja erinacea</i> )			X	X
Winter skate ( <i>Raja ocellata</i> )				X
<b>Source:</b> National Marine Fisheries Service. "Summary of Essential Fish Habitat (EFH) Designation" posted on the internet at <a href="http://www.nero.nmfs.gov/ro/STATES4/conn_li_ny/40407350.html">www.nero.nmfs.gov/ro/STATES4/conn_li_ny/40407350.html</a> .				

**C. POTENTIAL IMPACTS TO EFH****GENERAL DISCUSSION OF AQUATIC IMPACTS****CONSTRUCTION**

The results of the bathymetry study will be used to minimize the amount of dredging required for installation of the floating dock at Starlight Park. Potential impacts associated with dredging include localized and temporary increases in suspended sediments and the temporary loss of benthic macroinvertebrates in the area dredged. Water quality changes associated with increases in suspended sediment will be expected to be minimal and temporary, limited to the immediate area of the activity. Suspended sediments will dissipate shortly after the dredging is completed and the piles that will anchor the floating dock are driven into place.

The benthic community will be expected to reestablish within a short period of time as organisms colonize the area from adjacent areas. Estuarine species have behavioral and physiological mechanisms for dealing with variable concentrations of suspended sediment. Life stages of estuarine-dependent and anadromous fish species, bivalves and other macroinvertebrates are fairly tolerant of elevated suspended



sediment concentrations and have developed behavioral and physiological mechanisms for dealing with variable concentrations of suspended sediment (Birtwell et al. 1987, Dunford 1975, Levy and Northcote 1982 and Gregory 1990 in Nightingale and Simenstad 2001, LaSalle et al. 1991). Fish are mobile and generally avoid unsuitable conditions in the field such as increases in suspended sediment and noise (Clarke and Wilber 2000), and also have the ability to expel materials that may clog their gills when they return to cleaner, less sediment laden waters. Most shellfish are adapted to naturally turbid estuarine conditions and can tolerate short-term exposures by closing valves or reducing pumping activity. More mobile benthic invertebrates that occur in estuaries have been found to be tolerant of elevated suspended sediment concentrations. In studies of the tolerance of crustaceans to suspended sediments that lasted up to two weeks, nearly all mortality was caused by extremely high suspended sediment concentrations (greater than 10,000 mg/L) (Clarke and Wilber 2000) which will not occur from the limited dredging that will occur as a result of the Proposed Project. The area of dredging will be small and the period of disturbance short. Therefore activity associated with dredging for the floating dock, should it be required, will not be expected to result in significant adverse impacts to water quality or populations of aquatic species using this portion of the New York Harbor Estuary.

The installation of the piles anchoring the floating dock will remove a small area of benthic habitat and the benthic macroinvertebrates within the footprint of each piling that are unable to move from the area of installation. Approximately 12-16 piles will be needed to anchor the dock because it will be floating and not a fixed structure. The loss of this small area of habitat for benthic macroinvertebrates, plankton, and fish will not significantly impact the populations of the aquatic species using this portion of the New York Harbor Estuary, or the designation as EFH. The permanent loss of benthic macroinvertebrates within the piling footprints will not significantly impact the food supply for fish foraging in the area. Additionally, the pilings will provide a surface for encrusting organisms.

Bulkhead and riprap will be removed, where feasible, along the New York City Marshall's Impound Lot (aka PDJ Simone) and Apex Auto property shorelines (total of 802 feet), and the shorelines graded, naturalized, and stabilized with plantings. Results of the boring program (e.g., depth to bedrock) will be used to determine how and where regrading and naturalization of shorelines will be feasible. Stormwater from the Project Site will be managed to reduce direct discharges to the Bronx River. A stormwater pollution prevention plan (SWPPP) will be developed in accordance with NYSDEC's State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity Permit No. GP02-01.

The proposed improvements to the traffic intersections and construction of the bridges, amphitheater, and multi-use path will not infringe on wetlands or the waterway as they are being constructed upland of the armor stone/riprap shoreline. Extension of the CSO by 30 feet will adversely impact 0.04 acres of littoral zone wetland. NYSDOT will mitigate for this loss of littoral zone through the creation of wetlands within the Project Site (most likely high marsh). The type of wetland creation will be determined during the design phase of the project. The loss of this small amount of littoral zone will not be expected to result in significant adverse impacts to water quality, aquatic biota, or EFH in the Bronx River. Fill activities will have the potential to cause temporary increases in suspended sediment in the immediate area where the fill is placed. Activities associated with bulkhead and riprap removal during restoration of natural shorelines also have the potential to result in localized, temporary increases in suspended sediments. Sediment control measures will be taken to minimize the amount of resuspended sediment and could include such measures as the use of turbidity curtains.

There will be potential for on-site erosion and sedimentation at construction sites where soils will be disturbed (i.e., bulkhead and riprap removal, installation of landscaping, construction of retaining walls, removal of impervious surfaces, etc.). Where these activities are located adjacent to the waterway there will be potential for localized, temporary increases in suspended sediment. The SWPPP will include

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erosion and sediment control measures that comply with the "New York Standards and Specifications for Erosion and Sediment Control" such as hay bales, silt fencing, vegetative covers, and slope and soil stabilization. Planting of the graded, naturalized shorelines with native vegetation will reduce the potential for erosion and sedimentation in these areas.

Starlight Park has a separate stormwater management plan to manage stormwater and reduce discharges to the Bronx River. Silt fences have been placed along the Bronx River shoreline adjacent to the park in preparation for remediation activities. Therefore, construction of the park will not be expected to adversely impact water quality, aquatic biota, or EFH in the lower Bronx River.

### ***OPERATION***

The bridges considered for the three pedestrian crossings over the river are 17 feet wide with 1 foot to either side for railings. Shading of water by the three pedestrian bridges over the Bronx River will be approximately 8,512 square feet (0.195 acres). The cantilevered overlooks would shade approximately 1,520 square feet (0.03 acres). The floating dock and fixed platform have the potential to shade 2,414 square feet (0.055 acres) of water. Shading is of concern because it can adversely affect the habitat of some species of fish and lower productivity of primary producers. Studies of fish under very large piers (approximately 230,000 square feet, or 5.3 acres) indicate that shading could cause an adverse impact on the habitat for certain fish species because of these species' dependence on sight and light for feeding (Able et al. 1999). The bridge between Westchester Avenue and the AMTRAK railroad tracks will shade approximately 430 square feet (0.01 acres) of proposed high marsh on the west bank, 821 square feet (0.02 acres) of littoral zone, and a small amount of mudflat on the east bank. However, the areas of the three bridges and overlooks are very small and light will still be able to penetrate from the sides of these relatively narrow structures. The proposed 17 foot width is narrower than what is considered optimal for multi-use paths (22 feet) which reduces the potential impacts due to shading by the bridge structures. The small amount of shading resulting from the Proposed Project will not be expected to result in significant adverse impacts to water quality, aquatic biota, or EFH in the Bronx River.

Recreational boats visiting the park will be limited to small personal watercraft such as kayaks and canoes. These watercraft have shallow drafts and will not disturb the river bottom. Their use in the Bronx River will not result in significant adverse impacts to water quality, aquatic biota, or EFH in the Bronx River.

The CSO extension will be built with tide gates to prevent floatables from entering the river from the CSO. This will decrease the amount of debris discharged during storm events and improve water quality. Naturalization of shorelines and planting of wetland areas with native wetland species will be expected to result in improvements to water quality. The intertidal wetlands created during shoreline naturalization will enhance EFH within the Bronx River, offsetting the limited loss of habitat due to filling for the CSO extension and the potential loss of habitat for some fish due to shading of overwater structures. Installation of the CSO tide gate, increased green space, reduced impervious surfaces (approximately 3.33 acres), and reductions in direct discharges to the river will result in additional benefits to water quality in the lower Bronx River. The SWPPP will include measures to manage stormwater following construction in accordance with the "New York State Stormwater Management Design Manual." Therefore, operation of the Proposed Project will not be expected to result in significant adverse impacts to water quality, aquatic biota, or EFH in the Bronx River.

### **ASSESSMENT OF EFH SPECIES**

Table D-A2-1 lists the 20 managed fish species that have been identified by the NMFS as having EFH in the lower Bronx River. King mackerel and Spanish mackerel, for which EFH has been identified for the egg, larval, juvenile, and adult life stages, are considered southern species. These species are rarely found as far north as the mid-Atlantic or New York Bight, and are often associated with marine, offshore

habitats. Therefore, Atlantic and king mackerel are unlikely to occur within the Project Site except as occasional transient individuals. Cobia, for which EFH has been identified for the egg, larval, juvenile, and adult life stages, are highly migratory coastal pelagic fish that prefer salinities greater than 25 ppt. Cobia are unlikely to occur within the Project Site except as occasional transient individuals. The sandbar shark (EFH for larvae and adults), dusky shark (EFH for larvae), and sand tiger shark (EFH for larvae) are highly migratory shark species that rarely appear in the upper waters of the New York and New Jersey Harbor Estuary and will not be expected to occur within the Project Site.

The following sections present an analysis of EFH for each fish species and life stage for listed in Table D-A2-1—including the likelihood that the species will occur within the vicinity of the Proposed Action.

#### *POLLOCK (Pollachius virens)*

Pollock are marine fish that occur on both sides of the Atlantic (NEFMC 2000). In the western Atlantic, pollock occur from the Hudson Strait south to North Carolina, and is rare at the extremes of its range (Fishbase 2002). In the northwest Atlantic they are most abundant on the western Scotian Shelf and in the Gulf of Maine. There is one major spawning area in the western Gulf of Maine and several spawning areas on the Scotian Shelf (NEFSC 2002). The lower Bronx River is part of an area designated as EFH for juvenile and adult pollock.

Juvenile pollock are common in inshore areas and move offshore as they get older. The typical habitat for juveniles is bottom habitats with aquatic vegetation or a substrate of sand, mud, or rocks with water temperatures below 18°C (65°F), depths from 0-250 meters (0-820 feet), and salinities of about 29 ppt or 30 ppt (NEFMC 2000). This is a higher salinity than is typical for the lower Bronx River in the northern portion of the Project Site above the weir (Rachlin Pers. Comm. 2004). In addition, there is currently little, if any, aquatic vegetation to provide nursery areas for juvenile pollock at the Project Site.

Adult pollock are found on hard bottom habitats, including artificial reefs, with water temperatures below 14°C (57.2°F), depths from 15-365 meters (50-1,200 feet), and marine salinities above 31 ppt (NEFMS 2000). These are greater depths and salinities and lower temperatures than are typical for the lower Bronx River (NYCDEP 2001).

Adults are the stage of pollock with the greatest potential to occur in the vicinity of the Project Site, however, the low salinities encountered above the weir will limit their presence. If present, adults of this species are expected to be transient. The northeast pollock stock is considered overfished (the stock size is below its prescribed biomass threshold), but overfishing is not currently occurring. A rebuilding program should be ready for implementation by April of 2004 (NMFS 2003). The potential for water quality impacts from construction of the Proposed Project will be limited in duration and area. The extent of bottom habitat lost due to extension of the CSO will be small. Operation of the Bronx River Greenway will be expected to contribute to improved water quality of the lower Bronx River and will not be expected to result in significant adverse impacts to aquatic biota. For these reasons, the Proposed Project will not be expected to result in significant adverse impacts to the EFH for this species.

#### *RED HAKE (Urophycis chuss)*

Red hake is a bottom-dwelling fish that lives on sand and mud bottoms along the continental shelf from southern Nova Scotia to North Carolina (concentrated from the southwestern part of the Georges Banks to New Jersey). Spawning adults and eggs are common in marine portions of most coastal bays between Rhode Island and Massachusetts. Spawning occurs from May to June in the New York Bight (Steimle et al. 1999a). The lower Bronx River is within an area designated as EFH for larval, juvenile, and adult red hake.

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coastal bays between Rhode Island and Massachusetts. Spawning occurs from May to June in the New York Bight (Steimle et al. 1999a). The lower Bronx River is within an area designated as EFH for larval, juvenile, and adult red hake.

Larval red hake are free floating and occur in the middle and outer continental shelf. They are most common in water temperatures from 11-19°C (52-66°F) and depths from 10 to 200 m (33660 feet). Recently metamorphosed juveniles remain pelagic (occupy open water areas) for about two months where they then begin growth up to 25-30 mm (1.0-1.2 inches) in total length.

Shelter is a critical habitat requirement for red hake. In the autumn, young juveniles descend from the water column to the bottom and seek sheltering habitat in depressions in the sea floor. Settling peaks usually occur in October and November. Older juveniles use scallop shells, mussel beds, surf clam collars, etc., residing near these shelters until their second autumn when they move inshore to within 55 m (180 feet) depths. They will remain inshore until the temperature reaches 4°C (39°F), at which point they head offshore to overwinter (USACE 2000; Steimle et al. 1999a).

Woodhead (1990) describes red hake as a common resident of the New York Harbor system. In the Hudson-Raritan Estuary, the distribution of red hake is influenced by salinity, water temperature, and dissolved oxygen. Juvenile red hake were collected when salinity was greater than 22 ppt and at depths from 5-50 m (16-164 feet) deep. Collections tapered off when salinity reached greater than 28 ppt. Adult red hake prefers temperatures from 2-22°C (36-72°F), salinity ranging from 20-33 ppt and depths greater than 25 m (82 feet) deep. In Middle Atlantic Bight, red hake occur most often in coastal waters in the spring and autumn, moving offshore to avoid the warm summer temperatures. Additionally, red hake have been reported to be sensitive to low DO levels, preferring concentrations of 6 mg/L or more within the Hudson-Raritan Estuary (Steimle et al. 1999a).

The water quality measurements from the nearby NYCDEP Harbor Survey lower Bronx River monitoring station and salinity measurements above the weir suggest that juvenile red hake presence within the Project Site may be occasionally limited by low DO and salinity, adults may be limited by salinity levels and shallow depths. The portion of the lower Bronx River in the vicinity of the Project Site makes up a small portion of the EFH for this species and most of the adults and juveniles appear to occur south of the Narrows within the Hudson-Raritan Estuary (Steimle et al. 1999a). Additionally, the southern stock of red hake (the stock that occurs within the New York/New Jersey Harbor) is not currently considered overfished (NMFS 2003). The potential for water quality impacts from construction of the Proposed Project will be limited in duration and area. The extent of bottom habitat lost due to extension of the CSO will be small. Operation of the Bronx River Greenway will be expected to improve water quality of the lower Bronx River and will not be expected to result in significant adverse impacts to aquatic biota. For these reasons, the Proposed Project will not be expected to result in significant adverse impacts to the EFH for this species.

*WINTER FLOUNDER (Pseudopleuronectes americanus)*

Winter flounder can be found from Labrador to North Carolina but most commonly in estuaries from the Gulf of St. Lawrence to the Chesapeake Bay including the Lower Hudson (Heimbuch et al. 1994; USACE 2000). It is a fairly small, thick flatfish that is abundant in the Lower Hudson River Estuary, where it is a resident, but may travel upriver into fresh water (Heimbuch et al. 1994). It spawns during the winter and early spring, typically at night in shallow, inshore estuarine waters with sandy bottoms. Woodhead (1990) reports spawning to occur mostly in the Lower New York Bay and the New York Bight. The lower Bronx River is within an area designated as EFH for eggs, larval, juvenile, and adult winter flounder.

Eggs float in the top 25 cm (10 inches) of the intertidal zone and clump together postfertilization at which point they sink (Heimbuch et al. 1994; USACE 2000). Optimal egg hatching occurs at 3°C (37°F) and in salinity ranging from 15-25 ppt. Winter flounder larvae develop to juveniles within the estuarine system. In March, April and May, winter flounder larvae can be found in the Upper New York Bay near the bottom (Heimbuch et al. 1994).

For the first summer, young-of-year winter flounder remain in the shallow waters (0.1-10 m [0.3-33 feet] in depth) of bays and estuaries where they were spawned, where temperatures are less than 28°C (82°F) and salinities range from 5-33 ppt. Juveniles often occupy areas with sand and/or mud substrates. Some juveniles beyond their first year may overwinter in estuaries at temperatures less than 25°C (77°F), salinities from 10-30 ppt, and depths from 1-5 m (3-16 feet). However, in winter, juvenile catches generally increased outside of the estuary while at the same time decreasing within the estuary, suggesting that some juveniles also migrate out of the estuary in the winter (Pereira et al. 1999).

Adult winter flounder prefer depths of 20 to 48 m (66-158 feet) and are commonly associated with mud, sand, pebble, or gravel bottoms (USACE 2000). Adults generally leave the New York Harbor estuary in the summer as water temperatures increase, returning to the Harbor in the autumn (Woodhead 1990). Winter flounder will live close to shore, swimming into shallow water to feed. Adults tend to move to deeper water when water temperatures increase in the summer or decrease in the autumn and winter (Heimbuch et al. 1994). NMFS Northeast Fisheries Science Center (NEFSC) trawls within the Hudson-Raritan estuary found adult winter flounder at temperatures between 4-12°C (39-54°F) and salinities as low as 15 ppt, although most were found at salinities greater than 22 ppt. The bulk of the adult catch occurred in water depths of 25 m (82 feet) or less in the spring (during and just after spawning) and 25 m or deeper in the autumn (prior to spawning) (Pereira et al. 1999).

Winter flounder are bottom fish and all stages of this species have the potential to occur within the vicinity of the Project Site but will be mostly likely south of the weir. Juveniles feed on a variety of worms and small crustaceans, switching to mostly mollusks as they grow. Adults eat small invertebrates and fish fry. Because they are sight feeders increased turbidity can interfere with feeding success (USACE 2000).

Winter flounder were collected in the Bronx River south of the Project Site below Lafayette Avenue during recent surveys (Rachlin 2004). While winter flounder are found throughout the New York/New Jersey Harbor Estuary, this species is currently experiencing high fishing rates that are in excess of natural production—recent annual exploitation rates (proportion of the biomass removed by fishing) range from 55-70 percent. The Southern New England/MidAtlantic stock unit (which includes the New York population), is considered to be overfished (NMFS 2003). The 2001 exploitation rate was 37 percent (ASMFC 2002). The potential for water quality impacts from construction of the Proposed Project will be limited in duration and area. The extent of bottom habitat lost due to extension of the CSO will be small. Operation of the Bronx River Greenway will be expected to improve water quality of the lower Bronx River and will not be expected to result in significant adverse impacts to aquatic biota. For these reasons, the Proposed Project will not be expected to result in significant adverse impacts to the EFH for this species.

#### *WINDOWPANE (Scophthalmus aquosus)*

Windowpane, also called sand flounder, is found from the Gulf of St. Lawrence to South Carolina and has its maximum abundance in the New York Bight. Windowpane are generally found offshore on sandy bottoms in water between 50 m and 80 m deep (164-262 feet), and close inshore in estuaries just below the mean low water mark. They migrate onshore in the shallow shoal water in the summer and early autumn as water temperatures increase, and migrate offshore during the winter and early spring.

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months when temperatures decrease. Windowpane spawn within the mid-Atlantic Bight from April to December in the bottom waters with temperatures ranging from 8.5-13.5°C (47-56°F). Spawning peaks occur in May and then again in the autumn in the southern portion of the Bight (USACE 2000). The lower Bronx River is within an area designated as EFH for eggs, larval, juvenile, and adult windowpane.

The buoyant eggs and larvae that settle to the bottom are found predominately in the estuaries and coastal shelf water for the spring spawned eggs, and in the coastal shelf waters alone for those eggs spawned in the autumn. Windowpane eggs are found floating in the water column at temperatures of 5-20°C (41-68°F), specifically at 4-16°C (39-61°F) in spring (March through May), 10-16°C (50-61°F) in summer (June through August), and 14-20°C (57-68°F) in autumn (September through November), and within depths less than 70 m (230 feet) (Chang et al. 1999). Larvae are typically found in the area of the estuary where salinity ranges from 18 to 30 ppt in the spring and on the shelf in the autumn. Juvenile windowpane were found year-round in both the shelf waters and in the Hudson-Raritan Estuary. Larvae are found at similar temperature and depth as the egg stage of this species, particularly at 3-14°C (37-57°F) in the spring, 10-17°C (50-63°F) in the summer, and 13-19°C (55-66°F) in the autumn (Chang et al. 1999).

Within the estuary, juvenile fish were fairly evenly distributed but seemed to prefer the deeper channels in the winter and summer. They were most abundant where bottom water temperatures ranged from 5 to 23°C (41-73°F), depths ranged from 7-17 m (23-56 feet), salinities ranged from 22-30 ppt, and dissolved oxygen concentrations ranged from 7-11 mg/L. Similarly, adults were fairly evenly distributed year-round, preferring deeper channels in the summer months. Adults were collected in bottom waters where temperatures ranged from 0 to 23°C (32-73°F), depths were less than 25 m (82 feet), salinity ranged from 15-33 ppt, and dissolved oxygen ranged from 2-13 mg/L (USACE 2000).

All stages of windowpane have the potential to occur within the vicinity of the Project Site, primarily south of the weir. Juveniles and adults are less likely to occur in the relatively shallow waters of the Project Site during the winter and summer. The southern New England/Middle Atlantic stock is currently considered to be overfished although overfishing is not currently occurring (NMFS 2003). As with winter flounder, this species is widely distributed in the New York Harbor Estuary. The potential for water quality impacts from construction of the Proposed Project will be limited in duration and area. The extent of bottom habitat lost due to extension of the CSO will be small. Operation of the Bronx River Greenway will be expected to improve water quality of the lower Bronx River and will not be expected to result in significant adverse impacts to aquatic biota. For these reasons, the Proposed Project will not be expected to result in significant adverse impacts to the EFH for this species.

*ATLANTIC HERRING (Clupea harengus)*

Atlantic herring is a planktivorous marine species that occurs throughout the Northwestern Atlantic waters from Greenland to North Carolina. They are most abundant north of Cape Cod and relatively scarce in waters south of New Jersey (USACE 2000). Atlantic herring rarely move into fresh water (Smith 1985). The lower Bronx River is within an area designated as EFH for larval, juvenile, and adult Atlantic herring.

Juvenile and adult herring undergo complex north-south migrations and inshore-offshore migration for feeding, spawning, and overwintering. They spawn once a year in late August to November, in the coastal ocean waters of Gulf of Maine and Georges Banks. This species never spawns in brackish water. Post-spawn, the adults migrate to the New York Bight to overwinter from December to April. The autumn migration to overwintering areas is done in tight schools while the spring migration to spawning areas is much more dispersed. Fish that pass through the mid-Atlantic Bight are typically four years of age or older (USACE 2000).

Larval herring are free-floating and for Autumn-spawned fish this stage can last 4-8 months. Portions of those hatched remain at the spawning site while others drift in ocean currents reaching eastern Long Island Sound. In the Gulf of Maine, larvae occur at temperatures ranging from 9-16°C (48-61°F), and a salinity of 32 ppt. During post-metamorphosis, which occurs through April and May, juveniles form large schools and move into shallow waters. Large schools of juveniles have been found in Connecticut and southern Massachusetts in May and June. In the summer and autumn, juveniles move out of the nearshore waters to overwinter in deep bays or near the bottom in offshore areas. Within Long Island Sound, springtime abundances have been reported as being highest at temperatures ranging from 9-10°C (48-50°F), depths ranging from 10-30 m (33-98 feet), and salinity ranging from 25-28 ppt. Within the Hudson-Raritan Estuary, catches of herring were highest at temperatures ranging from 3 to 6°C

(37-43°F) and in the deeper portions of the estuary (USACE 2000). Juveniles collected in the

Hudson-Raritan Estuary NEFSC bottom trawl surveys were found to prefer temperatures at 216°C (36-61°F) and 12-22°C (54-72°F), being most abundant at 4-6°C (40-43°F) and 15-18°C

(59-64°F). Juveniles are commonly found at depths ranging from 30-135 m (98-443 feet), preferring deeper waters in the summer (Reid et al. 1999).

On average, males and females mature at about 25-27 cm (10-11 inches). In the Hudson-Raritan estuary NEFSC bottom trawl surveys, adults were most abundant at 3-6°C (37-43°F) at depths ranging from 4.5-13.5 m (14-44 feet). Atlantic herring prefer salinities 28 ppt or greater (Reid et al. 1999). Juveniles and adults perform diel and semi-diel vertical migrations in response to daily photoperiods and increased turbidity. Being sensitive to light intensity, activity is highest after sunrise and just before sunset where the herring will avoid the surface during daylight to avoid predators (Reid et al. 1999).

No spawning will occur within the vicinity of the Project Site and larvae will not likely be found due to their salinity and temperature preferences. Juvenile and adult Atlantic herring will be unlikely to occur except as occasional transient individuals in the vicinity of the Project Site because of salinity and depth preferences. The Atlantic herring stock complex in the northeastern United States is considered under-utilized with the exception of the portion in the Gulf of Maine (Reid et al. 1999) and is not overfished (NMFS 2003). The potential for water quality impacts from construction of the Proposed Project will be limited in duration and area and will not be expected to affect aquatic organisms. Therefore, the Proposed Project will not be expected to result in significant adverse impacts to the EFH for this species.

#### *BLUEFISH (Pomatomus saltatrix)*

Bluefish is a carnivorous marine fish that occurs in temperate and tropical waters on the continental shelf and in estuarine habitats around the world. In North America, bluefish live along most of the Atlantic coastal waters from Nova Scotia south, around the tip of Florida, and along the Gulf Coast to Mexico. Bluefish migrate between summering and wintering grounds, generally traveling in groups of fish of similar sizes loosely aggregated with other groups. They generally migrate north in the spring and summer and south in the autumn and winter. Along the North Atlantic, summering ground centers are located in the New York Bight as well as southern New England and northern sections of the North Carolina coastline. Wintering grounds are found in the southeastern parts of the Florida coast. Juvenile and adult bluefish travel far up estuarine waters (where salinity may be less than 10 ppt) while eggs and larvae are largely restricted to marine habitats (USACE 2000). The lower Bronx River is within an area designated as EFH for juvenile and adult bluefish.

There are two spawning stocks along the U.S. Atlantic coast—a south Atlantic spring spawn, and mid-Atlantic summer spawn. The fish active in the spring spawn migrate to the Gulf Stream/coastal shelf

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interface between northern Florida and Cape Hatteras, in April and May. Post-spring spawn, smaller bluefish drift west while the larger fish slowly migrate north along the shelf and west into mid-Atlantic bays and estuaries where they stay until autumn. Summer spawning fish migrate to the mid-Atlantic from Cape Cod to Cape Hatteras in June through August. Summer post-spawn fish head towards the mid-Atlantic shores and are particularly abundant in Long Island Sound (USACE 2000; Fahay et al. 1999). Juveniles from the spring spawn drift north in the early summer and also enter the important nursery habitats in estuaries and bays along the mid-Atlantic coast in June. Summer spawned fish enter the estuaries in middle to late summer (Buckel et al. 1999). All spent fish and juveniles migrate to the wintering grounds in the autumn (USACE 2000).

Juveniles in the Mid-Atlantic Bight inhabit inshore estuaries from May to October, preferring temperatures between 15 and 30°C (59-86°F), and salinities between 23 ppt and 33 ppt. Although juvenile and adult bluefish are moderately euryhaline, occasionally they will ascend well into estuaries where salinities may be less than 3 ppt. Juveniles use estuaries as nursery areas, and can be found in sand, mud, silt, or clay substrates as well as *Spartina* or *Fucus* beds. Bluefish juveniles are sensitive to changes in temperature. Thermal edges apparently serve as important cues to juvenile migration off shore in the winter season (Fahay et al. 1999).

Adult bluefish are pelagic and highly migratory with a seasonal occurrence in Mid-Atlantic estuaries from April to October. They prefer temperatures from 14-16°C (57-61°F) but can tolerate temperatures from 11.8-30.4°C (35-87°F) and salinities greater than 25 ppt. Adult bluefish are not uncommon in bays and larger estuaries, as well as coastal waters (Bigelow and Schroeder 1953, Fahay et al. 1999).

No spawning will occur within the Project Site. Juvenile and adult bluefish presence at the Project Site may be limited by the low salinities encountered above the weir. Bluefish was categorized as overfished—the stock size was below the minimum threshold set for this species—and a rebuilding program was implemented. However, recent estimates of fishing mortality suggest that the rebuilding program, state-by-state quota system, and recreational harvest limit have been successful and that overfishing is no longer occurring (MAFMC 2002, NMFS 2003). Further, during the period from 2000 through 2002, the recreational and commercial sectors landed only 59 percent of the authorized total landings allowed, most likely due to decreased recreational fishing pressure as other species' populations have increased (MAFMC 2003). The potential for water quality impacts from construction of the Proposed Project will be limited in duration and area. The extent of bottom habitat lost due to extension of the CSO will be small. Operation of the Bronx River Greenway will be expected to improve water quality of the lower Bronx River and will not be expected to result in significant adverse impacts to aquatic biota. For these reasons, the Proposed Project will not be expected to result in significant adverse impacts to the EFH for this species.

*ATLANTIC BUTTERFISH (Peprilus triacanthus)*

Butterfish occur from Newfoundland to Florida and are most abundant between southern New England and Cape Hatteras. It has been suggested that two populations of Butterfish exist. One population appears largely restricted to shoals (less than 20 m [66 feet]) south of Cape Hatteras, and another mainly north of Hatteras that occurs in shoals and possibly some deeper waters along of the shelf. The lower Bronx River is within an area designated as EFH for larval, juvenile, and adult Atlantic butterfish.

Throughout its range, butterfish are found over the entire shelf, inshore and offshore. Cooling temperatures associated with late autumn trigger a migration offshore to the edges of the shelf where waters are warm. Butterfish require 10°C (50°F) for survival. This species spawns from June to August in inshore waters generally less than 30 m (98 feet) deep. Peak egg production is in late June and early July off Long Island Sound. Studies performed in the Hudson-Raritan Estuary noted that butterfish comprised less than 1 percent of total catches of fish (USACE 2000).



Newly hatched larvae are between 2 mm and 16 mm (0.1-0.6 inches) long. Larvae are found at the surface or in the shelter of the tentacles of large jellyfish, and are more nektonic (free swimming) than planktonic (drift with water movements) when between 10 and 15 mm (0.4-0.6 inches) long. Larvae are found at temperatures ranging from 7-26°C (45-79°F), although most abundant at 9-19°C (48-66°F), and at depths less than 120 m (394 feet) (Cross et al. 1999).

At 6 mm (0.24 inches) larval body depth has increased substantially in proportion to length and at 15 mm (0.6 inches), the fins are differentiated and the young fish takes on the general appearance of the adult. Adult butterfish can range from 120-305 mm (4.7-12 inches) long. Both juveniles and adults have similar habitat characteristics. They are eurythermal and euryhaline and are common near the surface in sheltered bays and estuaries during the spring to autumn months. In the Hudson-Raritan trawl survey, juveniles and adults were found at depths from 323 m (10-75 feet), salinities from 19-32 ppt, and dissolved oxygen from 3-10 mg/L. Juvenile and adult butterfish also often prefer sandy and muddy substrates, and temperatures from 3-28°C (37-82°F) (Cross et al. 1999).

Occasional adult and juvenile butterfish have the potential to occur within the vicinity of the Project Site. Spawning is unlikely to occur within the Project Site. Woodhead (1990) reports butterfish to be a common transient in the New York Harbor in the summer. Atlantic butterfish prefer sandy bottoms but are not closely associated with the bottom when inshore during the summer. They may stay close to the bottom during the day and move upward at night (Smith 1985). Butterfish stock is not overfished or approaching an overfished condition (Cross et al. 1999, NMFS 2003) and it is considered an underexploited fishery (Cross et al. 1999). The potential for water quality impacts from construction of the Proposed Project will be limited in duration and area. The extent of bottom habitat lost due to extension of the CSO will be small. Operation of the Bronx River Greenway will be expected to improve water quality of the lower Bronx River and will not be expected to result in significant adverse impacts to aquatic biota. Therefore, the Proposed Project will not be expected to result in significant adverse impacts to the EFH for this species.

#### *ATLANTIC MACKEREL (Scomber scombrus)*

Atlantic mackerel is a pelagic marine fish that occurs in the western North Atlantic from Labrador to North Carolina. It sustains fisheries from the Gulf of St. Lawrence and Nova Scotia to the Cape Hatteras area. The lower Bronx River is within an area designated as EFH for juvenile and adult Atlantic mackerel. There may be two populations: one occurring in the northern Atlantic and associated with the New England and Maritime Canadian coast, and another more southerly population inhabiting the mid-Atlantic coast. Both populations overwinter in the deep waters at the edge of the continental shelf, generally moving inshore (in a northeastern direction) during the spring, and reversing this migration in autumn.

The southern population begins its spawning migration by moving inshore between the Delaware Bay and Cape Hatteras and in a northeastern direction along the coast. The timing of the migration and spawn is a result of warming water temperatures. The peak spawn for the southern population occurs off New Jersey and Long Island Sound in April and May. Most spawning occurs in the shoreward half of the shelf and in waters from 7-14°C (45-57°F) (with the peak being 10-12°C (50-54°F) (Studholme et al. 1999). By June there are schools of juveniles off Massachusetts, and they move into the Gulf of Maine by June and July where they remain for the summer. In the Hudson-Raritan Estuary, juveniles are present from April to December, but are most common from April through June and October through November. Adults are present from April through June and from September through December, most commonly from April to May and from October to November (USACE 2000).

Juvenile transformation includes swimming and schooling behaviors starting at 30-50 mm (1.22-2.0 inches), and closely resemble adults when about 1 year in age. In the Hudson-Raritan Bay estuary,

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juveniles are present in the spring and summer months preferring depths from 4.9-9.8 m (16-32 feet), salinity ranges from 26-28.9 ppt, dissolved oxygen from 7.3-8.0 mg/L and temperatures from 17.6-21.7°C (64-71°F) (Studholme et al. 1999).

Adult Atlantic mackerel can range from 26 cm (10 inches) in their second year to about 40 cm (15.8 inches) in their sixth year. NEFSC trawl surveys show that adults are found in the spring at temperature ranges from 5-13°C (41-55°F) dispersed from 0-380 m (1,250 feet) (most abundant at 160-170 m [525-558 feet]), and in the summer at temperatures ranging from 4-14°C (39-57°F) at depths of 10-180 m (33-591 feet) (abundant at 50-70 m [164-230 feet]). Adults also prefer salinities of 25 ppt or greater (Studholme et al. 1999).

Atlantic mackerel were rarely collected during trawls in the New York Harbor by USACE from October 1998 through November 1999 (USACE 1999). Most individuals are found in the Lower Harbor (Raritan Bay and Sandy Hook Bay) (Woodhead and McEnroe 1991 in USACE 1999). Spawning is unlikely to occur in the lower Bronx River. Juvenile and adult Atlantic mackerel will be unlikely to occur within the Project Site north of the weir and will not be expected to occur south of the weir except as occasional transient individuals. The habitat found within the Project Site does not represent a significant portion of the EFH for this species. The Atlantic mackerel fishery is no longer considered overfished and this stock is now considered underexploited (MAFMC 2002; NMFS 2003). The potential for water quality impacts from construction of the Proposed Project will be limited in duration and area. The extent of bottom habitat lost due to extension of the CSO will be small. Operation of the Bronx River Greenway will be expected to improve water quality of the lower Bronx River and will not be expected to result in significant adverse impacts to aquatic biota or habitat in the river. For these reasons, the Proposed Project will not be expected to result in significant adverse impacts to the EFH for this species.

*SUMMER FLOUNDER (Paralichthys dentatus)*

Summer flounder prefer the estuarine and shelf waters of the Atlantic Ocean and are found between Nova Scotia and southeastern Florida. They are most abundant from Cape Cod, Massachusetts, to Cape Hatteras, North Carolina. The lower Bronx River is within an area designated as EFH for larval, juvenile, and adult summer flounder. Summer flounder usually appear in the inshore waters of the New York Bight in April, continuing inshore in May and June, and reach their peak abundance in July and August. Spawning takes place in the New York Bight in nearshore waters outside estuarine systems in September to October. Spawning occurs in surface water temperatures of 7-14°C (45-57°F), with a peak around 10-12°C (50-54°F) (Packer et al. 1999).

Larvae occur in water from 0-22°C (32-72°F) and are transported to estuarine nurseries by currents. They are distributed throughout the estuary prior to late summer and are more concentrated in sea grass beds as opposed to tidal marshes in the late summer and early autumn (USACE 2000). Planktonic larvae (2-13 mm [0.08-0.5 inches]) have been found in temperatures ranging from 0-23°C (32-73°F), but are most abundant between 9 and 17°C (48-63°F). Within New Jersey waters, summer flounder larvae have been found to prefer salinities ranging from 20-30 ppt. In the Mid-Atlantic Bight, larvae were found at depths from 10-70 m (33-230 feet). Greater densities of young fish were found in or near inlets (Packer et al. 1999).

Young summer flounder move into shallow (found usually at 0.5-5.0 m [1.6-16 feet] in depth) estuaries using them as nursery habitat in the autumn, summer, and spring months. Juvenile summer flounder are well adapted to the temperature and salinity ranges present in estuarine habitats. They are able to withstand a wide range of temperatures, and salinities ranging from 10-30 ppt. Juveniles can be found on mud and sand substrates in flats, channels, salt marsh creeks, and eelgrass beds (Packer et al. 1999).

Adult summer flounder feed both in the shelf waters and estuaries, and are more active in the daylight hours since they are primarily visual feeders (USACE 2000). Adults are found to grow to lengths ranging from 25-71 cm (10-28 feet). Adults inhabit sand substrates usually at depths up to 25 m (82 feet), at temperatures ranging from 9-26°C (48-79°F) in the autumn, 4-13°C (39-55°F) in the winter, 2-20°C (36-72°F) in the spring, and 9-27°C (48-81°F) in the summer. Salinity is known to have minimal effect on distribution in comparison to substrate preference (Packer et al. 1999).

Spawning of summer flounder will not occur in the vicinity of the Project Site. Larvae, juveniles, and adults will have the potential to occur in the vicinity of the Project Site. Summer flounder have been collected in areas of the Upper Harbor, primarily in the summer (USACE 1999). In 2002 the stock was considered overfished and was in the 8th year of a 10-year rebuilding program (NMFS 2003; MAFMC 2002). However, the latest stock assessment for summer flounder indicates that management measures have been successful. The resource is no longer overfished and overfishing is not occurring. Summer flounder biomass is estimated to be above the threshold point for the first time since this species was placed under the joint management of the Atlantic States Marine Fisheries Commission (ASMFC) and the MidAtlantic Fishery Management Council (MAFMC). The ASMFC and MAFMC have recommended increasing the total allowable landing limits to 28.2 million pounds in 2004 (compared to 23 million pounds in 2003) (ASMFC 2003). The potential for water quality impacts from construction of the Proposed Project will be limited in duration and area. The extent of bottom habitat lost due to extension of the CSO will be small. Operation of the Bronx River Greenway will be expected to improve water quality of the lower Bronx River and will not be expected to result in significant adverse impacts to aquatic biota. For these reasons, the Proposed Project will not be expected to result in significant adverse impacts to the EFH for this species.

#### *SCUP (Stenotomus chrysops)*

Scup is a marine fish that occurs primarily on the continental shelf from Cape Cod, Massachusetts to Cape Hatteras, North Carolina. The lower Bronx River is within an area designated as EFH for eggs, larval, and juvenile scup. Scup arrive in the waters off New Jersey and New York by early May. During the summer months, older fish (four years old or older) tend to stay in the inshore waters of the bays while the younger fish are found in the more saline waters of estuaries such as the Hudson-Raritan Estuary. Spawning occurs in May through August with a peak in June and occurs principally in the estuaries of New York and New Jersey. Juveniles grow quickly and migrate with the rest of the population to offshore wintering grounds starting in late October and are absent from inshore waters by the end of November (USACE 2000).

Scup eggs are buoyant and are rather small (0.8 to 1.0 mm [0.03-0.04 inches]), hatching in about 2-3 days depending on temperature. Most eggs are collected from May-August at depths less than 50 m (164 feet) and at temperatures ranging from 11-23°C (52-73°F) (Steimle et al. 1999c).

Newly hatched larvae are pelagic and approximately 2 mm (0.08 inches) long. In approximately three days, diagnostic characters of the species are evident and shortly afterwards the larvae abandon the pelagic phase and become bottom dwelling. They occur at water temperatures ranging from 14-22°C (57-72°F) and occupy more saline (23-33 ppt) portions of bays. They are often found within the water column at depths less than 50 m (164 feet) (Steimle et al. 1999c).

Juveniles from 15-30 mm (0.6-1.2 inches) (up to 10 cm [4 inches]) are common during November. By the end of their first year they can reach up to 16 cm (6.3 inches). Juveniles inhabit estuarine intertidal areas at depths of 5-12 m (16-39 feet), particularly areas with sand and mud substrates or mussel and eelgrass beds. Juveniles prefer temperatures from about 9-27°C (48-81°F) and salinities greater than 15 ppt (Steimle et al. 1999c).

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Scup males and females reach sexual maturity at age two and reach about 15.5 cm (6 inches) in length. From April to December, adults can be found inshore along silt, sand, and mud substrates at depths less than 30 m (98 feet). Adults prefer temperatures ranging from 6-27°C (43-81°F), and salinities ranging from 20-30 ppt (Steimle et al. 1999c).

In the New York Harbor, spawning occurs primarily in the Lower New York Bay and the Eastern Long Island Bay (USACE 2000) and is not expected to occur within the vicinity of the Project Site. Juveniles may occur within the portion of the estuary in the vicinity of the Project Site in the summer and autumn but their presence may be limited by the low salinities encountered above the weir. Woodhead (1990) reports that scup is a common summer transient in the New York Harbor. The EFH for this marine species is primarily in the higher salinity areas of the southern portion of the Upper Harbor (USACE 1999). The stock rebuilding schedule and management measures implemented in 1996 have resulted in a dramatic increase in scup abundance and recent data suggest the stock is no longer overfished (MAFMC 2002; ASMFC 2003). The potential for water quality impacts from construction of the Proposed Project will be limited in duration and area. The extent of bottom habitat lost due to extension of the CSO will be small. Operation of the Bronx River Greenway will be expected to improve water quality of the lower Bronx River and will not be expected to result in significant adverse impacts to aquatic biota. Therefore, the Proposed Project will not be expected to result in significant adverse impacts to the EFH for this species.

*BLACK SEA BASS (Centropristis striata)*

Black sea bass is a marine species that occurs from Cape Cod, Massachusetts to Cape Canaveral, Florida. The lower Bronx River is within an area designated as EFH for juvenile and adult black sea bass. The fishery is divided into a northern population above Cape Hatteras, North Carolina, and a southern population below Cape Hatteras. The northern population migrates seasonally: inshore and north in the spring, and offshore and south in the autumn. In the autumn, older fish move offshore sooner and overwinter in deeper waters (73 to 163 m [240-535 feet]) than young-of-the-year fish (56 to 110 m [184-361 feet]). Black sea bass can tolerate temperatures as low as 6°C (43°F) but are most abundant in offshore waters warmer than 9°C (48°F), between 20 to 60 m (66-197 feet) deep (USACE 2000). During the spring migration, adults move to spawning grounds and juveniles move into estuaries. For the northern population spawning generally takes place in the summer, in water 18 to 45 m deep from the Chesapeake Bay to Montauk.

Larvae develop for the most part in continental shelf waters and are most abundant in the southern portion of the Middle Atlantic Bight. They quickly become bottom dwellers and estuarine. In the mid-Atlantic Bight, young-of-year fish inhabit estuaries from July to September, at depths from 1-38 m (3-125 feet). They prefer rough bottom habitats with shells, amphipod tubes, and deep channel rubble (Steimle et al. 1999b) and have been noted to appear on inshore jetties in late May to early June. In the Hudson River Estuary, young-of-the-year have been captured in open water and interpier areas. The young-of-year are migratory during some portions of the first year (USACE 2000). They migrate out of the estuary and away from inner continental shelf nursery areas during the autumn as water temperatures drop (Steimle et al. 1999b). Young-of-the-year have been collected in the lower Hudson River off Manhattan from mid-July to September (Able et al. 1995).

Juvenile sea bass occur in the saline portions of estuaries from Massachusetts to Florida starting with the initial spring migration until late autumn. During this period they can grow up to 19 cm (7.5 inches). Juveniles can be found in water temperatures ranging from 6-30°C (43-86°F) and salinities ranging from 8-38 ppt (but most preferring 18-20 ppt) (USACE 2000). They prefer hard bottom (Bigelow and Schroeder 1953), and are commonly found around jetties, piers, wrecks, and bottom areas with shells (USACE 2000).

Adult black sea bass prefer similar habitat conditions to juveniles, and perform similar migratory patterns. Adults also find shelter around manmade structures (Steimle et al. 1999b). Black sea bass are bottom feeders, consuming crabs, shrimp, mollusks, small fish, and squid. Woodhead (1990) describes black sea bass as a common summer transient in the New York Harbor, and individuals have been collected in the New York Harbor and the Arthur Kill (Smith 1985).

Juvenile and adult black sea bass have the potential to occur within the vicinity of the Project Site. While previously considered overfished, management efforts have been successful in rebuilding the stock and it is no longer considered overfished (ASMFC 2003). The ASMFC and MAFMC recently recommended increasing the total allowable landing limit for black sea bass from 6.8 million pounds in 2003 to 8.0 million pounds in 2004 (ASMFC 2003). The potential for water quality impacts from construction of the Proposed Project will be limited in duration and area. The extent of bottom habitat lost due to extension of the CSO will be small. Operation of the Bronx River Greenway will be expected to improve water quality of the lower Bronx River and will not be expected to result in significant adverse impacts to aquatic biota. Therefore, the Proposed Project will not be expected to result in significant adverse impacts to the EFH for this species.

*KING MACKEREL (Scomberomorus cavalla)*

King mackerel is a marine fish that inhabits Atlantic coastal waters from the Gulf of Maine to Rio de Janeiro, Brazil, including the Gulf of Mexico. The lower Bronx River is within an area designated as EFH for eggs, larval, juvenile, and adult king mackerel. There may be two distinct populations of king mackerel. One group migrates from waters near Cape Canaveral, Florida south to the Gulf of Mexico, making it there by spring and continuing along the western Florida continental shelf throughout the summer. A second group migrates to waters off the coast of the Carolinas in the summer, after spending the spring in the waters of southern Florida, and continues on in the autumn to the northern extent of the range. Overall, temperature appears to be the major factor governing the distribution of the species. The northern extent of its range is near Block Island, Rhode Island, near the 20°C (68°F) isotherm and the 18-meter (59 feet) contour. King mackerel spawn in the northern Gulf of Mexico and southern Atlantic coast. Larvae have been collected from May to October, with a peak in September. In the south Atlantic, larvae have been collected at the surface with salinities ranging from 30 to 37 ppt and temperatures from 22-28°C (70-81°F). Adults are normally found in water with salinity ranging from 32-36 ppt (USACE 2000).

King mackerel will occur only as occasional transient individuals within the New York/New Jersey Harbor Estuary system, and will only be likely to occur in the Lower Harbor area where the salinities are higher. Therefore, EFH for this species will not be affected by the Proposed Project.

*SPANISH MACKEREL (Scomberomorus maculatus)*

Spanish mackerel is a marine species that can occur in the Atlantic Ocean from the Gulf of Maine to the Yucatan Peninsula. The lower Bronx River is within an area designated as EFH for eggs, larval, juvenile, and adult Spanish mackerel. Spanish mackerel is most common between the Chesapeake Bay and the northern Gulf of Mexico from spring through autumn, then moves south to overwinter in the waters of south Florida. These populations spawn in the northern extent of their ranges (along the northern Gulf Coast and along the Atlantic Coast). Spawning begins in mid-June in the Chesapeake Bay and in late September off Long Island, New York. Temperature is an important factor in the timing of spawning and few spawn in temperatures below 26°C (79°F). Spanish mackerel apparently spawn at night. Studies indicate that Spanish mackerel spawn over the Inner Continental Shelf in water 12-34 m (39-112 feet) deep.

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Spanish mackerel eggs are pelagic and about 1 mm in diameter. Hatching takes place after about 25 hours at a temperature of 26°C. Most larvae have been collected in coastal waters of the Gulf of Mexico and the east coast of the United States. Juvenile Spanish mackerel can use low salinity estuaries (about 13-20 ppt) as nurseries and also stay close inshore in open beach waters (USACE 2000).

Overall, temperature and salinity is indicated as the major factor governing the distribution of this species. The northern extent of their range is near Block Island, Rhode Island, near the 20°C (68°F) isotherm and the 18 meter contour. During warm years, they can be found as far north as Massachusetts. They prefer water from 21-27°C (70-81°F) and are rarely found in waters cooler than 18°C (64°F). Adult Spanish mackerel generally avoid freshwater or low salinity (less than 32 ppt) areas such as the mouths of rivers (USACE 2000).

Because this is a marine species that prefers higher salinity waters, only occasional individuals are likely to occur within the vicinity of the Project Site. Therefore, EFH for this species will not be affected by the Proposed Project.

**COBIA (*Rachycentron canadum*)**

Cobia are large, migratory, coastal pelagic fish of the monotypic family Rachycentridae. In the western Atlantic Ocean, cobia occur from Massachusetts to Argentina, but are most common along the south Atlantic coast of the United States and in the northern Gulf of Mexico. In the eastern Gulf, cobia typically migrate from wintering grounds off south Florida into northeastern Gulf waters during early spring. They occur off northwest Florida, Alabama, Mississippi, and southeast Louisiana wintering grounds in the fall. Some cobia overwinter in the northern Gulf at depths of 100 to 125 m (328 to 410 feet). The lower Bronx River is within an area designated as EFH for eggs, larval, juvenile and adult cobia.

Information on the life history of cobia from the Gulf and the Atlantic Coast of the United States is limited. Essential fish habitat for coastal migratory pelagic species such as cobia includes sandy shoals of capes and offshore bars, high profile rocky bottom and barrier island ocean-side waters, from the surf to the shelf break zone, but from the Gulf Stream shoreward, including *Sargassum*. For cobia, essential fish habitat also includes high salinity bays, estuaries, and seagrass habitat. The Gulf Stream is an essential fish habitat because it provides a mechanism to disperse coastal migratory pelagic larvae. Preferred temperatures are greater than 20°C and salinities are greater than 25 ppt.

Cobia are likely to occur only as occasional transient individuals within the vicinity of the Project Site due to its coastal migrations, pelagic nature, and salinity requirements. Therefore, EFH for this species will not be affected by the Proposed Project.

**SAND TIGER SHARK (*Odontaspis taurus*)**

The sand tiger shark is a large, coastal marine species found in tropical and warm temperate waters throughout the world and is often found in shallow water (less than 4 m [13 feet]). The lower Bronx River is within an area designated as EFH for larval sand tiger sharks (neonates). Males mature between 190-195 cm (75-77 inches) total length, or four to five years, and females at more than 220 cm (87 inches) or six years. The sand shark has extremely limited reproductive potential, producing only two young per litter measuring approximately 100 cm (39 inches). Embryos, being cannibalistic, consume other embryos until only one from each oviduct survives where each pup grows to be quite large (up to 40 inches) before birth. Neonates, after birth, migrate northward in the summer to estuarine nursery areas (UD 2001). In North America, the species gives birth in March and April and during the winter in the southern portion of its range. Young sand sharks migrate northward to nursery areas of the Mid-Atlantic Bight coastal sounds and estuaries, including: Chesapeake, Delaware, Sandy Hook, and Narragansett Bay.

Overfishing of the large aggregations associated with mating has led to a declining population. The essential fish habitat for young and juvenile sand tiger sharks includes the shallow coastal waters from Barnegat Inlet, New Jersey to Cape Canaveral, Florida to the 25 m (82 feet) isobath (USACE 2000). This species is not expected to occur within the New York/New Jersey Harbor Estuary except as occasional transient individuals. Therefore, EFH for this species will not be affected by the Proposed Project.

*DUSKY SHARK (Carcharhinus obscurus)*

The dusky is a large, coastal species found in tropical and temperate waters throughout the world, and ranges from Nova Scotia to Cuba. It is most often found along continental coastlines where it ranges from shallow inshore waters to the outer continental shelf and adjacent oceanic waters. This species is highly migratory, moving north during the summer and south in the winter. The lower Bronx River designated as EFH for dusky shark larvae (neonates).

In the western Atlantic, mating occurs in the spring. Due to the presence of two size classes of young found in pregnant females off the coast of Florida, it is believed that females of this species only mate every second year. These different size classes suggest alternating birth seasons every two years with a gestation period of eight months or a single season with a longer gestation period of about 16 months. In the western Atlantic, the number of young per litter ranges from six to eight.

Adults tend to avoid areas of low salinity, and rarely enter estuaries. However, dusky sharks are viviparous, and females enter bays and estuaries to drop their pups. After pupping, adult sharks move to deeper waters. The essential fish habitat for dusky shark neonate and early juvenile life stages are the shallow coastal waters, inlets, and estuaries from the eastern end of Long Island, NY south to West Palm Beach, FL to the 100 m isobath. The prime nursery areas are estuaries and bays from Cape Hatteras, North Carolina to New Jersey (Knickle 2001a).

This species is not expected to occur within the New York/New Jersey Harbor Estuary except as occasional transient individuals. Therefore, it is unlikely that this species will be found in the vicinity of the Project Site, and EFH for dusky shark will not be affected by the Proposed Project.

*SANDBAR SHARK (Carcharhinus plumbeus)*

The sandbar shark is found throughout the world in subtropical and warm temperate waters, and is common to many coastal habitats. It is bottom-dwelling and most commonly found in 20 to 55 m (66-180 feet) waters. The lower Bronx River is within an area designated as EFH for larval and adult sandbar sharks.

The sandbar shark is a slow growing species. Both sexes reach maturity at about 180 cm (71 inches) total length. Estimates of age of maturity range from 15-16 years to 29-30 years, although 15-16 years is the commonly accepted age of maturity. Sandbar sharks produce two litters per year, with each litter consisting of 1 to 14 pups (9 being the average). The gestation period lasts about a year and reproduction is biennial. Young are born at about 60 cm (24 inches) (smaller in the northern parts of the North American range) from March to July. In the United States, the sandbar shark uses estuarine nurseries in shallow coastal waters from Cape

Canaveral, Florida, to the northern extent of the range at Great Bay, New Jersey (Merson and Pratt 1997). Bays from Delaware to North Carolina are important nursery areas (Knickle 2001b).

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Juveniles return to Delaware Bay after the winter. Neonates have been captured in Delaware Bay in late June. Young-of-the-year are present in Delaware Bay until early October when the temperature falls below 21°C (70°F). Juveniles have been found as far north as Martha's Vineyard, Massachusetts in the summer. Young and juvenile sandbar sharks strongly prefer salinities of greater than 22 ppt and temperatures greater than 21°C (70°F). Essential fish habitat for young and early juvenile sandbar sharks are shallow coastal areas to the 25 m (82 feet) isobath from Montauk, Long Island, New York, south to Cape Canaveral, Florida; nursery areas in shallow coastal waters from Great Bay, New Jersey to Cape Canaveral, Florida; also shallow coastal waters up to a depth of 50 m (164 feet) on the west coast of Florida and the Florida Keys. This species is not expected to occur within the New York/New Jersey Harbor Estuary except as occasional transient individuals. Therefore, EFH for this species will not be affected by the Proposed Project.

*CLEARNOSE SKATE (RAJA EGLANTERIA)*

The lower Bronx River is designated as EFH for the adult clearnose skate. North of Cape Hatteras, clearnose skates move inshore and northward along the continental shelf during the spring and early summer and offshore and southward during autumn and early winter. The species occurs off of New Jersey and New York from late April-May and October-November. In the Hudson-Raritan Estuary bottom trawls, the largest numbers were found in the summer, particularly in and near channels and south of Coney Island. Small numbers were collected in the spring and autumn, with very few collected in the winter (Packer 2003a).

This skate is found on soft bottoms along the continental shelf but will also occur on rock or gravelly bottoms. It is most abundant at depths less than 111 meters (364 ft). The Hudson-Raritan trawls found the most abundant adults at depths of 5-8 m (16-26 ft), temperatures between 9 and 24°C (48-75°F), and salinities ranging from 22 to 32 ppt (Packer 2003a). Clearnose skate are not likely to occur in the Lower Bronx River at the project site. Salinities at the project site range from 0 to 2.5 ppt, far below the range required for adult clearnose skates. Additionally, because the project site has a depth of 1.8 meters (6 feet) or shallower, it is not likely the clearnose skate would be found at the project site. Therefore, EFH for this species will not be affected by the Proposed Project.

*LITTLE SKATE (LEUCORAJA ERINACEA)*

The lower Bronx River is designated as EFH for the juvenile and adult little skates. Little skates do not make extensive migrations but do move onshore and offshore with the seasons-generally to shallow waters in the spring and deeper waters in the winter. Little skates are generally found in gravelly bottoms but can also be found on muddy bottoms. This species are generally found in temperatures are less than about 16-18°C (61-64°F). Adult little skates prefer temperatures ranging from 1 to 17°C (34-63°F), depths from 5 to 16 m (16-52 ft) and salinities from 18 to 32 ppt (but most at ≥25 ppt). In a survey conducted of the New York Bight from 1996-1997, juvenile little skates were collected mostly in the inner continental shelf at mean depths of 40-45 m (131-148 ft), a mean temperature of 8.5°C (47.3°F), and a mean salinity of 32 ppt (Packer 2003b).

The northeastern little skate stock is not currently over fished but it is not known if overfishing of this stock is currently occurring Packer (2003b). Little skates are bottom dwelling and therefore have a potential to be affected by the temporary increases in turbidity. However, because both juvenile and adult little skates prefer salinities and depths that vary greatly from what is found at the project site (1-2.5 ppt salinity and less than 1.8 meter (6 feet) depths), it is not likely the little skate would be found at the project site. Therefore, EFH for this species will not be affected by the Proposed Project.



*WINTER SKATE (LEUCORAJA OCCELATA)*

The lower Bronx River is designated as EFH for the adult winter skate. This skate is found most often on sandy or gravelly bottoms but can also be found on muddy bottoms. It is most abundant at depths less than 111 meter (364 ft), and is most abundant over a temperature range of -1.2°C to 19°C (29.8°F to 66°F), and prefers salinities of 32-34 ppt. This species was most abundant in winter. Very few adults were collected in trawl surveys to determine their habitat preferences (Packer 2003c).

The northeastern winter skate stock is not currently overfished but it is not known if overfishing of this stock is currently occurring. Winter skates are bottom dwelling and therefore have a potential to be affected by the temporary increases in turbidity (Packer 2003c). However, because adult winter skates prefer salinities and depths that vary greatly from what is found at the project site (1-2.5 ppt salinity and less than 1.8 meter (6 foot) depths), it is not likely the winter skate would be found at the project site. Therefore, EFH for this species will not be affected by the Proposed Project.

## D. REFERENCES

- Able, K.W., J.P. Manderson, A.L. Studholme. 1998. The distribution of shallow water juvenile fishes in an urban estuary: the effects of manmade structures in the Lower Hudson River. *Estuaries* 21(4B):731-744.
- Able, K.W., J.P. Manderson, A.L. Studholme. 1999. Habitat quality for shallow water fishes in an urban estuary: the effects of man-made structures on growth. *Mar. Ecol. Prog. Ser.* 187:227-235.
- Able, K.W., A.L. Studholme and J.P. Manderson. 1995. Habitat quality in the New York/New Jersey Harbor Estuary: An evaluation of pier effects on fishes. Final Report. Hudson River Foundation, New York, NY. Berg and Levinton 1985.
- Adams, D.A., J.S. O'Connor, and S.B. Weisberg. 1998. Final Report: Sediment Quality of the NY/NJ Harbor System. An Investigation under the Regional Environmental Monitoring and Assessment Program (R-EMAP). EPA/902-R-98-001.
- Allee, King, Rosen and Fleming, Inc. (AKRF). 1998. Hudson River Park Final Environmental Impact Statement. Prepared for Empire State Development Corporation in cooperation with the Hudson River Park Conservancy. New York, NY.
- Atlantic States Marine Fisheries Commission (ASMFC). 2002a. Review of the Atlantic States Marine Fisheries Commission Fishery Management Plan for Winter Flounder (*Pseudopleuronectes americanus*) for 2002. The Winter Flounder Plan Review Team: Lydia Munger (ASMFC), Mark Gibson (RIDEM), David Simpson (CTDEP).
- Atlantic States Marine Fisheries Commission (ASMFC). 2003. AFSMFC News Release August 8, 2003: ASMFC & MAFMC Approve 2004 TALs for Bluefish, Summer Flounder, Scup and Black Sea Bass. Assessments show continued improvements to summer flounder and black sea bass stocks.
- Bigelow, H.B. and W.C. Schroeder. 1953. Fishes of the Gulf of Maine. Fishery Bulletin of the Fish and Wildlife Service Volume 53.
- Birtwell, I.K., M.D. Nassichuk, H. Beune, and M. Gang. 1987. Deas Slough, Fraser River Estuary, British Columbia: General Description and Some General Characteristics. Can. Fish. Mar. Serv. Man. Rep. No 1464.

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- Brosnan, T.M. and M.L. O'Shea. 1995. New York Harbor Water Quality Survey: 1994. New York City Department of Environmental Protection, Marine Sciences Section, Wards Island, NY.
- Buckel, J.A., D.O. Conover, N.D. Steinberg, and K.A. Mckown. 1999. Impact of age-0 bluefish (*Pomatomus saltatrix*) predation on age-0 fishes in the Hudson River estuary: evidence for density-dependent loss of juvenile striped bass (*Morone saxatilis*). *Canadian Journal of Fisheries and Aquatic Sciences* 56:275-287.
- Chang, S., P.L. Berrien, D.L. Johnson, and W.W. Morse. 1999. Essential Fish Habitat Source Document: Windowpane, *Scophthalmus aquosus*, Life History and Habitat Characteristics. National Marine Fisheries Service. NOAA Technical Memorandum NMFS-NE 137, <http://www.nefsc.nmfs.gov/nefsc/habitat/efh/-list>
- Clarke, D.G., and D.H. Wilber. 2000. Assessment of Potential Impacts of Dredging Operations Due to Sediment Resuspension. DOER Technical Notes Collection (ERDC TN-DOER-E9), US Army Engineer Research and Development Center, Vicksburg, MS.
- Cross, J.N., C.A. Zetlin, P.L. Berrien, D.L. Johnson, and C. McBride. 1999. Essential Fish Habitat Source Document: Butterfish, *Peprilus triacanthus* Life History and Habitat Characteristics. National Marine Fisheries Service. NOAA Technical Memorandum NMFSNE 145, <http://www.nefsc.nmfs.gov/nefsc/habitat/efh/-list>
- Duffy-Anderson, J.T., and K.W. Able. 1999. Effects of municipal piers on the growth of juvenile fishes in the Hudson River estuary: a study across a pier edge. *Marine Biology* 133:409-418.
- Dunford, W.E. 1975. Space and Food Utilization by Salmonids in Marsh Habitats of the Fraser River Estuary. University of British Columbia.
- EA Engineering, Science and Technology, Inc. 1990. Phase I feasibility study of the aquatic ecology along the Hudson River in Manhattan. Final Report. Prepared for New York City Public Development Corporation, New York, NY. Newburgh, NY.
- EEA, Inc. 1988. Report on Aquatic Studies: Hudson River Center Site. Prepared for the New York City Public Development Corporation, New York, NY. Prepared by EEA, Inc., Garden City, NY.
- Fahay, M.P., P.L. Berrien, D.L. Johnson, and W.W. Morse. 1999. Essential Fish Habitat Source Document: Bluefish, *Pomatomus saltatrix* Life History and Habitat Characteristics. National Marine Fisheries Service. NOAA Technical Memorandum NMFS-NE 144, <http://www.nefsc.nmfs.gov/nefsc/habitat/efh/-list>
- Gregory, R.S. 1990. Effects of turbidity on benthic foraging and predation risk in juvenile Chinook salmon (*Oncorhynchus tshawytscha*). *Can. J. Fish. Aquat. Sci.* 50(2):241-246.
- Heimbuch, D., S. Cairns, D. Logan, S. Janicki, J. Seibel, D. Wade, M. Langan, and N. Mehrotra. 1994. Distribution Patterns of Eight Key Species of Hudson River Fish. Coastal Environmental Services, Inc. Linthicum, MD. Prepared for the Hudson River Foundation, New York, NY.
- Knickle, C. 2001. Description Sandbar Shark-*Carcharhinus plumbeus*. Florida Museum of Natural History. <http://www.flmn.h.ufl.edu/fish/Gallery/Descript/sandbarshark/sandbarshark.html>, May 21, 2001.

**Attachment 2: Essential Fish Habitat Assessment**

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- LaSalle, M.W., D.G. Clarke, J. Homziak, J.D. Lunz, and T.J. Fredette. 1991. A framework for assessing the need for seasonal restrictions on dredging and disposal operations. Department of the Army, Environmental Laboratory, Waterways Experiment Station, Corps of Engineers, Vicksburg, MS.
- Levy, D.A., and T.G. Northcote. 1982. Juvenile salmon residency in a marsh area of the Fraser River estuary. *Can J. Fish. Aquat. Sci.* 39(2):270-276.
- Mid-Atlantic Fishery Management Council (MAFMC). 2002. Council Management, A Quiet Success Story. Council Newsletter, Summer 2002.
- Mid-Atlantic Fishery Management Council (MAFMC). 2003. Bluefish FMP: Fact Not Fiction. Council Newsletter, Summer 2003.
- Merson, R. and Pratt, H. 1997. Northern extent of the pupping grounds of the sandbar shark, *Carcharhinus plumbeus*, east coast. Abstract: ASIH/AES Meeting, Seattle, WA, June 26/July 2, 1997.
- Moran, M.A. and K.E. Limburg. 1986. The Hudson River Ecosystem. In *The Hudson River Ecosystem*, Limburg, K.E., M.A. Moran, and W.H. McDowell. 1986. Springer-Verlag, New York, NY. pp. 6-40.
- National Marine Fisheries Service (NMFS). 1999. Essential Fish Habitat Source Documents. <http://www.nefsc.nmfs.gov/nefsc/habitat/efh/#list>.
- National Marine Fisheries Service (NMFS). 2003. Annual Report to Congress on the Status of U.S. fisheries—2002, U.S. Dept. Commerce, NOAA, National Marine Fisheries Service, Silver Spring, MD.
- New York City Department of Environmental Protection (NYCDEP). 2002. [DRAFT] Environmental Assessment, Bronx River Greenway and CSO Abatement Facilities, Attachment J (Natural Resources).
- New York City Department of Environmental Protection (NYCDEP). 2003. 2002 Harbor Water Quality Survey Summary. New York, NY.
- New York City Department of Environmental Protection (NYCDEP). 2004. New York Harbor Water Quality Survey Data for 1999 - 2004.
- New York State Department of Environmental Conservation (NYCDEC). 1994. Technical and Administrative Guidance Memorandum #4046. Determination of Soil Cleanup Objectives and Cleanup Levels. January 24, 1994.
- New York State Department of State (NYSDOS). 1992. Significant Coastal Fish and Wildlife Habitats Program: A part of the New York Coastal Management Program and New York City's approved Waterfront Revitalization Program.
- Newell, R.C., L.J. Seiderer, D.R. Hitchcock. 1998. The impact of dredging works in coastal waters: A review of the sensitivity to disturbance and subsequent recovery of biological resources on the sea bed. *Oceanography and Marine Biology: An Annual Review* 36:127178.

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- Nightingale, B. and C.A. Simenstad. 2001. Dredging Activities: Marine Issues. White Paper, Research Project T1803, Task 35. Prepared by the Washington State Transportation Center (TRAC), University of Washington. Prepared for the Washington State Transportation Commission, Department of Transportation and in Cooperation with the U.S. Department of Transportation, Federal Highway Administration.
- Normandeau Associates, Inc. (NAI). 1986. 1985-1986 Hudson River Striped Bass Program. Prepared for New York Power Authority.
- Ocean Surveys, Inc. 1987. Final Report, Field Investigations of the Hudson River Center Site, NY. Prepared for EEA, Inc., Garden City, NY. Prepared by Ocean Surveys, Inc., Old Saybrook, CT.
- Packer, D.B., S.J. Griesbach, P.L. Berrien, C.A. Zetlin, D.L. Johnson, and W.W. Morse. 1999. Essential Fish Habitat Source Document: Summer Flounder, *Paralichthys dentatus*, Life History and Habitat Characteristics. National Marine Fisheries Service. NOAA Technical Memorandum NMFS-NE 151, <http://www.nefsc.nmfs.gov/nefsc/habitat/efh/-list>
- Packer, D.B., S.J. Griesbach, P.L. Berrien, C.A. Zetlin, D.L. Johnson, and W.W. Morse. 1999. Essential Fish Habitat Source Document: Summer Flounder, *Paralichthys dentatus*, Life History and Habitat Characteristics. National Marine Fisheries Service. NOAA Technical Memorandum NMFS-NE 151, <http://www.nefsc.nmfs.gov/nefsc/habitat/efh/-list>
- Packer, D.B., C.A. Zetlin, and J.J. Vitaliano. 2003a. Essential Fish Habitat Source Document: Clearnose Skate, *Raja eglanteria*, Life History and Habitat Characteristics. National Marine Fisheries Service. NOAA Technical Memorandum NE-174, <http://www.nefsc.noaa.gov/nefsc/publications/tm/tm174/>
- Packer, D.B., C.A. Zetlin, and J.J. Vitaliano. 2003b. Essential Fish Habitat Source Document: Little Skate, *Leucoraja erinacea*, Life History and Habitat Characteristics. National Marine Fisheries Service. NOAA Technical Memorandum NE-175, <http://www.nefsc.noaa.gov/nefsc/publications/tm/tm175/>
- Packer, D.B., C.A. Zetlin, and J.J. Vitaliano. 2003c. Essential Fish Habitat Source Document: Winter Skate, *Leucoraja ocellata*, Life History and Habitat Characteristics. National Marine Fisheries Service. NOAA Technical Memorandum NE-179, <http://www.nefsc.noaa.gov/nefsc/publications/tm/tm179/>
- Pereira, J.J., R. Goldberg, J.J. Ziskowski, P.L. Berrien, W.W. Morse, and D.L. Johnson. 1999. Essential Fish Habitat Source Document: Winter Flounder, *Pseudopleuronectes americanus*, Life History and Habitat Characteristics. National Marine Fisheries Service. NOAA Technical Memorandum NMFS-NE 138, <http://www.nefsc.nmfs.gov/nefsc/habitat/efh/-list>
- Rachlin, J.W. 2004. Personal communication with J.M. Wallin (AKRF, Inc., Hanover, MD) April 2004. Lehman College Laboratory for Marine and Estuarine Research, Bronx, NY.
- Rachlin, J.W. 2004. Field data from Lehman College's Laboratory for Marine and Estuarine Research study of the Bronx River Estuary, 2002-2003. Bronx, NY.
- Reid, R.N., L.M. Cargnelli, S.J. Griesbach, D.B. Packer, D.L. Johnson, C.A. Zetlin, W.W. Morse, P.L. Berrien. 1999. Essential Fish Habitat Source Document: Atlantic Herring, *Clupea harengus* Life History and Habitat Characteristics. National Marine Fisheries Service. NOAA Technical Memorandum NMFS-NE 126, <http://www.nefsc.nmfs.gov/nefsc/habitat/efh/-list>
- Ristich, S.S., M. Crandall, and J. Fortier. 1977. Benthic and epibenthic macroinvertebrates of the Hudson River. I. Distribution, natural history and community structure. *Estuarine and Coastal Marine Science* 5:255-266.

**Attachment 2: Essential Fish Habitat Assessment**

- Rohmann, S.O., and N. Lilienthal. 1987. Tracing a River's Toxic Pollution: A Case Study of the Hudson, Phase II. Inform, Inc., New York, NY.
- Smith, C.L. 1985. The Inland Fishes of New York State. The New York State Department of Environmental Conservation.
- Steimle, F.W., W.W. Morse, P.L. Berrien, and D.L. Johnson. 1999a. Essential Fish Habitat Source Document: Red Hake, *Urophycis chuss* Life History and Habitat Characteristics. National Marine Fisheries Service. NOAA Technical Memorandum NMFS-NE 133, <http://www.nefsc.nmfs.gov/nefsc/habitat/efh/-list>
- Steimle, F.W., C.A. Zetlin, P.L. Berrien, and S. Chang. 1999b. Essential Fish Habitat Source Document: Black Sea Bass, *Centropristis striata* Life History and Habitat Characteristics. National Marine Fisheries Service. NOAA Technical Memorandum NMFS-NE 143, <http://www.nefsc.nmfs.gov/nefsc/habitat/efh/-list>
- Steimle, F.W., C.A. Zetlin, P.L. Berrien, D.L. Johnson, and S. Chang. 1999c. Essential Fish Habitat Source Document: Scup, *Stenotomus chrysops* Life History and Habitat Characteristics. National Marine Fisheries Service. NOAA Technical Memorandum NMFSNE 149, <http://www.nefsc.nmfs.gov/nefsc/habitat/efh/-list>
- Steinberg, N., J. Way, and D.J. Suszkowski. 2002. Harbor Health/Human Health: an Analysis of Environmental Indicators for the NY/NJ Harbor Estuary. Prepared for the New York/New Jersey Harbor Estuary Program by the Hudson River Foundation for Science and Environmental Research. Produced under a cooperative agreement between the Hudson River Foundation and US EPA Region II.
- Studholme, A.L., D.B. Packer, P.L. Berrien, D.L. Johnson, C.A. Zetlin, and W.W. Morse. 1999. Essential Fish Habitat Source Document: Atlantic Mackerel, *Scomber scombrus* Life History and Habitat Characteristics. National Marine Fisheries Service. NOAA Technical Memorandum NMFS-NE 141, <http://www.nefsc.nmfs.gov/nefsc/habitat/efh/-list>
- University of Delaware. 2001. Sand Tiger Shark (*Odontaspis taurus*). <http://www.ocean.udel.edu/kiosk/shark.html>, May 21, 2001.
- U.S. Army Corps of Engineers (USACE). 1996. Hudson River Channel, N.Y.: A federal navigation project maintenance dredging. Public Notice No. 96-4-FP. New York District, Operations Support Branch, New York, NY.
- U.S. Army Corps of Engineers - New York District (USACE). 1999. New York and New Jersey Harbor Navigation Study. Draft Environmental Impact Statement.
- U.S. Army Corps of Engineers (USACE). 2000. Memorandum for the Record: Statement of Findings and Environmental Assessment for Application Number 1998-00290-Y3 by the Hudson River Park Trust. CENAN-OP-RE.
- Woodhead, P.M. 1990. The Fish Community of New York Harbor: Spatial and temporal Distribution of major Species. Report to the New York - New Jersey Harbor Estuary Program, New York, NY.
- Woodhead, P.M. and M. McEnroe. 1991. Habitat use by the fish community. A report on Task 5.1 of the New York/New Jersey Harbor Estuary Program. Marine Services Research Center, State University of New York, Stony Brook, NY.

**A. INTRODUCTION AND METHODOLOGY**

The Bronx River is designated as a regulatory floodway by NYSDEC Environmental Conservation Law. Per Executive Order 11988 and 23 CR 650, a Floodplain Analysis was conducted to ensure that the planned encroachment is the only practicable alternative for the Proposed Project.

Under Section 650.113 of 23 CR 650, a proposed action which includes a significant encroachment shall not be approved unless the FHWA finds that the proposed significant encroachment is the only practicable alternative. These items are addressed in this statement.

- The reasons why the proposed action must be located in the floodplains.
- The alternatives considered and why they were not practicable.
- A statement indicating whether the action conforms to applicable State or local floodplain protection standards.

According to FHWA, a floodplain is defined as the area adjoining a watercourse or water body which has been, or may be, covered by the base flood, 100-year flood, or regional flood. A floodway is the channel of a watercourse, the bed of a water basin, and those portions of the adjoining floodplains that are reasonably required to carry and discharge floodwater and provide water storage during a regional flood. A regulatory floodway is the floodplain area that is reserved in an open manner by federal, state or local requirements, i.e., unconfined or unobstructed either horizontally or vertically, to provide for the discharge of the base flood so that the cumulative increase in water surface elevation is no more than a designated amount (not to exceed 1 foot as established by the Federal Emergency Management Agency (FEMA) for administering National Flood Insurance Program) (23 CFR 650).

**PROJECT DESCRIPTION**

The Bronx River Greenway project would allow public access to the Bronx River; restore the Bronx River's natural shorelines to the extent possible in this area; enhance the natural qualities of the River and its surrounding areas; provide additional public open space amenities (e.g., bridges over the Bronx River and an open air amphitheater), and provide a resource for people to cycle, walk, run, or skate for transportation, recreation, or exercise. The project would also provide car-free passage for cycling and walking between the Bronx River and West Farms neighborhoods and their associated transit services, schools, and shopping. The project is a major segment in the entire Bronx River Greenway Corridor that extends from the Bronx/Westchester County border to the East River.

Another component of the Proposed Project is the rehabilitation and reconstruction of Starlight Park. Located on the west bank of the river between approximately East 172nd and East 174th Streets, this park is under the ownership jurisdiction of NYCDPR. Currently denuded and closed to the public, the 8.9-acre park is undergoing contaminated materials remediation by Con Edison. Once the remediation activities have been completed, the Starlight Park and portions of the Greenway will be redeveloped by NYSDOT to provide several active recreational uses including basketball courts, a multi-use playing field (permitted as a soccer field, two baseball diamonds, or performance seating), and various pieces of play equipment. Locations and utilities will be provided for NYCDPR to construct a boathouse at the south end of the park and a restroom and maintenance storage building near East 174th Street. Existing riprap along the shoreline will remain.

Kayak and canoe access will be provided at the southern end of Starlight Park by NYSDOT. A floating dock will provide safe kayak and canoe launching and safe portaging over an existing weir that is exposed during low tide. The floating dock will consist of a ramp system from the top of the slope leading

## **Bronx River Greenway**

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leading to a platform to be fixed above 100 year storm elevation. One floating dock will be constructed on each side of the weir with a ramp between them and a ramp leading to the fixed platform. This will maximize safety for people entering and exiting canoes and kayaks in all anticipated tide or storm conditions. Some dredging of mudflats may be necessary to accommodate the floating docks; however, all practicable measures will be used to minimize the amount of dredging and impacts due to dredging activities.

### **B. WHY PROPOSED ACTION MUST BE LOCATED IN FLOODPLAIN**

The entirety of the Bronx River Greenway Corridor will provide valuable transportation links and options to the communities it passes through. The Proposed Project will eventually provide a vital link between the Bronx River Greenway Corridor extending from the East River to beyond the Westchester County border (Figure D-1-2). Although it would become a link in the larger network, the project provides significant utility independent of the entire Bronx River Greenway corridor, including car-free passage for cycling and walking between the Bronx River and West Farms neighborhoods and their associated transit services, schools, and shopping. The completed Bronx River Greenway would also provide improved walking and cycling access to the Bronx Zoo, the Bronx Botanical Gardens, various community parks along the Bronx River, and would eventually be part of a connection to and from Manhattan. The Proposed Project will connect to NYCDPR's planned park at the former concrete plant site to the south and to NYCDPR's Bronx River Park (West Farms segment) of the Bronx River Greenway to the north. NYSDOT is coordinating closely with NYCDPR to ensure seamless links between these projects and additional projects linking Soundview Park and Randall's Island to the south and into Westchester County to the north. The Randall's Island connection will link the Bronx River Greenway corridor to the Manhattan Waterfront Greenway. In addition, the Bronx River Greenway corridor intersects the Pelham Parkway Greenway, including Pelham Bay Park, City Island, and Orchard Beach, and the Mosholu Parkway Greenway leading to Van Cortlandt Park and the North County Trail (continuous trail to be constructed from the New York City/Westchester County border up through part of Putnam County). The Proposed Project may also serve as a segment in the evolving East Coast Greenway from Florida to Maine.

### **C. ALTERNATIVES CONSIDERED AND WHY THEY WERE NOT PRACTICABLE**

#### **NO ACTION ALTERNATIVE**

The No Action Alternative is an avoidance alternative that would not affect floodplains. However, the goals and objectives of the project would not be met—this portion of the Greenway Corridor would not be completed, the reconstruction of the Starlight Park would not occur, and the connections that the new Bronx River Greenway would provide to other parks would not be realized. Additionally, the provision of the multi-use non-motorized transportation facility, and all of the additional amenities proposed as part of the Proposed Project would not be provided.

### **D. PROJECT CONFORMATION TO APPLICABLE STATE OR LOCAL FLOODPLAIN PROTECTION STANDARDS**

Within the Project Site, the entire shoreline on both sides of the river is characterized by hard shoreline stabilization structures. From East Tremont Avenue to East 172nd Street the shoreline is characterized by a functional armor stone riprap. South of East 172nd Street to the railroad track crossing, the eastern shoreline is characterized by a combination of natural rock shoreline and artificial broken rock riprap. South of the railroad bridge the shoreline is characterized by a combination of sheetpile and concrete bulkhead, and riprap. Between East Tremont Avenue to approximately 300 feet south of I-95 (Cross Bronx Expressway), the 100-year floodplain is primarily limited to the banks of the Bronx River (Figure

*D-A3-2*

D-9-1). South of this point the 100year floodplain varies from 0 to about 200 feet on either side of the river. The loss of most of the river's natural floodplain coupled with the large amount of impervious surfaces bordering the river have resulted in flashy surface water flows and low ground water recharge.

Conversion of impervious surfaces to green space and improved stormwater management practices will improve the water retention and detention ability of the lands. The naturalized shorelines will be constructed so as not to increase flooding or erosion on the site or the surrounding area. As a result of these improvements, the Proposed Project would have no significant adverse impacts to the floodplain.



**A. INTRODUCTION**

New York State Department of Transportation (NYSDOT) proposes to provide a "Class I" bikeway along the Bronx River from Westchester Avenue to East Tremont Avenue in the Bronx. The Proposed Project includes a floating dock for kayak and canoe access. Some dredging of wetlands may be necessary to accommodate the floating docks. Per Executive Order 11990, this Wetland Finding has been prepared to set forth the basis for a determination that there is no feasible and prudent alternative to impacts to wetlands and that all practical measures to minimize harm to wetlands have been included.

**B. PROJECT DESCRIPTION**

The Bronx River Greenway project is designed to allow public access to the Bronx River; restore the Bronx River's natural shorelines to the extent possible in this area; enhance the natural qualities of the River and its surrounding areas; provide additional public open space amenities (e.g., bridges over the Bronx River and an open air amphitheater), and provide a resource for people to cycle, walk, run, or skate for transportation, recreation, or exercise. The project will also provide car-free passage for cycling and walking between the Bronx River and West Farms neighborhoods and their associated transit services, schools, and shopping. The project is a major segment in the entire Bronx River Greenway Corridor that extends from the Bronx/Westchester County border to the East River.

Additionally, the Proposed Project will rehabilitate and reconstruct Starlight Park, located on the west bank of the river between approximately East 172nd and East 174th Streets. Currently denuded and closed to the public, the Park and portions of the Greenway will provide recreational uses, including basketball courts, a multi-use playing field (permitted as a soccer field, two baseball diamonds, or performance seating), various pieces of play equipment, as well as a floating dock providing kayak and canoe access.

Some dredging of mudflats and/or littoral zone wetland habitats may be necessary to accommodate the floating docks; however, all practicable measures will be used to minimize the amount of dredging and impacts due to dredging activities.

Since preparation of the Draft DR/EA, extension of the New York City Department of Environmental Protection (NYCDEP) combined sewer overflow (CSO) has been eliminated from the project, and is not considered in this Wetland Finding.

**C. DESCRIPTION OF ALTERNATIVES**

The Draft Design Report/Environmental Assessment for the project considered three alternatives:

- Null Alternative
- Creation of on-road bikeway route
- Construction of a 1.8 km (1.14 mi) greenway

As part of the alternative development and environmental review for the project, each alternative was evaluated based on the Project Objectives set forth for the project (Project Objectives, Chapter II.D). These include:

- Provide a multi-use path between Westchester Avenue and East Tremont Avenue
- Provide continuity to greenway networks
- Improve traffic operations and high accident rates; reduce congestion and improve air quality.

**Bronx River Greenway**

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While the Null Alternative and On-Road Bikeway Route would not disturb wetlands, they did not meet the requirements of the Project for providing a safe, route for commuting and recreation. Creation of the Bronx River Greenway meets all criteria for the project, and therefore was chosen as the feasible alternative.

This section summarizes the three alternatives considered for the project, including the two avoidance alternatives that would not impact wetland resources, and the feasible alternative.

**AVOIDANCE ALTERNATIVES**

Avoidance alternatives would not disturb wetlands. Two have been considered-the Null Alternative and the On-road Bikeway Route Alternative-and are discussed below.

*NULL ALTERNATIVE*

In this alternative, no major rehabilitation or reconstruction work would be undertaken. Pedestrians would continue to use congested streets and sidewalks for transportation and recreation through the corridor. No improvements would be made to existing intersections or roadways, and access to the Bronx River would not be improved. The Null Alternative will not satisfy the project objectives to create a safe and appealing location for non-motorized recreation and commuting, and to provide continuity to greenway networks.

*ON-ROAD BIKEWAY ROUTE*

This alternative would provide on-road bicycle routes in the project vicinity. Although this alternative would provide a dedicated facility for bicyclists, users would be traveling directly adjacent to vehicle lanes. An on-road bikeway would not sufficiently satisfy the project objective to encourage cycling among all skill levels in this high volume traffic area. No new provisions would be made for pedestrians or other non-motorized transportation. In addition, State and City owned right-of-way is not sufficient to widen the roadways to provide adequate bicycle lanes without required reconstruction. Therefore, this alternate will not be considered further.

**FEASIBLE ALTERNATIVE***CONSTRUCTION OF GREENWAY*

This alternative involves the creation a 1.8 km (1.14 mi) multi-use path facility adjacent to the Bronx River between Westchester Avenue and East Tremont Avenue. This segment will provide a location for people to cycle, walk, run or skate for transportation, recreation or exercise and will serve as an intermodal connection to the neighborhood bus and subway lines. This project will also include some work to the adjacent intersections and roadways and the creation of parkland features that are compatible with the surrounding transportation and land uses. The Greenway will also provide a link to the various recreational areas, commercial uses, and institutional facilities in the surrounding community and will enhance the Bronx River's natural qualities. This alternative satisfies all of the project objectives and for this reason is the preferred alternative.

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**Attachment 4: Wetlands Finding Executive Order 11990**

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**WETLAND IMPACTS**

Approximately 120 cubic meters (157 cubic yards) of material in mudflat and/or littoral zone wetlands will have to be dredged for installation of the floating dock. Potential impacts associated with dredging include localized and temporary increases in suspended sediments and temporary loss of benthic macroinvertebrates in the area dredged. Water quality changes associated with these increases in suspended sediment are expected to be minimal and temporary, limited to the immediate area of the activity. Suspended sediments will dissipate shortly after the dredging is completed and the dock piles are driven into place.

Once completed, elements of the Proposed Project will cause minimal amounts of shading over the Bronx River. The proposed three pedestrian bridges crossing over the river create approximately 0.08 HA (0.195 acres) of shading of the river. Cantilevered overlooks will shade approximately 0.012 HA (0.03 acres). The floating dock and fixed platform have the potential to shade 0.22 HA (0.055 acres) of water. While shading could cause an impact on habitat for wetland vegetation and wildlife, the affected areas are small and light will still be able to penetrate from the sides of the narrow structures. The small amount of shading resulting from the Proposed Project will not be expected to result in significant adverse impacts to aquatic biota or wetlands.

**MEASURES TO MINIMIZE HARM**

NYSDOT will mitigate for the loss of mudflats and/or littoral zone through the creation of wetlands within the Project Site. The type of wetland creation will be determined during the design phase of the Proposed Project, and may include littoral zone, mudflats, and high marsh habitats. Wetland restoration activities, including invasive species removal and native species planting, will also improve the quality of wetlands within the project site.

Bulkhead and riprap will be removed, where feasible, and parts of the shoreline will be graded, naturalized, and stabilized with plantings. Areas temporarily disturbed during construction and restoration work will be restored to the original or improved condition through proper grading, and all temporary structures and materials will be removed following construction. Designated wetlands areas to be protected will be prominently marked or barricaded.

Adjacent to the New York City Marshall Impound Lot (also referred to as PDJ Simone), the bulkhead and 420 cubic meters (550 cubic yards) of fill material will be removed to grade and naturalize the shoreline, and stabilize the area with plantings. Additionally, 330 cubic meters (432 cubic yards) of fill material will be removed from the Apex Auto property shorelines, and the area will be graded, naturalized, and stabilized with plantings.

Naturalization of shorelines will help to improve stormwater retention, resulting in improved water quality, and will improve habitat for birds and mammals that use riparian and wetland habitats. The intertidal wetlands created during shoreline naturalization will provide habitat for macroinvertebrates and fish. During low tides, exposed intertidal habitat will provide feeding and resting areas for wading and shorebirds.

**D. CONCLUSION**

Based upon the above considerations, it is determined that there is no practicable alternative to the proposed new construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

**APPENDIX H: ACOE PERMIT AND CONDITIONS**

## DEPARTMENT OF THE ARMY PERMIT

**Permittee:** New York City Department of Design and Construction  
Attn: Jean M. Jean-Louis  
30-30 Thompson Avenue  
Long Island City, New York 11101  
(718) 391-3134

**Permit Number:** NAN-2016-01176

**Date Issued:** JUN 29 2017

**Issuing Office:** U.S. Army Corps of Engineers, New York District

**NOTE:** The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

### Project Description:

From Westchester Avenue, on the west side of the Bronx River and continuing north for approximately 450 feet, varying width ranging from 10 feet to 50 feet, for a total of approximately 12,126 square feet, dredge via excavator, approximately 1,512 cubic yards of gravelly sand/silty mud, to a maximum depth of -11 feet NAVD88. The purpose of the proposed dredging is to create a planting area. The dredged material will be placed at a state approved upland location. Place approximately 872 cubic yards of clean upland cap comprised of appropriate planting medium. Place approximately 145 cubic yards of boulders and rip-rap along the dredged area and plant the dredged area with native wetland vegetation.

From the Bronx River Avenue southern property line to the Amtrak property, on the east side of the Bronx River, over an approximately 250-foot area, varying width from 4-feet to 25-feet for a total of approximately 4,206 square feet, dredge via excavator, approximately 461 cubic yards of gravelly sand/silty mud, to a maximum depth of -5 feet NAVD88. The purpose is to create planting area.

At each of two (2) storm water outfalls, place 3 cubic yards of rip-rap waterward of the spring high water line for scour protection.

Construct approximately 200-foot long retaining wall to support upland pathway through the park.

**Bridge Number 1:** Work Areas 1 and 2 will each include a new concrete bridge abutment wall at the river's edge to support the first of three (3) new 21-foot-wide bikeway and pedestrian walkway bridges over the Bronx River. This first bridge will have new pile-supported concrete bridge

ENG FORM 1721, Nov 86

EDITION OF SEP 82 IS OBSOLETE.

(33 CFR 325 (Appendix A))

1145-2-303b(Bronx River/New York City Department of Design and Construction/Starlight Park)

PERMITTEE: New York City Department of Design and Construction  
 PERMIT NO.: NAN-2016-01176

abutments on each side of the river and new gravel and rock rip-rap shoreline stabilization. This bridge's individual Bridge Identification Number (B.I.N.) is 226990 and it will be located just south of the existing CSX/Amtrak Corridor railroad bridge. This new bridge will have a vertical clearance of approximately 10.82 feet above the river, measured at Mean High Water, the average high tide elevation. The river is currently approximately 105 feet wide at this location. Upriver of Westchester Avenue, the Bronx River's vertical clearance is already limited by the existing CSX/Amtrak Corridor railroad bridge which has a vertical clearance of 7.5 feet above the river, measured at Mean High Water, the average elevation of high tide.

Bridge Number 2: The next pedestrian walkway bridge will be over the Amtrak property and is out of USACE jurisdiction.

Bridge Number 3: The next new bikeway and pedestrian walkway bridge over the Bronx River is just north of Work Area 4 with new upland pile-supported concrete bridge abutments on each side of the river and replacement, as needed, of the existing rock rip-rap shoreline stabilization materials. This bridge's individual Bridge Identification Number (B.I.N.) is 226947. This bridge will connect the east and west segments of the pedestrian walkway. This new bridge will have a vertical clearance of 10 feet above the river, measured at Mean High Water, the average high tide elevation. The river is approximately 120 feet wide at this location. Upriver of Westchester Avenue, the Bronx River's vertical clearance is already limited by the existing CSX/Amtrak Corridor railroad bridge which has a vertical clearance of 7.5 feet above the river, measured at Mean High Water, the average elevation of high tide.

All work shall be performed in accordance with the attached drawings and special conditions (A) through (F) which are hereby made part of this permit, and the New York State Department of Environmental Conservation Permit No. 2-6007-00265/00011, incorporating the Section 401 Water Quality Certificate, which is hereby made a part of this permit.

Project Location:       IN: Bronx River  
                               AT: Borough of Bronx, Bronx County, New York

Permit Conditions:

PERMITTEE: New York City Department of Design and Construction  
PERMIT NO.: NAN-2016-01176

**General Conditions:**

1. The time limit for completing the work authorized ends on \_\_\_\_\_ . If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

**Special Conditions:**

(A) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such

PERMITTEE: New York City Department of Design and Construction  
PERMIT NO.: NAN-2016-01176

removal or alteration.

(B) The permittee shall submit a final planting plan based on site specific conditions to the Corps of Engineers and the U.S. Environmental Protection Agency for review and approval prior to construction. The submission shall be submitted to the following address: Chief, Eastern Section, New York District, 26 Federal Plaza, Room 1937, New York, New York 10278-0090 and Michele M. Fafette, Wetlands Regulatory Specialist, Clean Water Division, U.S. EPA Region 2, 290 Broadway, New York, NY 10007-1866.

(C) The permittee shall not conduct any in-water work from March 1 to June 30 of any calendar year to avoid impacts to Essential Fish Habitat and managed species.

(D) The permittee shall submit the following project construction details via email to the US Coast Guard, First Coast Guard District so that the information arrives 14 calendar days before starting in-water construction operations, for publication in the Coast Guard's Local Notice to Mariners: Date of Submission, Name, Phone Number, Email Address for Project Contact, Company Name, Type of Work, Waterway and Location (where work will be done), Latitude & Longitude of Work Area (degrees, minutes, thousandths of seconds), Work Start and Stop Dates and Hours of Operation, Equipment on Scene, Passing Arrangements/Time to Move Vessel to Not Impede Navigation, VHF Radio Channel Monitored, Disposal Site (if used), and NOAA Chart Number for the Area). The information should be e-mailed to: [LNM@uscg.mil](mailto:LNM@uscg.mil), or sent to 24-Hour FAX: (617) 223-8291.

(E) The permittee shall notify the National Oceanic and Atmospheric Administration within 3 days of completion of the authorized work and specifications so they may initiate the appropriate chart and Coast Pilot corrections. This information must be submitted online at <http://ocsddata.ncd.noaa.gov/ldrs/discrepancy.aspx> and include a copy of the USACE permit.

(F) The permittee shall comply with the following: Waterway closures, Regulated Navigation Areas, or Limited Access Areas must be requested in writing as per 33 CFR 165.5 and include a written Maintenance or Waterway Traffic Plan (PLAN). The PLAN must include, at a minimum, a summary of the maritime users contacted, their contact information, and scheduled channel openings to be provided for the maritime users transits. Requests must be submitted as early as possible, preferably 135 days before the start of the action so that the U.S. Coast Guard may comply with the existing National Environmental Policy Act, Administrative Procedures Act and existing USCG regulations including but not limited to, 33 CFR Part 1.05 - Rulemaking and 33 CFR Part 72 - Marine Information. A list of current permitted waterfront users may be obtained by contacting the USACE NY District Eastern Section at (917) 790-8511, the NYS DEC Region 2 at (718) 489-4997 or [DEP.R2@dec.ny.gov](mailto:DEP.R2@dec.ny.gov), and NYC Small Business Services Waterfront Permits at (212) 618-8822. The following agencies and organizations must also be contacted to identify existing or future vessel traffic on the impacted waterways: USACE Operations Support Branch at (917) 790-8550, the Maritime Association of the Port of NY/NJ Tug & Barge Committee at (631) 766-8571, NYPD



**PERMITTEE:** New York City Department of Design and Construction  
**PERMIT NO.:** NAN-2016-01176

Harbor Commanding Officer at David.Driscoll@nypd.org or (718) 765-4102 and FDNY Marine Operations at marinediv@fdny.nyc.gov or (718) 596-6173. These provided lists must also be verified with site visits. Channel openings during the project may still be required to meet the reasonable needs of navigation.

**Further Information:**

**1. Congressional Authorities:** You have been authorized to undertake the activity described above pursuant to:

(x) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S. Code 403).

(x) Section 404 of the Clean Water Act (33 U.S. Code 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

**2. Limits of this authorization:**

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

**3. Limits of Federal Liability:** In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

PERMITTEE: New York City Department of Design and Construction  
PERMIT NO.: NAN-2016-01176

4. **Reliance on Applicant's Data:** The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. **Reevaluation of Permit Decision:** This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. **Extensions:** General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

**PERMITTEE:** New York City Department of Design and Construction  
**PERMIT NO.:** NAN-2016-01176

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

Kevin F. Donnelly 6/20/17  
 (NY City Dept of Design and Construction) (DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Stephen A. Caldwell JUN 29 2017  
 (DISTRICT ENGINEER) (DATE)

**For and in behalf of**

David A. Caldwell  
 Colonel, U.S. Army  
 Commander

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below. A copy of the permit signed by the transferee should be sent to this office.

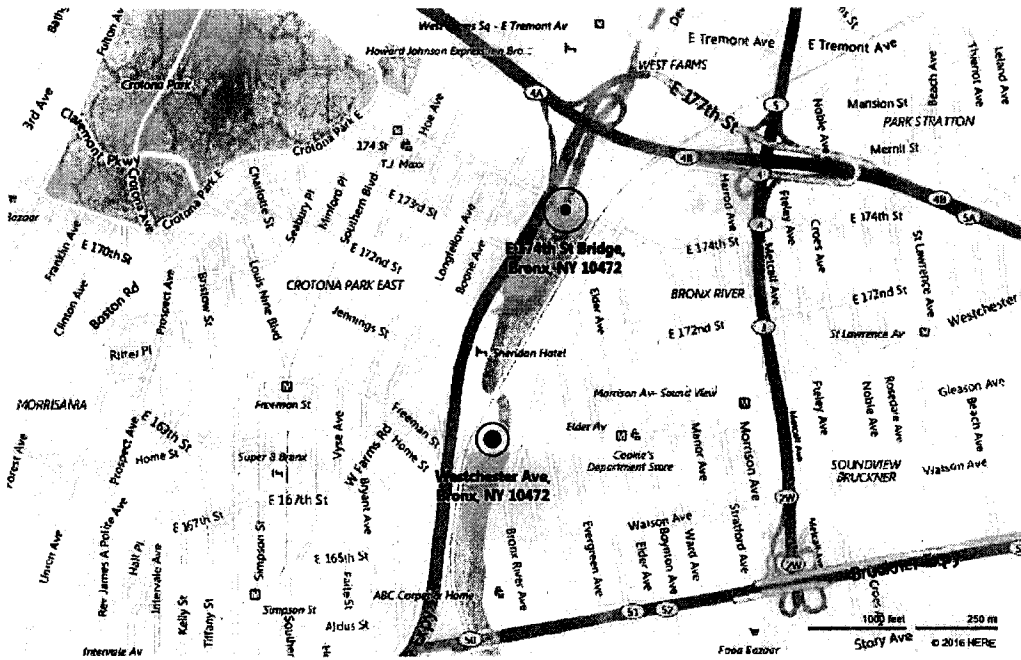
\_\_\_\_\_  
 (TRANSFeree) (DATE)

Bing Maps - Directions, trip planning, traffic cameras & more



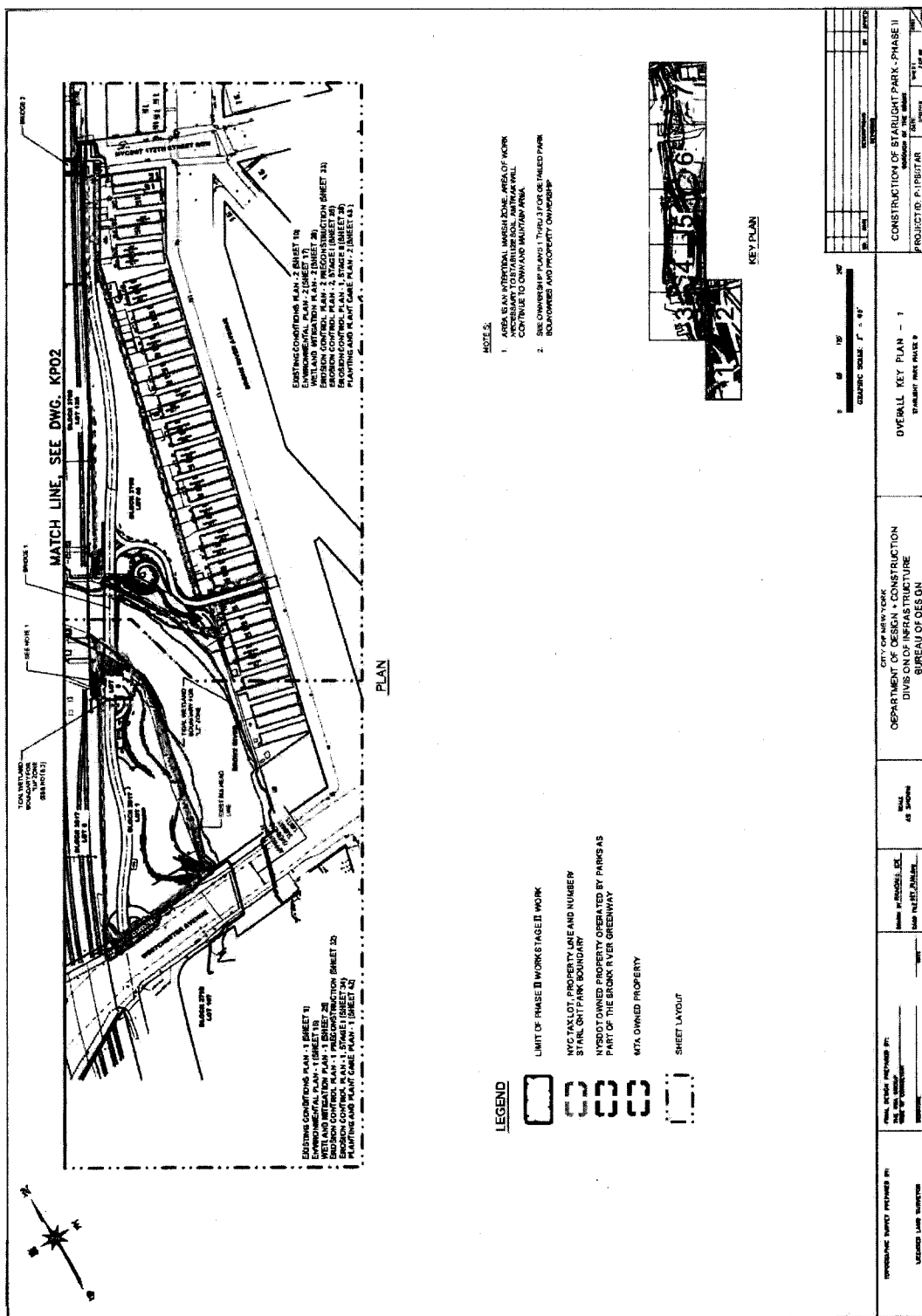
E 174th St Bridge, Bronx, NY 10472

NAN-2016-01176-EHA

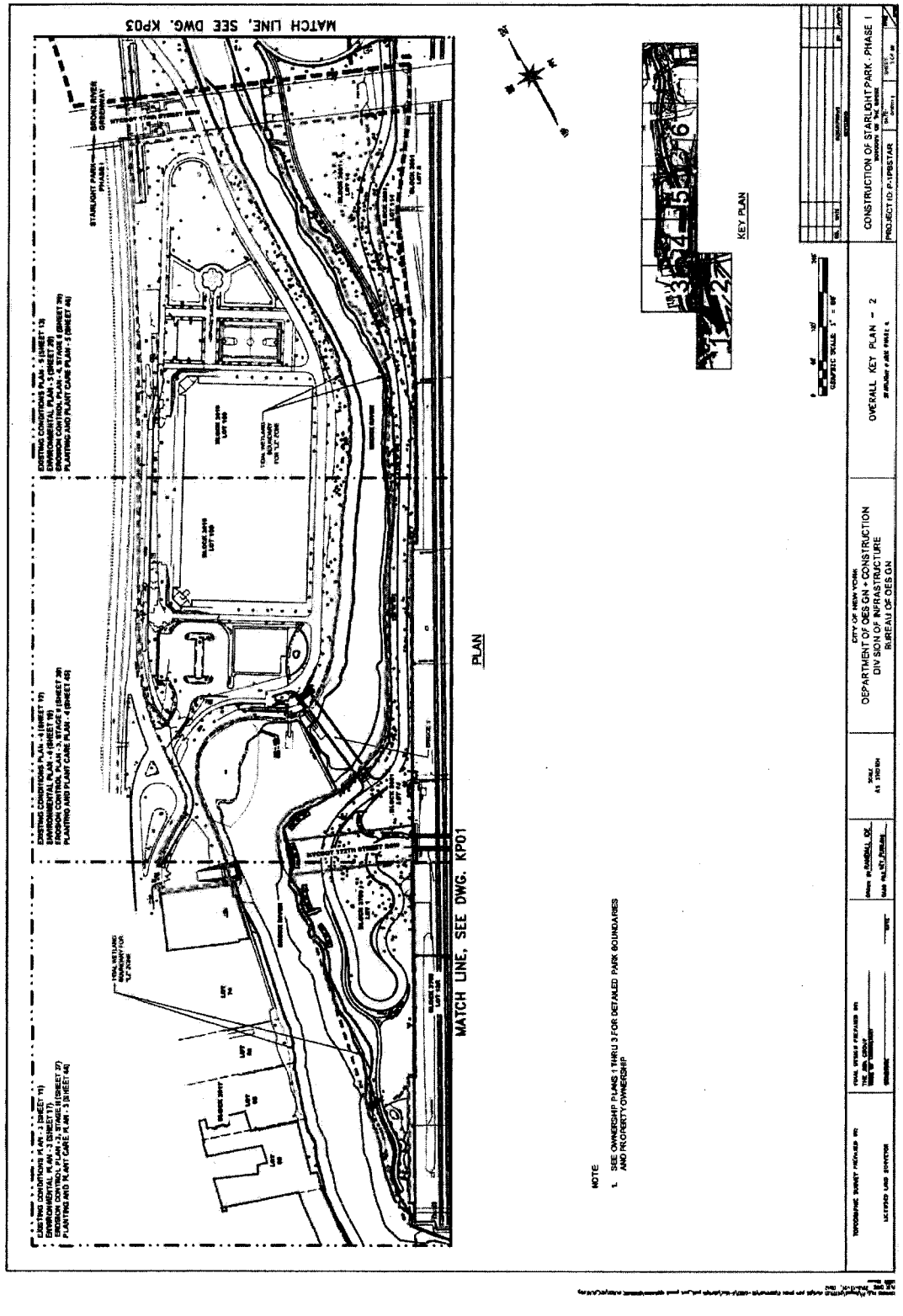


1a/68

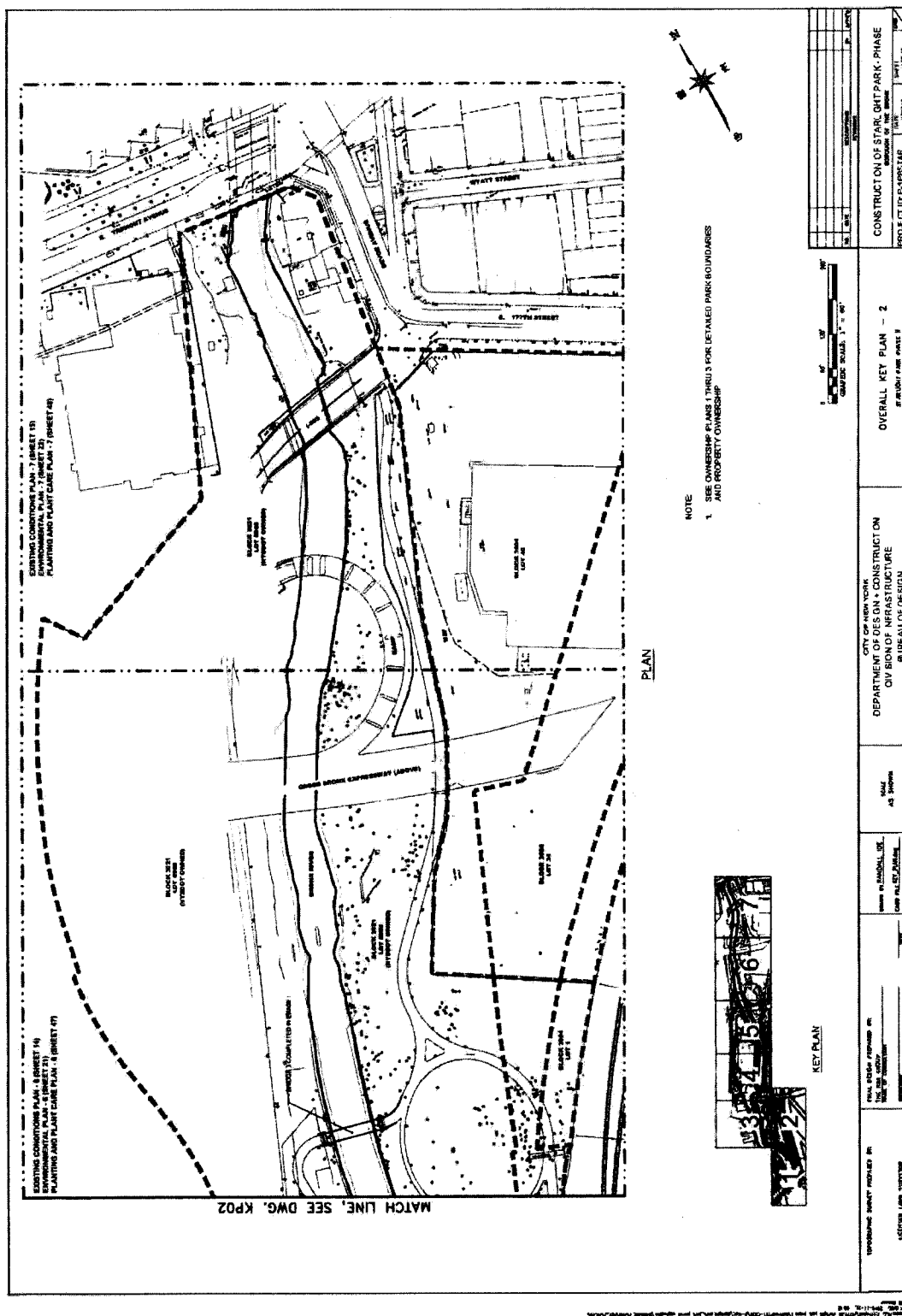




NAN-2016-01176-EHA



NAN-2016-01176-EHA





NAN-2016-01176-EHA

WETLANDS IMPACT SUMMARY FOR STARLIGHT PARK (INCLUDES ALL BLOCK AND LOTS SOUTH OF 174TH STREET BRIDGE)			
ITEM #	PROJECT AREA	QUANTITY	UNITS
5	Total Wetland/Water Impacted Areas	9,530	S.F.
6	Total Proposed Mitigation Area <sup>3</sup>	13,970	S.F.
7	Total Existing Impervious Surfaces <sup>2</sup>	18,513	S.F.
8	Total Proposed Impervious Surfaces <sup>3</sup>	23,053	S.F.
9	Total Adjacent Area	229,552	S.F.
10	Percent Impervious Surface Area	18.11%	
13	Adjacent Area Dredging <sup>1A, 1B, 1C</sup>	3,312	S.Y.
14	Adjacent Volume Dredging <sup>1A, 1B, 1C</sup>	8,865	C.Y.
15	Adjacent Area Cut and Fill	3,922	C.Y.
16	Total Dredge Volume	6,975	C.Y.
17	Total Dredge Area	3,398	S.Y.

WETLANDS IMPACT SUMMARY FOR BRONX RIVER GREENWAY (INCLUDES ALL BLOCK AND LOTS NORTH OF 174TH STREET BRIDGE)			
ITEM #	PROJECT AREA	QUANTITY	UNITS
7	Total Existing Impervious Surfaces	55,899	S.F.
8	Total Proposed Impervious Surfaces	0	S.F.
9	Total Adjacent Area	281,298	S.F.
10	Percent Impervious Surface Area	19.87%	
13	Adjacent Area Dredging	0	S.Y.
14	Adjacent Volume Dredging	0	C.Y.
15	Adjacent Area Cut and Fill	0	C.Y.
16	Total Dredge Volume	0	C.Y.
17	Total Dredge Area	0	S.Y.

Impact Quantities in ACOE Jurisdiction Areas

#### FOOTNOTES

<sup>3</sup> FINAL MITIGATION AREA TO BE CONSTRUCTED PHASE II (14,144 SF OF TOTAL PROPOSED MITIGATION PROVIDED)  
11,488 SF OF VEGETATED AREA  
2,649 SF OF NON-VEGETATED AREA (NUDGE LAY)

#### FOR STARLIGHT PARK

Proposed Wetland/Water Impacts: 494 s.f. (for prior owners inter tidal marsh loss) + 2,883 s.f. + 462 s.f. = 9830 s.f. total wetland/water impacted, including 9990 s.f. of inter tidal marsh that was filled in prior to any city or state ownership or project.

Mitigation calculation: 9830 s.f. (for prior owner inter tidal marsh loss) to be calculated at 1:1 ratio per NYSDEC - 3400 s.f. (2:1 ratio for new creation) = 1600 s.f. + 396 s.f. + 9990 s.f. (1:1 ratio mitigation for prior owner inter tidal marsh loss) = 34,086 s.f. required. Proposed mitigation provided: 34,144 s.f.

<sup>2</sup> TOTAL EXISTING IMPERVIOUS AREA ARE CALCULATED FROM TOPOGRAPHIC SURVEY PERFORMED IN 2008 (PRIOR TO PHASE I CONSTRUCTION)

<sup>1A</sup> THIS WORK INCLUDES PHASE I (ALL WORK PREVIOUSLY COMPLETED) AND PHASE II WORK.

<sup>1B</sup> MHW ITEMS CALCULATED ABOVE MEAN HIGH WATER

<sup>1C</sup> MHW ITEMS CALCULATED BELOW MEAN HIGH WATER

\* AREA IS INCLUDED IN TOTAL PROPOSED MITIGATION AREA TO BE CONSTRUCTED IN PHASE II

#### NOTE:

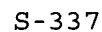
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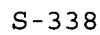
PREPARED BY: DATE: CHECKED BY: DATE: APPROVED BY: DATE:		CITY OF NEW YORK DEPARTMENT OF DESIGN + CONSTRUCTION DIVISION OF INFRASTRUCTURE BUREAU OF DESIGN		SUMMARY OF QUANTITIES PHASE I AND PHASE II		CONSTRUCTION OF STARLIGHT PARK - PHASE II PROJECT ID: P-1STARLP	
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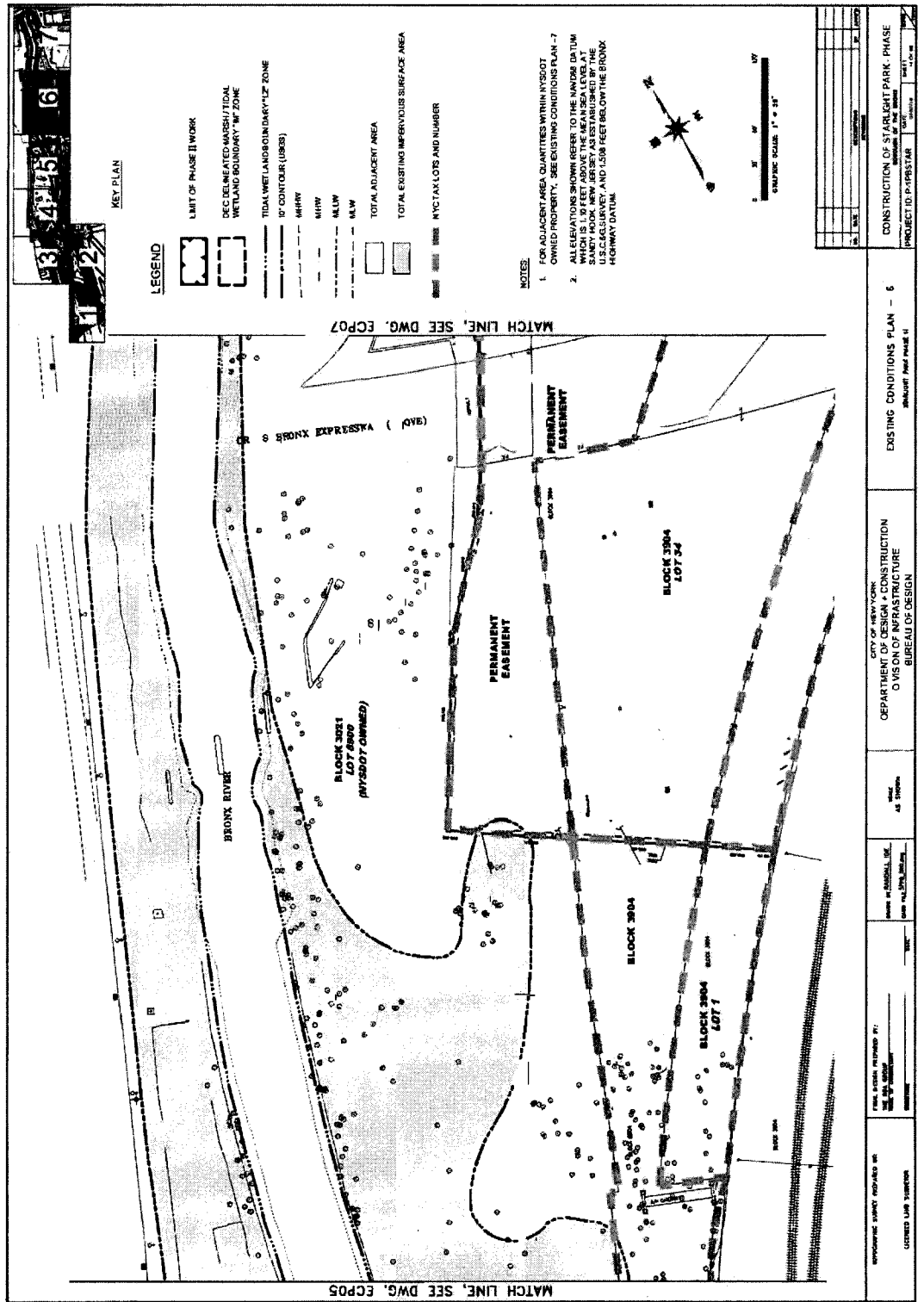


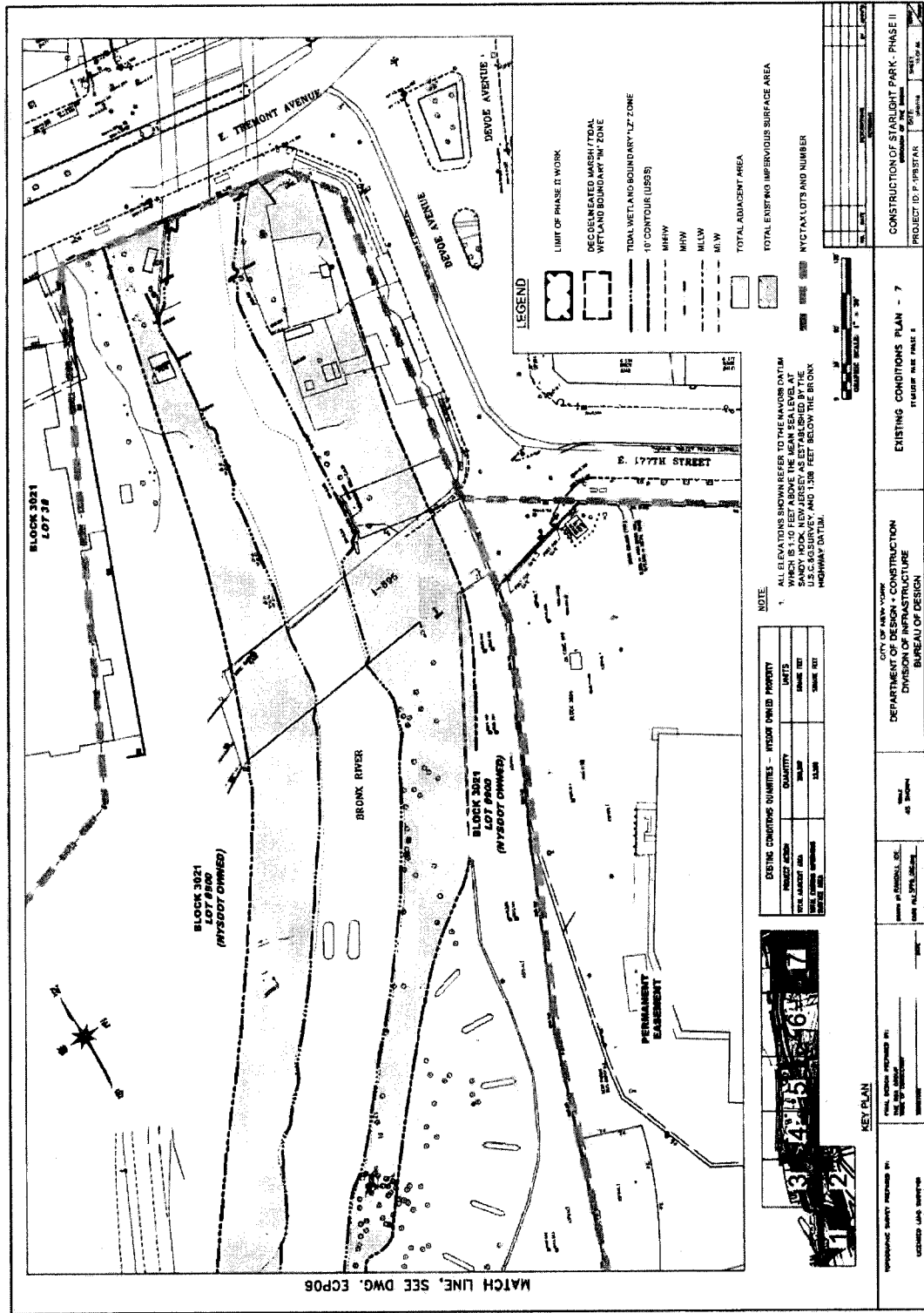






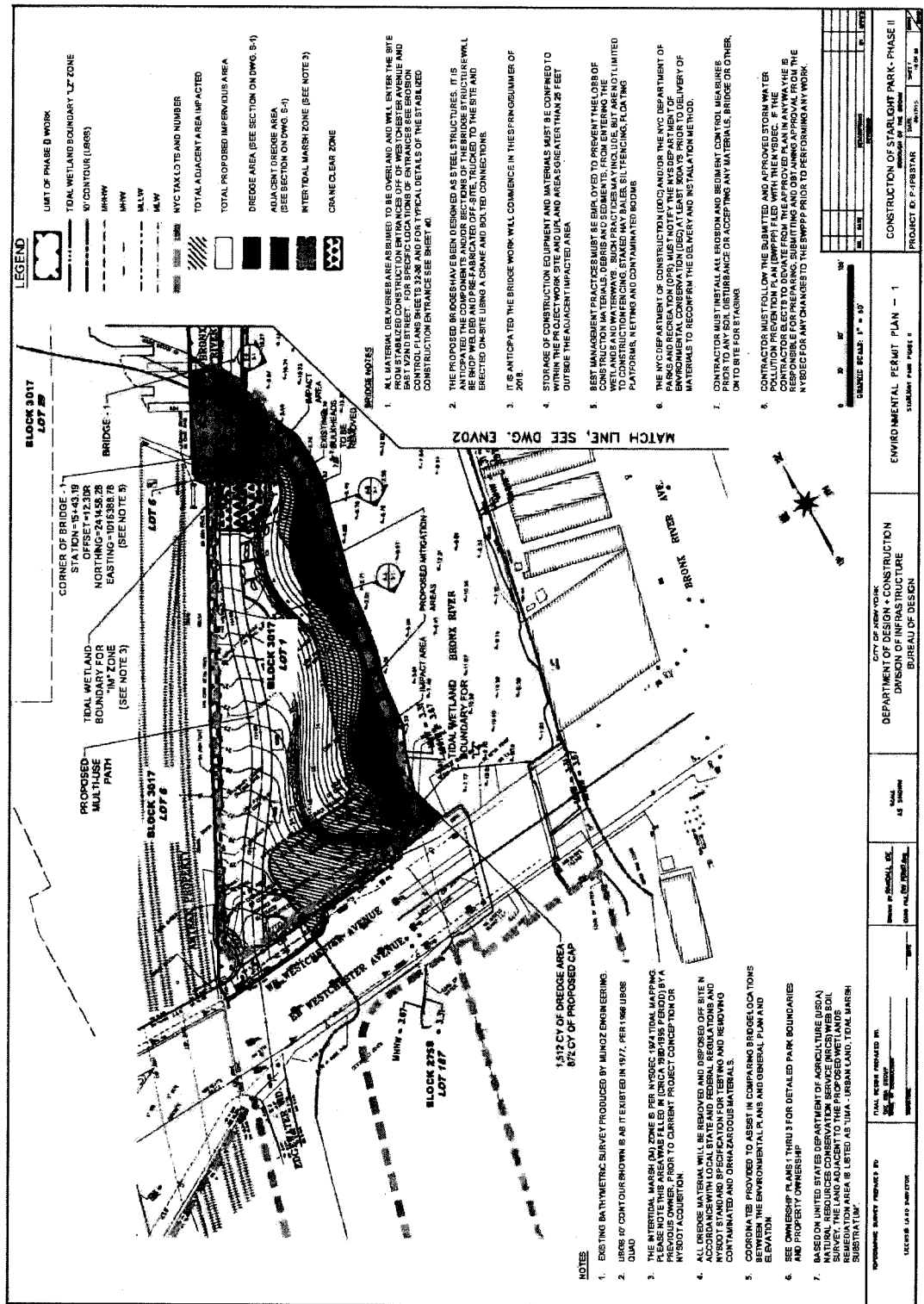
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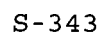


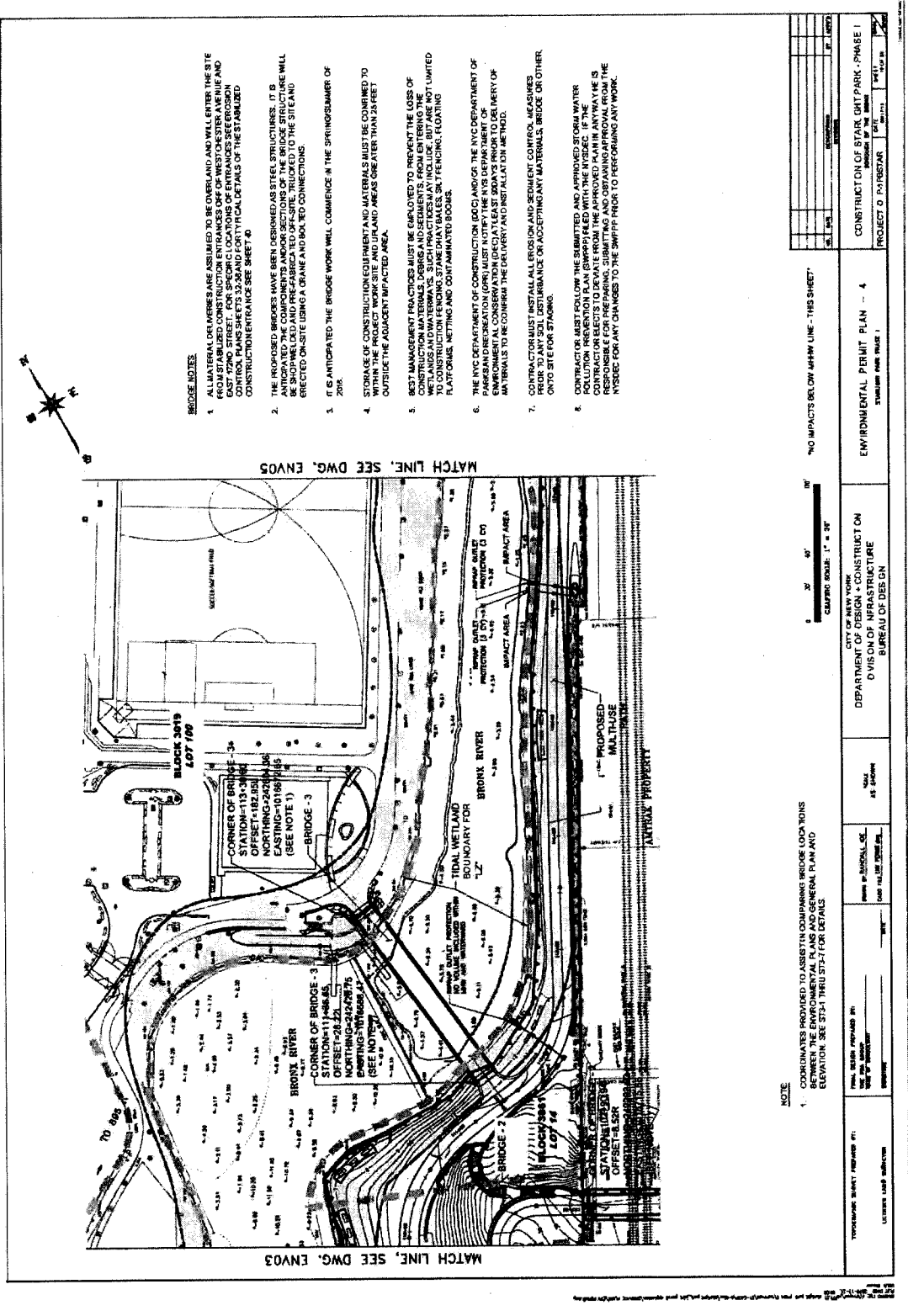


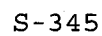
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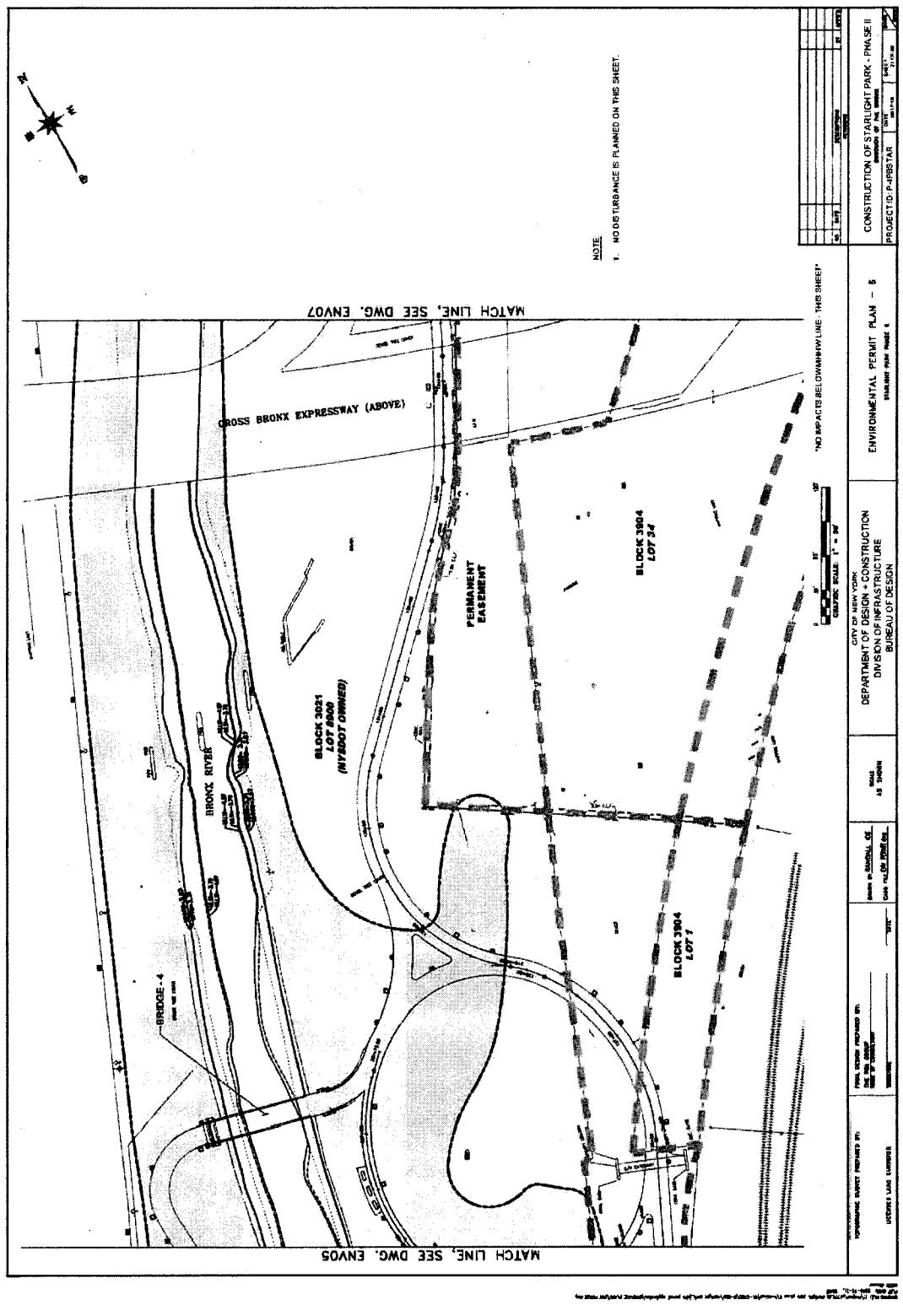


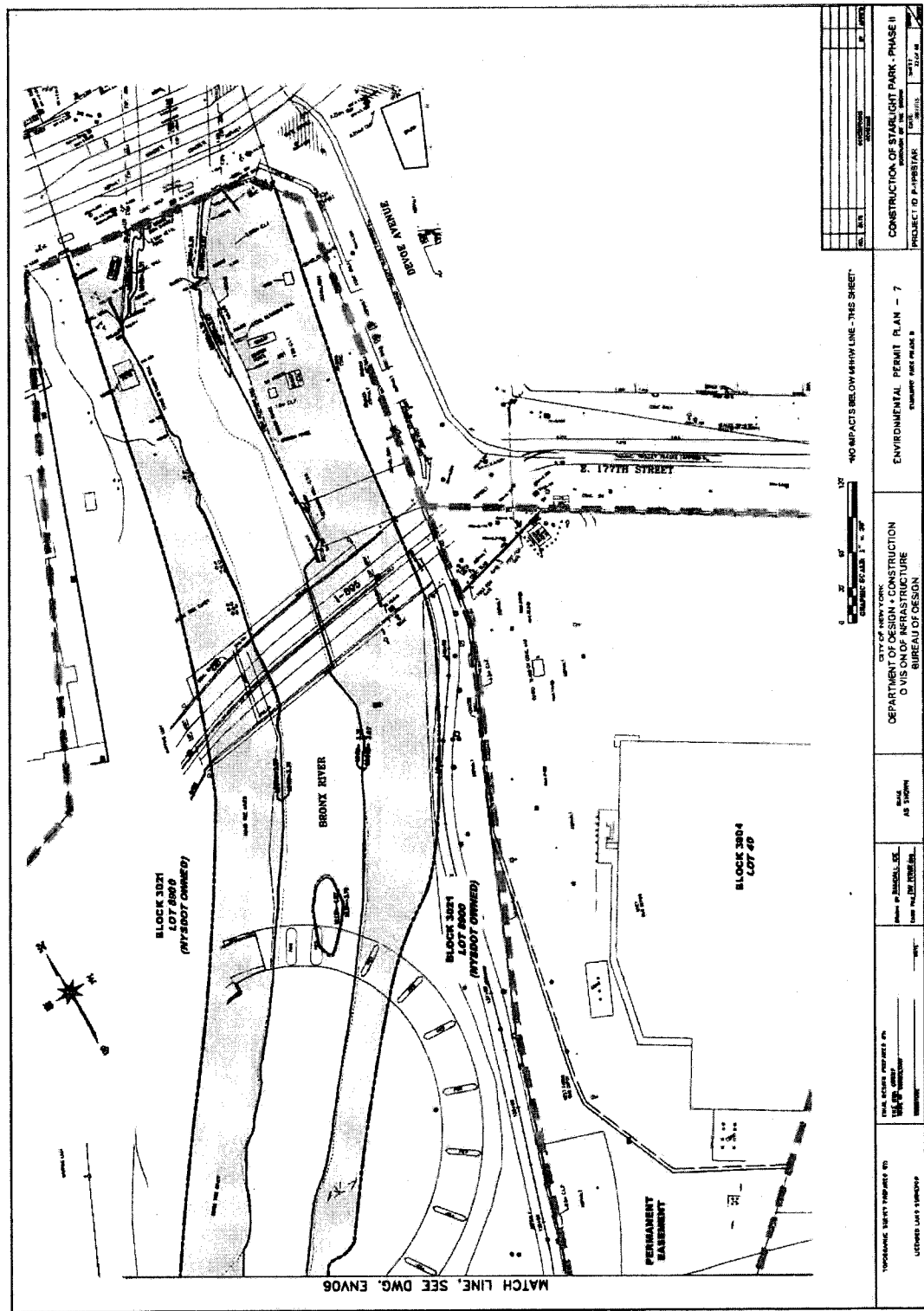


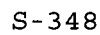








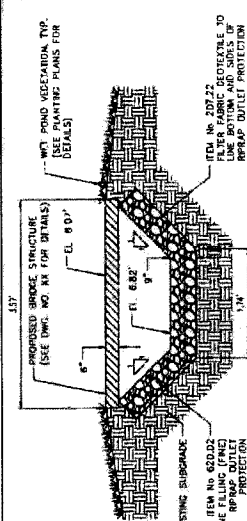




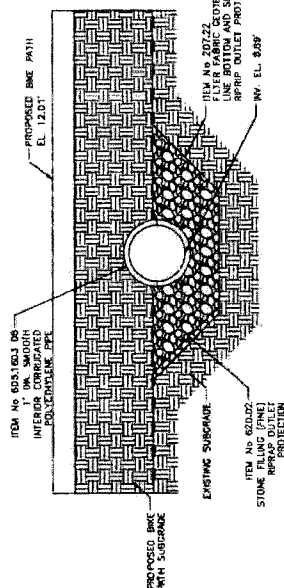


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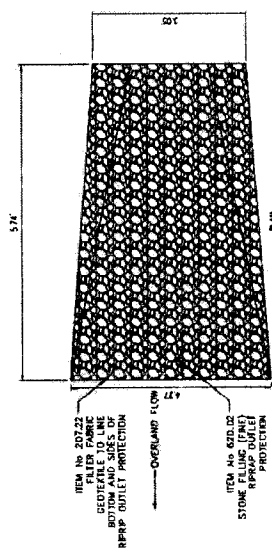
TRANSMISSIONS, POWER & TELEPHONE DIV. DIVISION OF CONSTRUCTION DIVISION OF CONSTRUCTION DIVISION OF CONSTRUCTION	CITY OF NEW YORK DEPARTMENT OF DESIGN & CONSTRUCTION DIVISION OF INFRASTRUCTURE BUREAU OF DESIGN	NAME A.S. BUREAU	CROSS SECTIONS DREDGING AND FILL
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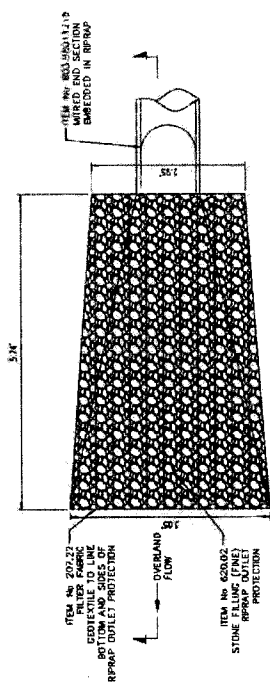
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SCALE N.T.S.



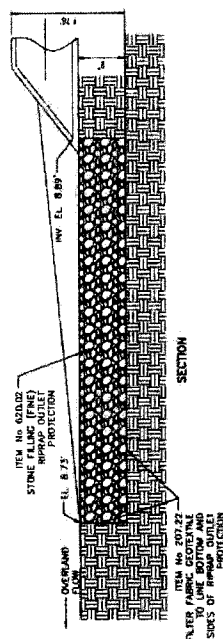
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③ RIPRAP OUTLET PROTECTION  
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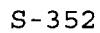
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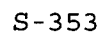


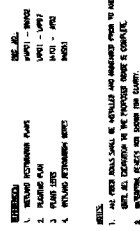
3 RIPRAP OUTLET PROTECTION  
SCAF. NYS.

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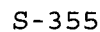




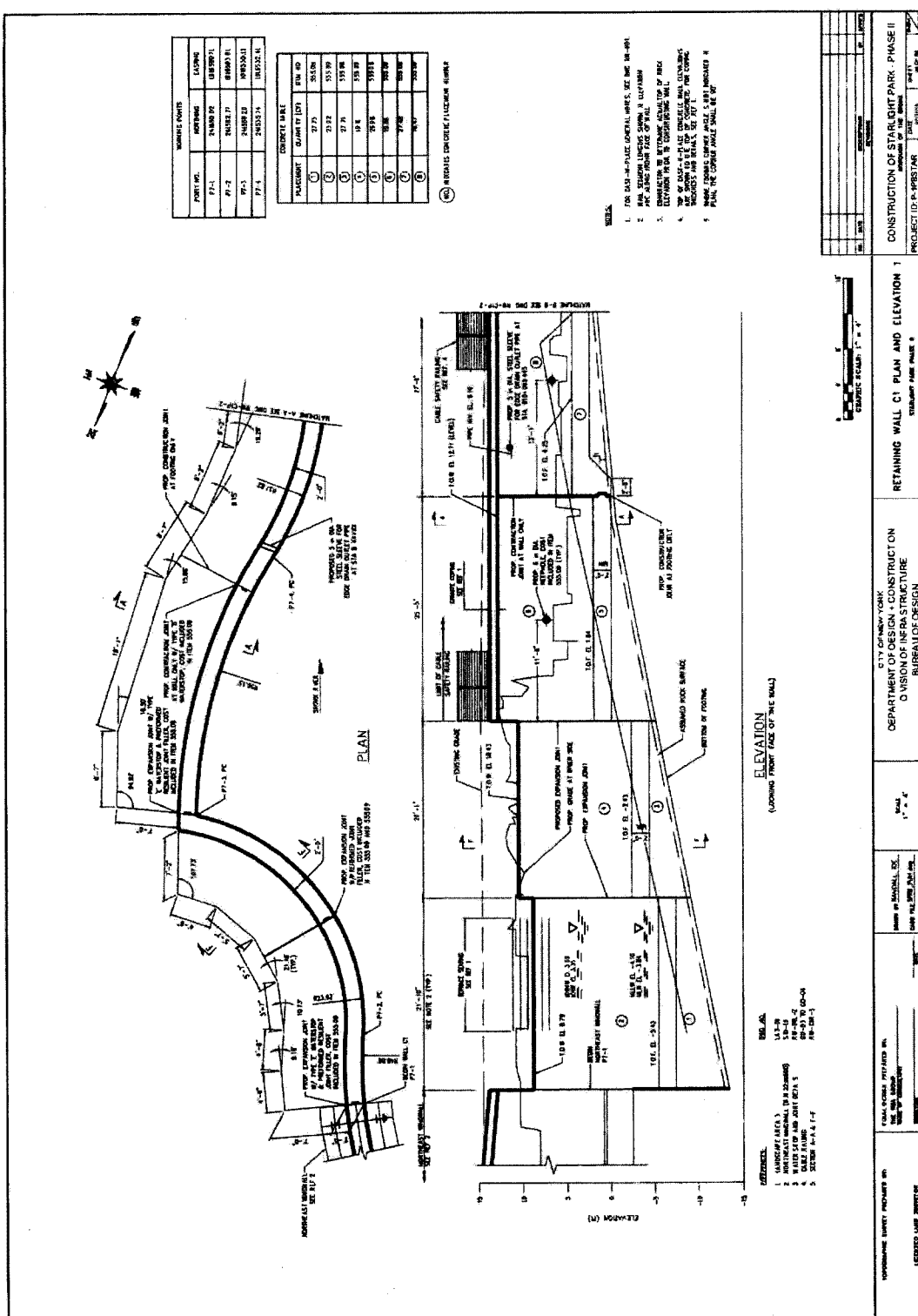


1 WETLAND MARSH RESTORATION SECTION  
SCALE: 1" = 10'

FINAL REPORT PREPARED BY: NAME OF PREPARED:	NAME OF BIDDAL OF: ADDRESS:	CITY OF NEW YORK DEPARTMENT OF DESIGN + CONSTRUCTION DIVISION OF INFRASTRUCTURE	WETLAND MITIGATION SECTIONS - 2	CONSTRUCTION OF STRAIGHT PARK - PHASE 1 SHEET 1 OF 1
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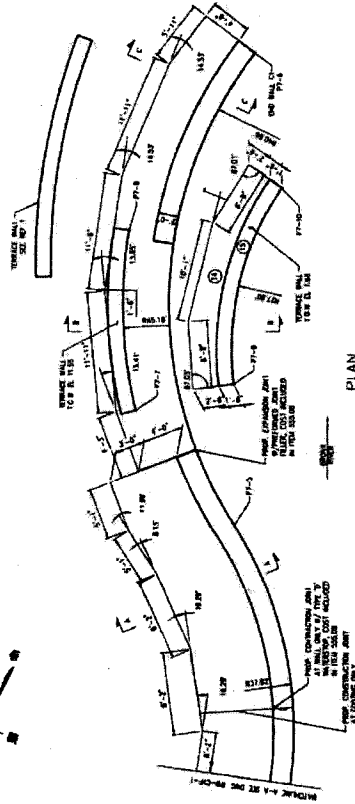


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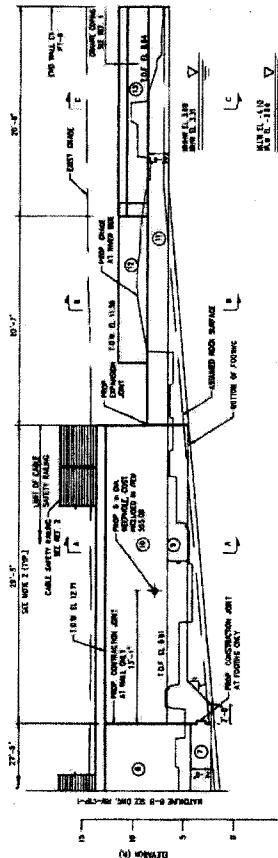




NAN-2016-01178-EHA



PLAN



ELEVATION  
(LOOKING FROM FACE OF WALL)

- REVISIONS
- 1. LARGEST AREA 3
  - 2. CHINESE WALL
  - 3. WATER STOP AND JOINT DETAILS
  - 4. SET OF WALL, B-W, AND L-C

DATE: 01/11/16  
BY: [Signature]  
CHECKED BY: [Signature]

PORT NO.	DATE	LOCATION
P-1	2/1/17	00000000
P-2	2/1/17	00000000
P-3	2/1/17	00000000
P-4	2/1/17	00000000
P-5	2/1/17	00000000
P-6	2/1/17	00000000
P-7	2/1/17	00000000
P-8	2/1/17	00000000
P-9	2/1/17	00000000
P-10	2/1/17	00000000

ALLOCATION	QUANTITY (CY)	UNIT PRICE
1	1.00	100.00
2	1.00	100.00
3	1.00	100.00
4	1.00	100.00
5	1.00	100.00
6	1.00	100.00
7	1.00	100.00
8	1.00	100.00
9	1.00	100.00
10	1.00	100.00

- NOTES
- FOR GATE-HOUSE, SEE GATE-HOUSE, SEE GATE-HOUSE.
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NO.	DESCRIPTION	AMOUNT	DATE
1	CONSTRUCTION OF STARBUCK PARK, PHASE II	100.00	01/11/16
2	CONSTRUCTION OF STARBUCK PARK, PHASE II	100.00	01/11/16
3	CONSTRUCTION OF STARBUCK PARK, PHASE II	100.00	01/11/16
4	CONSTRUCTION OF STARBUCK PARK, PHASE II	100.00	01/11/16
5	CONSTRUCTION OF STARBUCK PARK, PHASE II	100.00	01/11/16
6	CONSTRUCTION OF STARBUCK PARK, PHASE II	100.00	01/11/16
7	CONSTRUCTION OF STARBUCK PARK, PHASE II	100.00	01/11/16
8	CONSTRUCTION OF STARBUCK PARK, PHASE II	100.00	01/11/16
9	CONSTRUCTION OF STARBUCK PARK, PHASE II	100.00	01/11/16
10	CONSTRUCTION OF STARBUCK PARK, PHASE II	100.00	01/11/16

CONSTRUCTION OF STARBUCK PARK, PHASE II  
PROJECT ID: P-1STARLP

CITY OF NEW YORK  
DEPARTMENT OF DESIGN + CONSTRUCTION  
DIVISION OF INFRASTRUCTURE  
BUREAU OF DESIGN

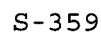
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STATIONING FROM P-1STARLP

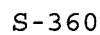
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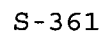
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DATE: 01/11/16  
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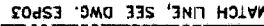
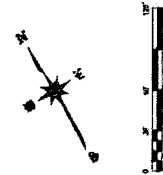












**MATCH LINE, SEE DWG. ESP01**

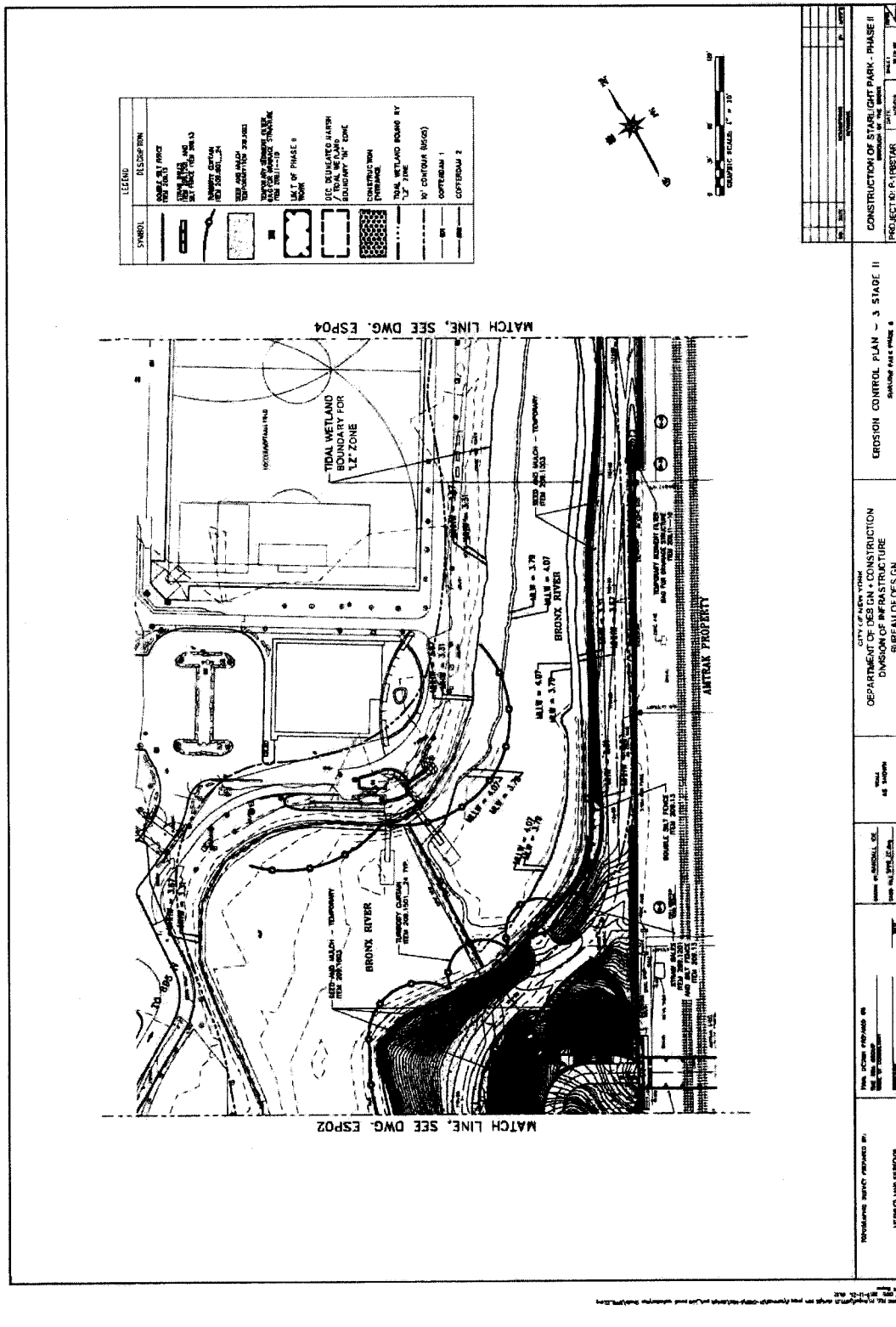
EROSION CONTROL PLAN - 2  
STAGE 1

CITY OF NEW YORK  
DEPARTMENT OF DESIGN + CONSTRUCTION  
DIVISION OF INFRASTRUCTURE

DATE OF RECEIPT

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED  
DATE 08-20-2013 BY 60322 UCBAW

RECEIVED JAN 19 1964



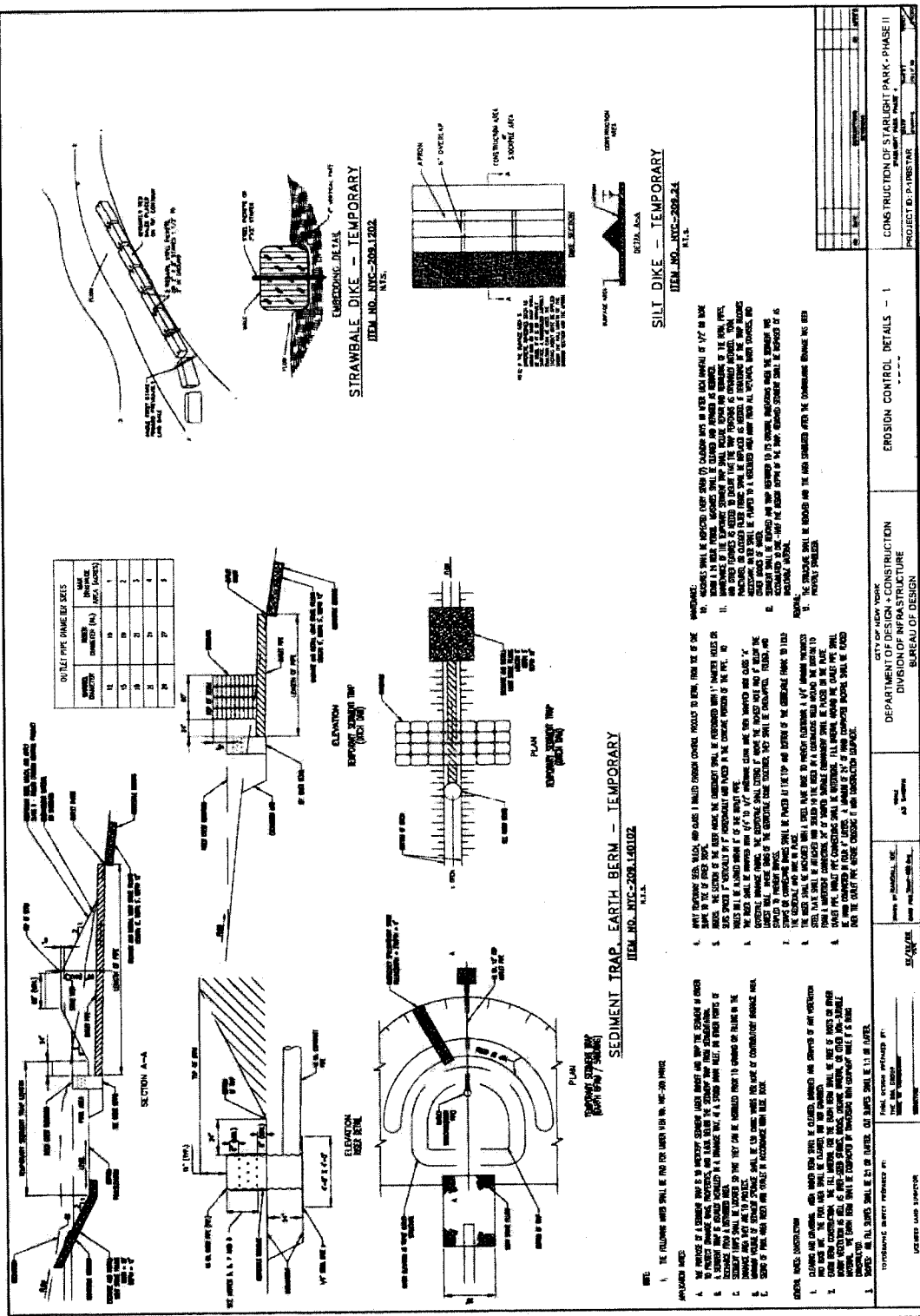
PROJECT NO. P-1STARLP	DATE 10/1/16	PROJECT NAME STARLIGHT PARK - PHASE II	PROJECT LOCATION 1000 W. 181ST ST, BAY RICHMOND, NY 11411
PROJECT NO. P-1STARLP	DATE 10/1/16	PROJECT NAME STARLIGHT PARK - PHASE II	PROJECT LOCATION 1000 W. 181ST ST, BAY RICHMOND, NY 11411
PROJECT NO. P-1STARLP	DATE 10/1/16	PROJECT NAME STARLIGHT PARK - PHASE II	PROJECT LOCATION 1000 W. 181ST ST, BAY RICHMOND, NY 11411
PROJECT NO. P-1STARLP	DATE 10/1/16	PROJECT NAME STARLIGHT PARK - PHASE II	PROJECT LOCATION 1000 W. 181ST ST, BAY RICHMOND, NY 11411

CONSTRUCTION CONTROL PLAN - 3 STAGE II	CONSTRUCTION CONTROL PLAN - 3 STAGE II	CONSTRUCTION CONTROL PLAN - 3 STAGE II	CONSTRUCTION CONTROL PLAN - 3 STAGE II
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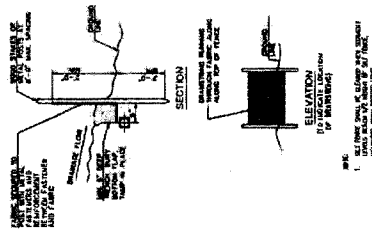




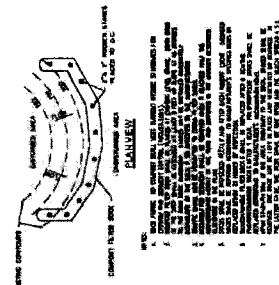
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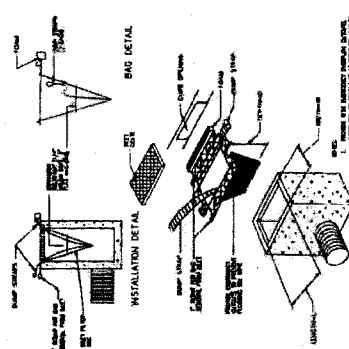
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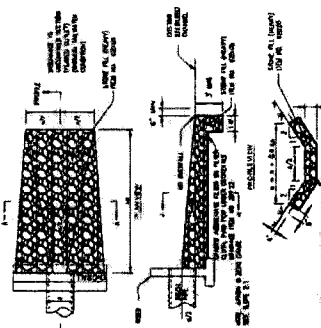
**SILT FENCE - TEMPORARY**  
ITEM NO. NYC-200-13  
N.Y.C.



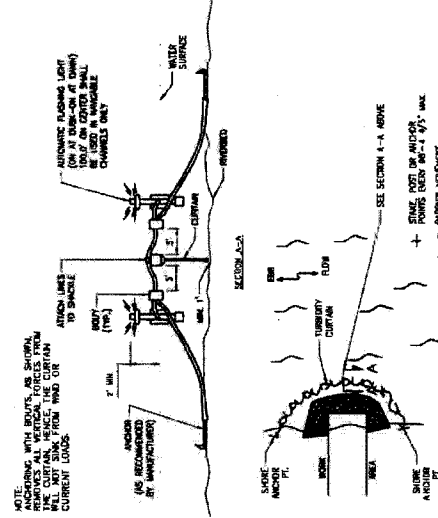
**BIO-FIBER ROLLS - 12 INCH**  
ITEM NO. NYC-200-20120010  
N.Y.C.



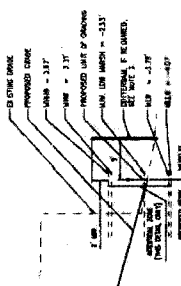
**TEMPORARY CATCH BASIN INSERTS FOR DRAINAGE STRUCTURES**  
ITEM NO. NYC-200-101011  
N.Y.C.



**RIPRAP OUTLET PROTECTION**  
ITEM NO. NYC-200-101011  
N.Y.C.



**TURBIDITY CURTAIN - TEMPORARY**  
ITEM NO. NYC-200-13  
N.Y.C.



**APPLICATION NOTES:**  
A. FOR RUM LOCATIONS, 5' DIA. METAL A. EROSION CONTROL CURTAIN TO BE INSTALLED IN TRENCH 12" DEEP AND 12" WIDE. CURTAIN TO BE INSTALLED IN TRENCH 12" DEEP AND 12" WIDE. CURTAIN TO BE INSTALLED IN TRENCH 12" DEEP AND 12" WIDE.

**COFFERDAM**  
ITEM NO. NYC-200-13  
N.Y.C.

**EROSION CONTROL DETAILS - 2**  
ITEM NO. NYC-200-13  
N.Y.C.

**CONSTRUCTION OF STARLIGHT PARK - PHASE II**  
ITEM NO. NYC-200-13  
N.Y.C.

**CONSTRUCTION OF STARLIGHT PARK - PHASE II**  
ITEM NO. NYC-200-13  
N.Y.C.

**CONSTRUCTION OF STARLIGHT PARK - PHASE II**  
ITEM NO. NYC-200-13  
N.Y.C.

**CONSTRUCTION OF STARLIGHT PARK - PHASE II**  
ITEM NO. NYC-200-13  
N.Y.C.

**CONSTRUCTION OF STARLIGHT PARK - PHASE II**  
ITEM NO. NYC-200-13  
N.Y.C.

**CONSTRUCTION OF STARLIGHT PARK - PHASE II**  
ITEM NO. NYC-200-13  
N.Y.C.

**CONSTRUCTION OF STARLIGHT PARK - PHASE II**  
ITEM NO. NYC-200-13  
N.Y.C.

**CONSTRUCTION OF STARLIGHT PARK - PHASE II**  
ITEM NO. NYC-200-13  
N.Y.C.

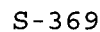
**CONSTRUCTION OF STARLIGHT PARK - PHASE II**  
ITEM NO. NYC-200-13  
N.Y.C.

**CONSTRUCTION OF STARLIGHT PARK - PHASE II**  
ITEM NO. NYC-200-13  
N.Y.C.

**CONSTRUCTION OF STARLIGHT PARK - PHASE II**  
ITEM NO. NYC-200-13  
N.Y.C.

**CONSTRUCTION OF STARLIGHT PARK - PHASE II**  
ITEM NO. NYC-200-13  
N.Y.C.





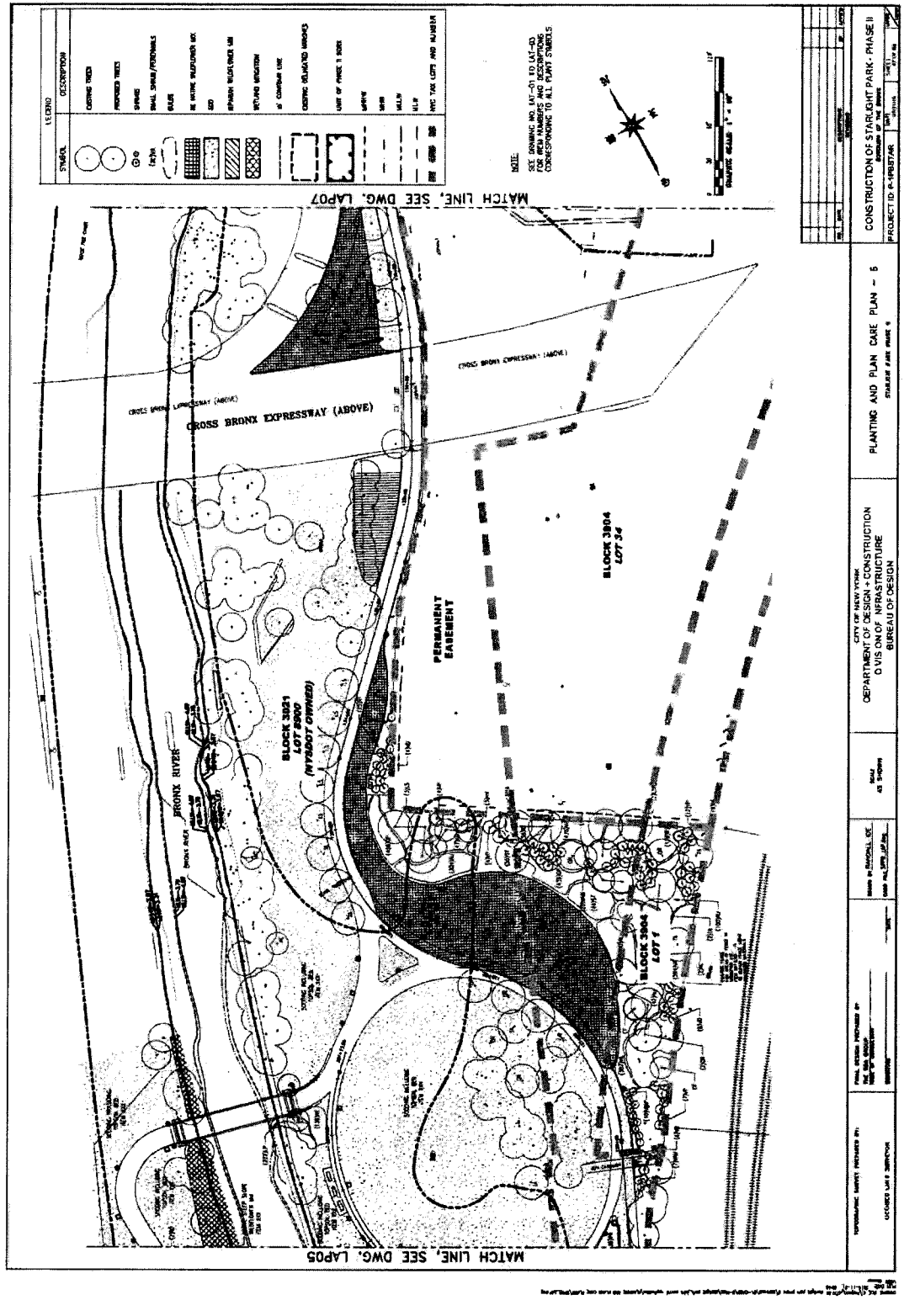


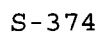






NAN-2016-01176-EHA





S-375

NAN-2016-01176-EHA

ESTABLISH WILDFLOWERS - ITEM XXX			
ITEM	QTY	BOTANICAL NAME	COMMON NAME
101	10	TRIFOLIUM REPENS	WHITE CLOVER
102	10	TRIFOLIUM PRATENSE	RED CLOVER
103	10	TRIFOLIUM HYDRUNGICUM	RED CLOVER
104	10	TRIFOLIUM ALPIMUM	RED CLOVER
105	10	TRIFOLIUM VIOLEACEUM	RED CLOVER
106	10	TRIFOLIUM ALPIMUM	RED CLOVER
107	10	TRIFOLIUM VIOLEACEUM	RED CLOVER
108	10	TRIFOLIUM ALPIMUM	RED CLOVER
109	10	TRIFOLIUM VIOLEACEUM	RED CLOVER
110	10	TRIFOLIUM ALPIMUM	RED CLOVER
111	10	TRIFOLIUM VIOLEACEUM	RED CLOVER
112	10	TRIFOLIUM ALPIMUM	RED CLOVER
113	10	TRIFOLIUM VIOLEACEUM	RED CLOVER
114	10	TRIFOLIUM ALPIMUM	RED CLOVER
115	10	TRIFOLIUM VIOLEACEUM	RED CLOVER
116	10	TRIFOLIUM ALPIMUM	RED CLOVER
117	10	TRIFOLIUM VIOLEACEUM	RED CLOVER
118	10	TRIFOLIUM ALPIMUM	RED CLOVER
119	10	TRIFOLIUM VIOLEACEUM	RED CLOVER
120	10	TRIFOLIUM ALPIMUM	RED CLOVER

TOTAL SEED REQUIRED = 4,079 SY

ITEM	QTY	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	ROOT BALL SIZE	REMARK
101	10	TRIFOLIUM REPENS	WHITE CLOVER	1' x 1'	1' x 1'	1' x 1'	
102	10	TRIFOLIUM PRATENSE	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
103	10	TRIFOLIUM HYDRUNGICUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
104	10	TRIFOLIUM ALPIMUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
105	10	TRIFOLIUM VIOLEACEUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
106	10	TRIFOLIUM ALPIMUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
107	10	TRIFOLIUM VIOLEACEUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
108	10	TRIFOLIUM ALPIMUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
109	10	TRIFOLIUM VIOLEACEUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
110	10	TRIFOLIUM ALPIMUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
111	10	TRIFOLIUM VIOLEACEUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
112	10	TRIFOLIUM ALPIMUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
113	10	TRIFOLIUM VIOLEACEUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
114	10	TRIFOLIUM ALPIMUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
115	10	TRIFOLIUM VIOLEACEUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
116	10	TRIFOLIUM ALPIMUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
117	10	TRIFOLIUM VIOLEACEUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
118	10	TRIFOLIUM ALPIMUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
119	10	TRIFOLIUM VIOLEACEUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	
120	10	TRIFOLIUM ALPIMUM	RED CLOVER	1' x 1'	1' x 1'	1' x 1'	

NOTES:  
1. ALL PLANTS SHALL BE SUPPLIED BY THE CONTRACTOR.  
2. ALL PLANTS SHALL BE SUPPLIED BY THE CONTRACTOR.  
3. ALL PLANTS SHALL BE SUPPLIED BY THE CONTRACTOR.  
4. ALL PLANTS SHALL BE SUPPLIED BY THE CONTRACTOR.  
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6. ALL PLANTS SHALL BE SUPPLIED BY THE CONTRACTOR.  
7. ALL PLANTS SHALL BE SUPPLIED BY THE CONTRACTOR.  
8. ALL PLANTS SHALL BE SUPPLIED BY THE CONTRACTOR.  
9. ALL PLANTS SHALL BE SUPPLIED BY THE CONTRACTOR.  
10. ALL PLANTS SHALL BE SUPPLIED BY THE CONTRACTOR.

WORKSHEET SHEET NUMBER 17	DATE: 10/1/2016	PROJECT: 101-101-101-101	CONTRACT: 101-101-101-101
DESIGNED BY: [Signature]	CHECKED BY: [Signature]	APPROVED BY: [Signature]	DATE: 10/1/2016
CONSTRUCTION OF STARLIGHT PARK - PHASE 1			

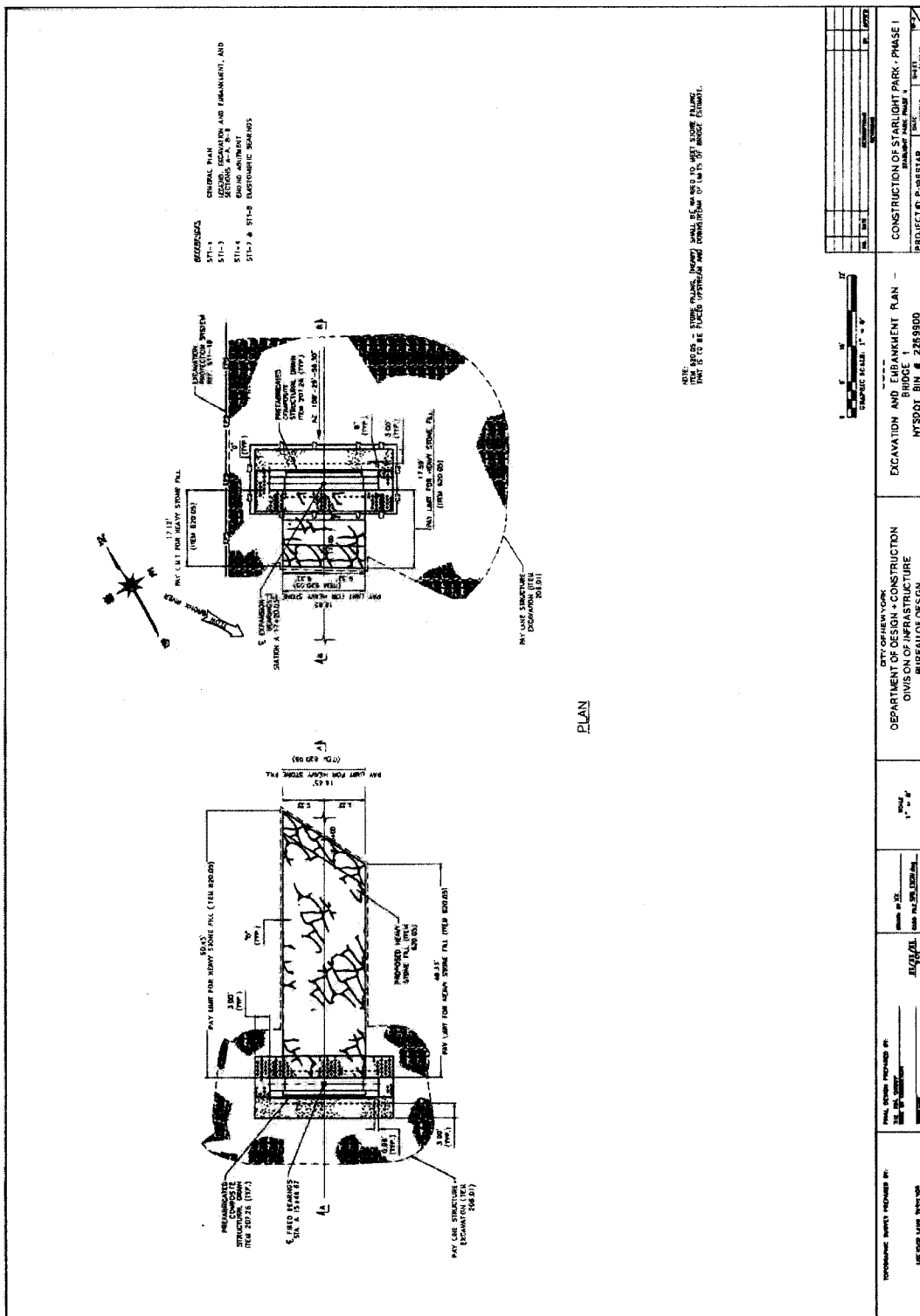
1. THE STATE OF TEXAS  
 2. COUNTY OF DALLAS  
 3. BEFORE ME, the undersigned authority, on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_  
 4. known to me to be the person whose name is subscribed to the foregoing instrument,  
 5. and acknowledged to me that he executed the same for the purposes and consideration therein expressed.  
 6. I give this instrument the effect of a deed.  
 7. Witness my hand and seal of office this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.  
 8. Notary Public in and for the State of Texas.  
 9. My commission expires this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.  
 10. My office is located at \_\_\_\_\_, \_\_\_\_\_, Texas.  
 11. My name is \_\_\_\_\_.  
 12. My address is \_\_\_\_\_, \_\_\_\_\_, Texas.  
 13. My telephone number is \_\_\_\_\_.  
 14. My fax number is \_\_\_\_\_.  
 15. My e-mail address is \_\_\_\_\_.  
 16. My business hours are \_\_\_\_\_ to \_\_\_\_\_.  
 17. My fee is \_\_\_\_\_.  
 18. My fee is non-refundable.  
 19. My fee is not subject to sales tax.  
 20. My fee is not subject to state or local taxes.  
 21. My fee is not subject to federal taxes.  
 22. My fee is not subject to any other taxes.  
 23. My fee is not subject to any other charges.  
 24. My fee is not subject to any other fees.  
 25. My fee is not subject to any other costs.  
 26. My fee is not subject to any other expenses.  
 27. My fee is not subject to any other liabilities.  
 28. My fee is not subject to any other obligations.  
 29. My fee is not subject to any other responsibilities.  
 30. My fee is not subject to any other duties.  
 31. My fee is not subject to any other functions.  
 32. My fee is not subject to any other tasks.  
 33. My fee is not subject to any other jobs.  
 34. My fee is not subject to any other work.  
 35. My fee is not subject to any other employment.  
 36. My fee is not subject to any other service.  
 37. My fee is not subject to any other business.  
 38. My fee is not subject to any other industry.  
 39. My fee is not subject to any other sector.  
 40. My fee is not subject to any other economy.  
 41. My fee is not subject to any other market.  
 42. My fee is not subject to any other place.  
 43. My fee is not subject to any other location.  
 44. My fee is not subject to any other area.  
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 46. My fee is not subject to any other zone.  
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 48. My fee is not subject to any other division.  
 49. My fee is not subject to any other department.  
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 170. My fee is not subject to any other partnership.  
 171. My fee is not subject to any other joint venture.  
 172. My fee is not subject to any other association.  
 173. My fee is not subject to any other union.  
 174. My fee is not subject to any other guild.

PROJECT ID	P-IPBSTAR	DATE	09-03-04	SCALE	1" = 10' 0"
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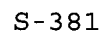




NAN-2016-01176-EHA



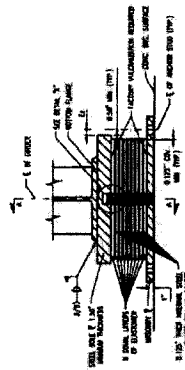




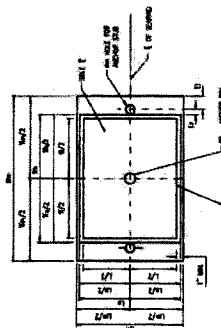






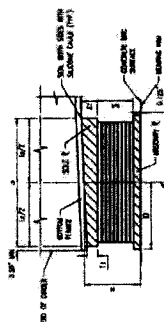


ELEVATION  
RECTANGULAR FIXED BEARING

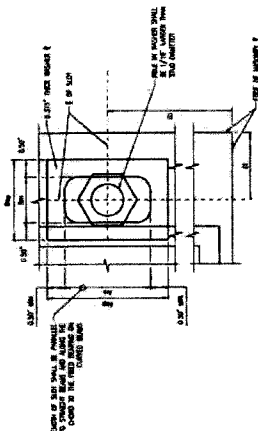


PLAN  
RECTANGULAR FIXED BEARING

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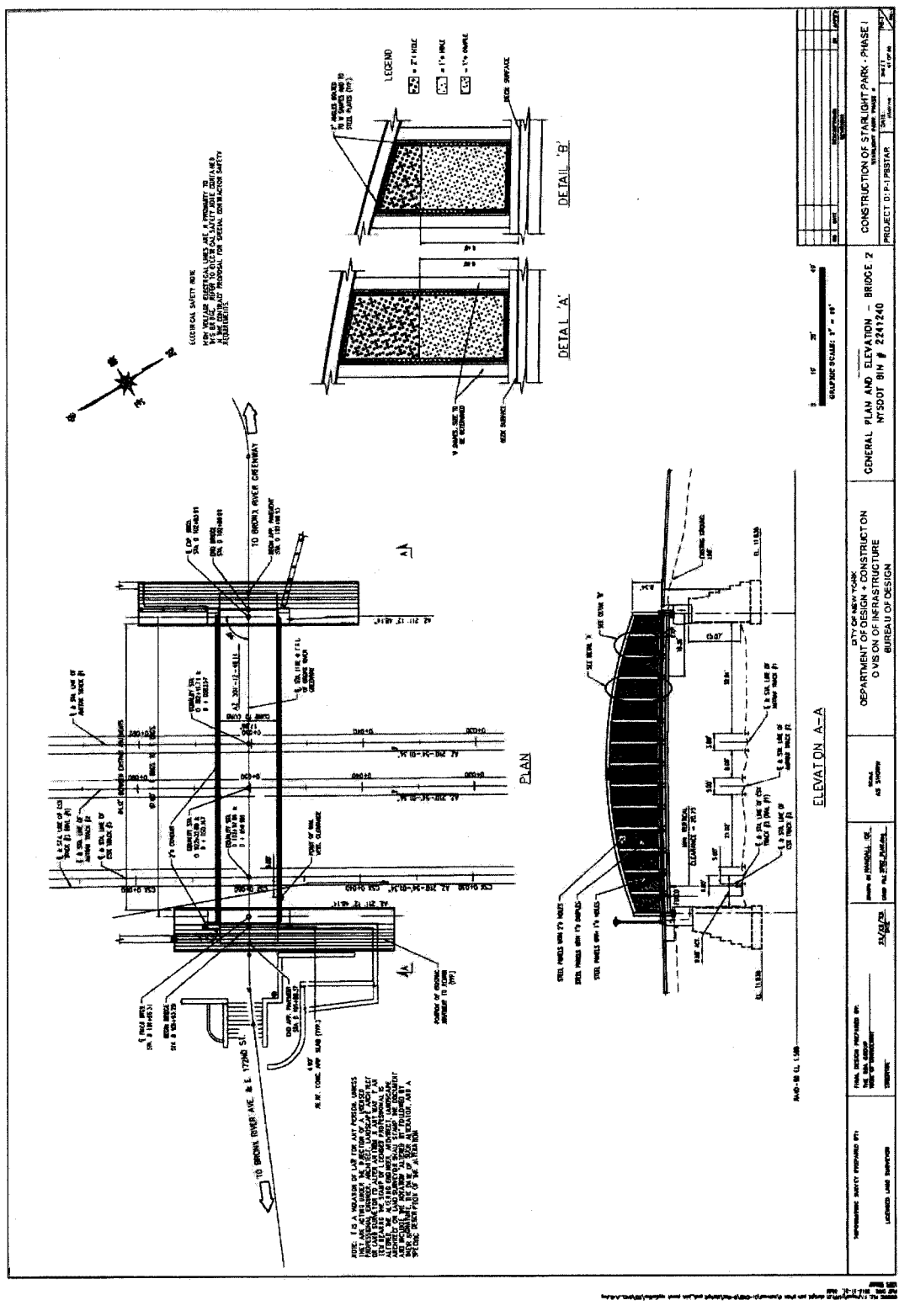
SECTION 8-8



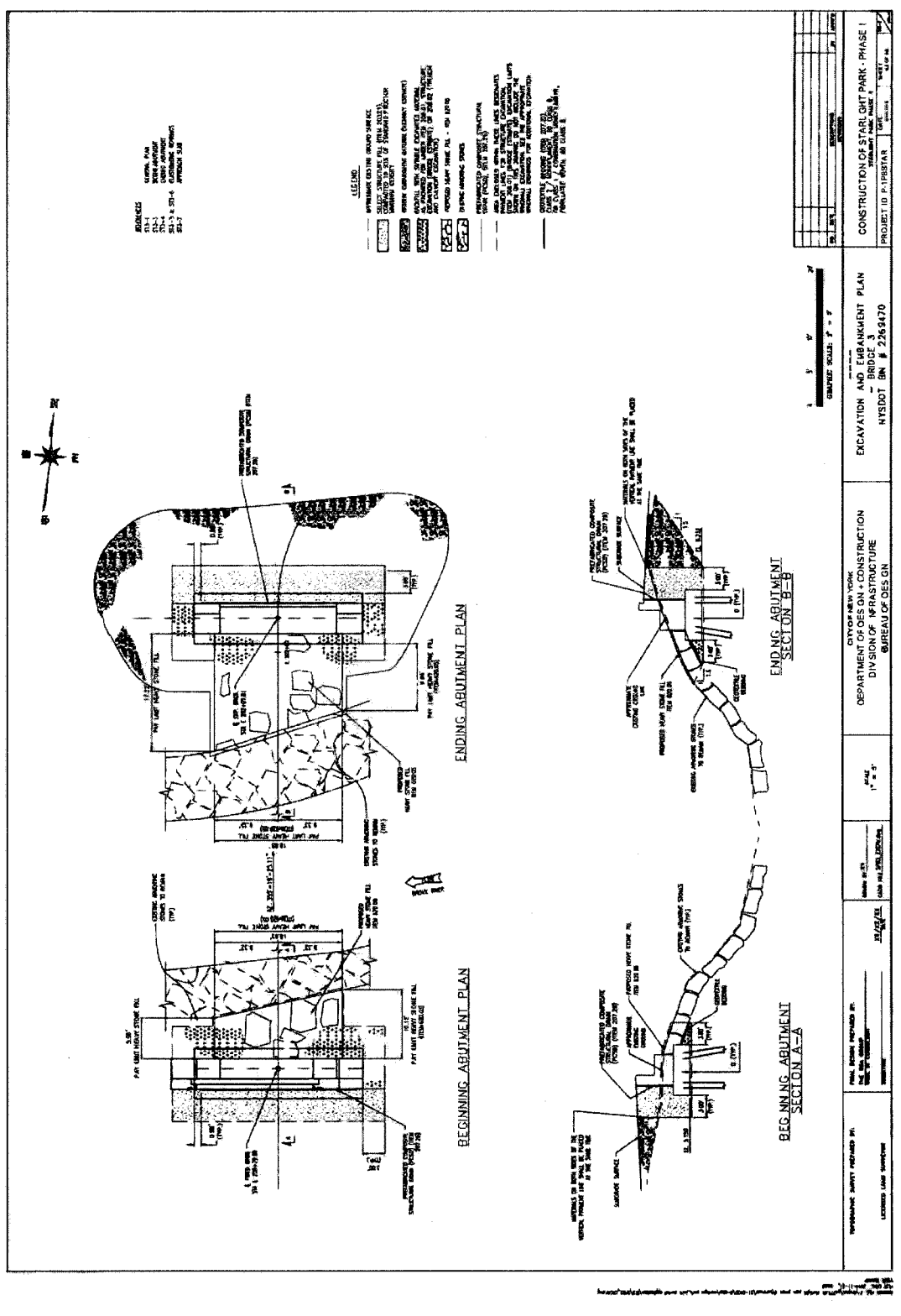
TYPICAL SLOTTED HOLE DETAIL  
MASONRY PLATE

[illegible][illegible][illegible]

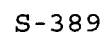
**NAN-2016-01176-EHA**



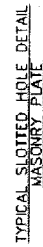
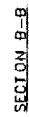
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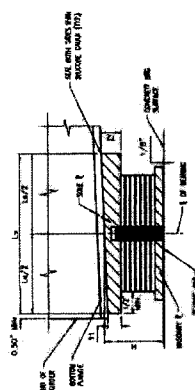




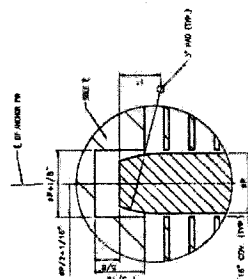


[illegible][illegible]

IMPROVING BARRI REMAINS IN: LOCATION AND SKETCH	ROAD AHEAD REMAINS IN: LOCATION AND SKETCH	DRAWN BY: <u>                    </u> DATE: <u>                    </u>	DRAWN BY: <u>                    </u> DATE: <u>                    </u>	NAME OF AGENCY, STATE AND FEDERAL DEPARTMENT	NAME OF AGENCY, STATE AND FEDERAL DEPARTMENT	CITY OF NEW YORK DEPARTMENT OF DESIGN + CONSTRUCTION DIVISION OF INFRASTRUCTURE BUREAU OF DESIGN	ELASTOMERIC BEARING FIXED TYPE E.B. - BRIDGE 3 NYS DOT BIN # 2269470
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SECTION A-A

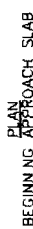


DETAIL "A"  
FIXED BEARING ANCHOR PIN

[illegible]

U.S. DEPARTMENT OF JUSTICE

[illegible][illegible]



APPROACH SLAB TABLE		
LOCATION	APPROACH SLAB THICKNESS INCHES	APPROACH SLAB REINFORCING BAR SIZE AND SPACING
OFF-CHANGING APPROACH	84.17 in.	8 # 12 @ 18
ENTRANCE APPROACH	84.88 in.	8 # 8 @ 18

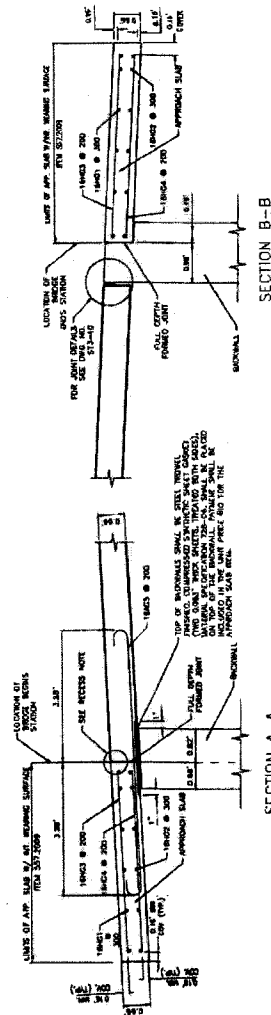
NEEDS TO BE FILLED WITH COLD APPLIED SEALER. FEDERAL NATIONAL SPECIFICATION SS-30798E - CLASSIFIED POLYMER CONCRETE REPAIR. THE COLD FILL IS PLACED IN A CLEAN AND DRY SURFACE. THE COLD FILL MUST BE PLACED IN THE UNIT PRIOR TO THE SECOND MOTION. WARNING! DO NOT PLACE IN THE UNIT PRIOR TO THE APPROACH SLAB.

THE SURFACES OF STRUCTURAL SLABS, AND APPROACH SLABS SHALL BE SEALED UNDER THE PROTECTIVE SLICANT TELL.

THE FULL JOINT JOINT SHOWN IS UNACCEPTABLE. \* IMPURE OCEPH MOUNTAIN IS NOT PERMITTED.

ALL REMEDIATION SHALL HAVE 3' COVER UNLESS OTHERWISE NOTED.

(C) BENTLEY CONSULTING



APPROACH SLAB PLAN, SECTIONS AND DETAILS - BRIDGE 3 MYSDOT BN # 2289470 RIBEAUDEGEN	CITY OF DENVER DEPARTMENT FOR DESIGN, CONSTRUCTION & DETAILS DIVISION OF INFRASTRUCTURE RIBEAUDEGEN	DRAWN BY: <u>DAVID L. DEWITT</u> CHECKED BY: <u>DAVID L. DEWITT</u> DATE: <u>08/27/2018</u>	SCALE: <u>AS SHOWN</u>	PROJECT NO. <u>18-00000000</u> PROJECT NAME <u>CONSTRUCTION OF STABLET PARK - PHASE II</u> PROJECT LOCATION <u>STABLET PARK, DENVER, CO</u> PROJECT DATE <u>08/27/2018</u>	SHEET NO. <u>1</u> OF <u>1</u> SHEET TITLE <u>CONSTRUCTION OF STABLET PARK - PHASE II</u> SHEET DATE <u>08/27/2018</u>

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
Facility DEC ID 2-6007-00265



## PERMIT

### Under the Environmental Conservation Law (ECL)

#### Permittee and Facility Information

**Permit Issued To:**  
NYC DEPT OF PARKS & RECREATION  
830 5TH AVE  
  
NEW YORK, NY 10021-7001

**Facility:**  
NYC PARKS-STARLIGHT PARK  
SHERIDAN EXPWY ROW, WESTCHESTER  
AVE TO E174 ST  
BRONX, NY

**Facility Permit Contact:**  
THERESE BRADDICK  
NYC DEPT OF PARKS & RECREATION -  
OLMSTEAD CTR  
117-02 ROOSEVELT AVE  
FLUSHING, NY 11368  
(718) 760-6602

**Facility Application Contact:**  
JEAN M JEAN-LOUIS  
NYC Department of Design & Construction  
  
30-30 Thompson Ave  
Long Island City, NY 11101  
(718) 391-3134

**Facility Location:** in BRONX COUNTY Village: Bronx County

**Facility Principal Reference Point:** NYTM-E: 594.266 NYTM-N: 4520.857  
Latitude: 40°49'60.0" Longitude: 73°52'55.1"

**Project Location:** Starlight Park from Westchester Avenue to E.174th St., Bronx, NY

**Authorized Activity:** This permit authorizes improvements and reconstruction to Starlight Park to form connections to the Bronx River Greenway to the North and Concrete Plant Park to the South. The improvements will be a multi-use landscaped bikeway and walkway approximately 0.5 miles long, extending along the Bronx River (WIN#ER-3, Part 935-18, Class I, Standard I) from Westchester Avenue to E.174th St. in the Bronx. The application includes the construction of pathways, two foot bridges to span across the Bronx River, new green spaces and native plantings, dredging, wetlands enhancements and restoration along the Bronx River within State regulated Tidal Wetlands and within the Tidal Wetland adjacent area.

#### Permit Authorizations

##### Tidal Wetlands - Under Article 25

Permit ID 2-6007-00265/00011

New Permit

Effective Date: 10/4/2016

Expiration Date: 12/31/2025

##### Water Quality Certification - Under Section 401 - Clean Water Act

Permit ID 2-6007-00265/00012

New Permit

Effective Date: 10/4/2016

Expiration Date: 12/31/2025

##### Excavation & Fill in Navigable Waters - Under Article 15, Title 5

Permit ID 2-6007-00265/00013

New Permit

Effective Date: 10/4/2016

Expiration Date: 12/31/2025



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
Facility DEC ID 2-6007-00265

### NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: STEPHEN A WATTS, Regional Permit Administrator

Address: NYSDEC Region 2 Headquarters  
47-40 21st St  
Long Island City, NY 11101 -5401

Authorized Signature: \_\_\_\_\_

Date 10/04/2016

### Distribution List

JEAN M JEAN-LOUIS  
THERESE BRADDICK  
Marine Resources

### Permit Components

NATURAL RESOURCE PERMIT CONDITIONS

WATER QUALITY CERTIFICATION SPECIFIC CONDITION

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

### Permit Attachments

Permit Sign  
Notice of Intent to Commence Work  
Notice of Completion of Work

**NATURAL RESOURCE PERMIT CONDITIONS - Apply to the Following  
Permits: TIDAL WETLANDS; WATER QUALITY CERTIFICATION;  
EXCAVATION & FILL IN NAVIGABLE WATERS**

1. **Conformance With Plans** All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or applicant's agent as part of the permit application. Such approved plans were prepared by RBA Group for NYCDDC and NYCDPR included in the Joint Application submission dated August 22, 2016 received by NYSDEC on August 26, 2016.
2. **Conformance with Plans - Addenda** In addition to any plans referenced in the Condition titled "Conformance with Plans," the activities authorized by this permit must be in strict conformance with the following approved plans and/or submissions made as part of the permit application:
  - A. Plans titled "Construction of Starlight Park- Phase II Borough of the Bronx" Sheets 1-5, 9-15, 23-29, 32-41, and 52-68 prepared by RBA Group dated July 7, 2016 and received by NYSDEC on August 26, 2016.
  - B. Plans titled "Construction of Starlight Park- Phase II Borough of the Bronx" Sheets 6-8 prepared by RBA Group dated July 5, 2016 and received by NYSDEC on August 26, 2016.
  - C. Plans titled "Construction of Starlight Park- Phase II Borough of the Bronx" Sheets 16-22 and 49-51 prepared by RBA Group dated September 17, 2015 and received by NYSDEC on August 26, 2016.
  - D. Plans titled "Construction of Starlight Park- Phase II Borough of the Bronx" Sheets 30, 31, and 42-48 prepared by RBA Group dated July 31, 2015 and received by NYSDEC on August 26, 2016.
3. **Notice of Intent to Commence Work** At least five (5) days prior to the start of work, Permittee must complete and submit the attached "Notice of Intent to Commence Work" form to the NYSDEC Bureau of Marine Resources, 47-40 21st Street, Long Island City, New York 11101 (Attention: Justin Falls).
4. **Notice of Completion of Work** Within ten (10) days of the completion of work, Permittee must complete and submit the attached Notice of Completion of Work form to NYSDEC Bureau of Marine Resources, 47-40 21st Street, Long Island City, New York 11101 (Attention: Justin Falls).
5. **Post Permit Sign** The permit sign enclosed with this permit shall be posted in a conspicuous location on the worksite and adequately protected from the weather.
6. **Placement of Dredged Material** Information on the final placement location of the licensed facility must be received at least thirty (30) days prior to the commencement of dredging. Information should include:
  - A. The name and address of the licensed facility for disposal of dredged material.
  - B. The name, email, and phone number of the contact person for the placement site.
  - C. A letter of approval from the placement location stating that it is willing and able to accept the dredged material.





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- D. A copy of the facility permits and/or other authorizations that enable the placement site to accept the subject dredged material.
- E. No onsite reuse is permitted unless the Permittee obtains authorization in writing from the Department.

**7. Delivery and Placement of Bridge Structures** Information on the final delivery method and placement of bridge components/sections of the bridge structure(s) must be received at least ninety (90) days prior to delivery of materials to reconfirm the delivery and installation method.

**8. Minimize Adverse Impacts to Wetlands, Wildlife, Water** All work must be accomplished in a manner which minimizes adverse impacts to freshwater wetlands, wildlife, water quality, and natural resources.

**9. Precautions Against Contamination of Waters** All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.

**10. Concrete or Leachate Must Not Escape** During construction, concrete or leachate will not escape or be discharged, nor will washings from transit mix trucks, mixers, or other devices enter any water body, including wetlands or protected buffer areas.

**11. Removal of Debris and Excess Material** Any debris or excess material from construction of this project will be completely removed from the adjacent area (upland) and removed to an approved upland area for disposal. No debris is permitted in tidal wetlands or tidal wetlands adjacent area or protected buffer areas.

**12. Erosion/Sediment Control** All areas of soil disturbance resulting from this project will be stabilized immediately following project completion or prior to permit expiration, whichever comes first. The approved methodologies are as follows:

- A. Stabilization of the entire disturbed area with appropriate vegetation (grasses, etc.).
- B. Stabilized as per specifications identified on approved plans.
- C. Temporarily stabilized with straw or hay mulch or jute matting or other similar natural fiber matting within 1 week of final grading. Temporary stabilization will be maintained until a mature vegetative cover is established.

**13. Disturbed Soils** All disturbed areas where soil will be temporarily exposed or stockpiled for longer than one (1) week will be contained by a continuous line of staked hay bales/silt curtain (or other NYSDEC approved method) placed on the seaward side between the fill and wetland or protected buffer area. Tarps are authorized to supplement these approved methods.

**14. Fill Material** All fill will consist of "clean" sand, gravel, or soil. The use of material such as asphalt, slag, fly-ash, recycled concrete aggregate (RCA), broken concrete, or demolition debris is strictly prohibited.

**15. No Excavating Beach for Fill** Excavation of the beach for the purpose of obtaining fill or stone materials is prohibited.



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**16. No Discharge into Tidal Wetlands** There will be no discharge of runoff or other effluent over or through any bulkhead or shoreline stabilization structure or into any tidal wetland or tidal wetlands adjacent area (unless specifically authorized herein).

**17. Best Management Practices** Best management practices will be employed to prevent the loss of construction materials, debris and sediments from entering the wetlands or waterways. Such practices may include, but are not limited to construction fencing, staked hay bales, silt fencing, floating platforms, netting, containment booms.

**18. Complete Construction Before Backfilling** Construction of all peripheral riprap berms, cofferdams, rock revetment, gabions, bulkheads, etc., shall be completed prior to placement of any fill material behind such structures.

**19. Demolition and Construction Debris** Should any demolition or construction debris fall into the waterway or enter the tidal wetlands, it must be removed immediately.

**20. Disposal of Demolition and Construction Debris** All demolition and construction debris must be properly disposed of at a licensed facility.

**21. Planting Survival** All plants, as shown on Mitigation drawings of this permit (Wetland Mitigation Plan -1, Wetland Mitigation Plan -2, Wetland Mitigation Sections -1, and Wetland Mitigation Sections -2), must be monitored for a minimum of five (5) years following the initial planting to ensure an 85% survival rate. If plant survival is less than 85%, dead plants are to be replaced. The Permittee shall notify the NYSDEC, 47-40 21st Street, Long Island City, NY 11101 (Attention: Habitat Manager), in writing, when planting activities are completed. The planting area must be evaluated annually, and a report must be submitted to the NYSDEC, 47-40 21st Street, Long Island City, NY 11101 (Attention: Habitat Manager) by November 15th of each consecutive growing season following initial planting, as to the condition of the plants and the actions taken in the planting area. Both the initial notification and following five (5) growing season reports should include plant species, number of plants, and photographs of the planting area.

**22. Dredging Operation** During the dredging operation, the Permittee or the Permittee's agent will prevent spillage of sediment during excavation and haulage. Dredging will be accomplished with a clam shell or other closed "bucket" equipment. The use of a dragline for dredging is strictly prohibited.

**23. Excavated Sediments** Excavated sediments must be placed directly into the approved disposal site or conveyance vehicle. The sidecasting (double dipping) or temporary storage of excavated material is strictly prohibited.

**24. Disposal of Excavated Material** All dredged material will be disposed on an approved upland site and be retained so as to not reenter any water body, tidal wetland, or protected buffer area.

**25. Barge Overflow** Barge overflow is prohibited.

**26. Decanting** The Permittee will be allowed to decant the dredged water off the barge so long as all of the conditions below are met:

- A. All dredge material is allowed to settle for at least 24 hours prior to decanting.
- B. The barge water is clear of turbidity.
- C. Decanting of the barge shall be conducted in a manner that precludes adding substantial



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suspended solids, turbidity or sheens to the receiving water body. During pumping of the decant water, great care shall be taken to avoid re-suspending or pumping previously settled sediment.

**27. No Terrestrial Equipment in the Water** The tires or tracks of land based heavy equipment is not permitted to operate below the mean high water line.

**28. Vessel Clearance** Any barge or vessel used to stage or conduct this work must maintain clearance from the mud line during all tidal cycles.

**29. No Interference With Navigation** There shall be no unreasonable interference with navigation by the work herein authorized.

**30. Post Construction Photographs** Post-construction photographs of the work area must be submitted to the NYSDEC Bureau of Marine Resources, 47-40 21st Street, Long Island City, New York 11101 (Attention: Justin Falls) within 30 days of the completion of work.

**31. Prior Approval of Changes** If the Permittee desires to make any changes in construction techniques, species to be planted, the site plan, any mitigation plan, scheduling or staging of construction, or any other aspect of this project, the Permittee shall submit a written request to the Regional Permit Administrator to make such proposed changes and shall not make such changes unless authorized in writing by the Department.

**32. Failure to Meet Permit Conditions** Failure of the permittee to meet all the conditions of this permit is grounds for an order to immediately cease the permitted activity at the project site.

**33. State May Order Removal or Alteration of Work** If future operations by the State of New York require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Department of Environmental Conservation it shall cause unreasonable obstruction to the free navigation of said waters or flood flows or endanger the health, safety or welfare of the people of the State, or cause loss or destruction of the natural resources of the State, the owner may be ordered by the Department to remove or alter the structural work, obstructions, or hazards caused thereby without expense to the State, and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners, shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable and flood capacity of the watercourse. No claim shall be made against the State of New York on account of any such removal or alteration.

**34. State May Require Site Restoration** If upon the expiration or revocation of this permit, the project hereby authorized has not been completed, the applicant shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may lawfully require, remove all or any portion of the uncompleted structure or fill and restore the site to its former condition. No claim shall be made against the State of New York on account of any such removal or alteration.

**35. State Not Liable for Damage** The State of New York shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the State for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
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### WATER QUALITY CERTIFICATION SPECIFIC CONDITIONS

**1. Water Quality Certification** The authorized project, as conditioned pursuant to the Certificate, complies with Section 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act, as amended and as implemented by the limitations, standards, and criteria of state statutory and regulatory requirements set forth in 6 NYCRR Section 608.9(a). The authorized project, as conditioned, will also comply with applicable New York State water quality standards, including but not limited to effluent limitations, best usages and thermal discharge criteria, as applicable, as set forth in 6 NYCRR Parts 701, 702, 703, and 704.

### GENERAL CONDITIONS - Apply to ALL Authorized Permits:

**1. Facility Inspection by The Department** The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

**2. Relationship of this Permit to Other Department Orders and Determinations** Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

**3. Applications For Permit Renewals, Modifications or Transfers** The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator  
NYSDEC Region 2 Headquarters  
47-40 21st St  
Long Island City, NY 11101 -5401

**4. Submission of Renewal Application** The permittee must submit a renewal application at least 30 days before permit expiration for the following permit authorizations: Excavation & Fill in Navigable Waters, Tidal Wetlands, Water Quality Certification.



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**5. Permit Modifications, Suspensions and Revocations by the Department** The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

- a. materially false or inaccurate statements in the permit application or supporting papers;
- b. failure by the permittee to comply with any terms or conditions of the permit;
- c. exceeding the scope of the project as described in the permit application;
- d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

**6. Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

<b>NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS</b>
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**Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification**

The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

**Item B: Permittee's Contractors to Comply with Permit**

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

**Item C: Permittee Responsible for Obtaining Other Required Permits**

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.



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**Item D: No Right to Trespass or Interfere with Riparian Rights**

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

**APPENDIX I: N.Y.C. TRANSIT INSURANCE**

The Contractor (Permittee) shall indemnify and save harmless the City of New York and the New York City Transit (Permitter) in accordance with the following "Insurance Requirements" and proof that the necessary insurance is in effect will be required before work can commence:

### **NYCT "NOT FOR BENEFIT" INSURANCE REQUIREMENTS**

#### **SECTION A: INSURANCE REQUIREMENTS**

The Permittee at its sole cost and expense shall carry and maintain policies of insurance at all times during the period of performance under this Agreement as herein set forth below:

- 1 **Workers' Compensation:** including Employer's Liability Insurance with limits of liability not less than \$2,000,000 which may be met by a combination of primary and excess insurance meeting the statutory limits of New York State.
2. **Commercial General Liability:** (ISO 2001 Form or equivalent) approved by Permitter in the Permittee's name with limits of liability in the amount of not less than \$3,000,000 for each occurrence on a combined single limit basis for injuries to persons (including death) and damage to property, \$3,000,000 General Aggregate and \$3,000,000 in the Aggregate with respect to Products/Completed Operations. The limits may be provided in the form of a primary policy or combination of primary and umbrella/excess policy. When the minimum contract amounts can only be met when applying the umbrella/excess policy, the Umbrella/Excess Policy must follow form of the underlying policy and be extended to "drop down" to become primary in the event primary limits are reduced or aggregate limits are exhausted. Such insurance shall be primary and non-contributory to any other valid and collectible insurance and must be exhausted before implicating any Permitter/MTA policy available.

Such policy should be written on an occurrence form, and shall include the following coverages:

- Additional Insured Endorsement (I.S.O. Form CG 20 26 07/04) version or equivalent approved by the Permitter, shall name the indemnitees as referenced under Section B of this agreement as Additional Insureds.
  - Contractual Liability assumed by the Permittee under this agreement;
  - Personal and Advertising Injury;
  - Products-Completed Operations;
  - Independent Contractors;
  - "XCU" (Explosion, Collapse, and Underground Hazards) where necessary;
  - Contractual Liability Exclusion, applicable to construction or demolition operations to be performed within 50 feet of railroad tracks, must be removed, where necessary;
3. **Business Automobile Liability:** (ISO Form CA 00 01 10 01 or equivalent) approved by the Permitter is required if Permittee's vehicle enters Permitter's property. The insurance must be in the name of the Permittee or its contractor entering the Permitter property with limits of liability in the amount of not less than \$2,000,000 each accident for claims for bodily injuries (including death) to persons and for damage to property arising out of the ownership, maintenance or use of any owned, hired or non-owned motor vehicle.
  4. **Railroad Protective Liability:** (ISO-RIMA or equivalent form) approved by Permitter covering the work to be performed at the designated job site and affording protection for damages arising out of bodily injury or death, physical damage to or destruction of property, including damage to the Insured's own property and conforming to the following:
    - The policy shall be issued to the "Named Insureds" listed under Section B.
    - The limit of liability shall be not less than \$2,000,000 per occurrence, subject to a \$6,000,000 annual aggregate;



- Policy must be endorsed to provide coverage for claims arising from injury to employees covered by Federal Employer's Liability Act (FELA).
  - Indicate the Name and address of the designated Contractor, project location and description of work, and permit number if applicable.
  - Evidence of Railroad Protective Liability Insurance, must be provided in the form of a policy. A detailed **Insurance Binder (ACORD or Manuscript Form)** will be accepted pending issuance of the policy, which must be provided within 30 days from the effective date.
5. **Environmental Insurance:** In the event environmental or pollution exposures exist, the Permittee shall require the environmental contractor or sub-contractor to provide the applicable insurance covering such exposure. The limits and types of insurance provided must be satisfactory to the Permitter and approved prior to the start of the work.

#### **SECTION B: INDEMNITEES (ADDITIONAL INSURED / NAMED INSURED)**

New York City Transit Authority ("NYCT"), the Manhattan and Bronx Surface Transit Operating Authority ("MaBSTOA"), the Staten Island Rapid Transit Operating Authority ("SIRTOA"), the Metropolitan Transportation Authority ("MTA") including its subsidiaries and affiliates, MTA Capital Construction ("MTACC"), MTA Bus Company ("MTA Bus"), and the City of New York ("City" as Owner) and the respective affiliates and subsidiaries existing currently or in the future of and successors to each Indemnified Parties listed herein.

#### **SECTION C: GENERAL INSURANCE REQUIREMENTS**

1. **Insurance Companies:** All of the insurance required by this Article shall be with Companies licensed or authorized to do business in the State of New York with an A.M. Best Company rating of not less than A-/VII or better and reasonably approved by the Permitter/MTA.
2. **Forms:** All forms shall comply with the Insurance Services Office, Inc. ("ISO") or its equivalent approved by the Insurance Department of the State of New York
3. **Policy Deductible / Self Insured Retention:** Insurance may contain a deductible and or self-insured retention and shall not exceed \$100,000. The Permittee shall be responsible for all claim expenses and loss payments within the deductible or self-insured retention.
4. **Policy Terms:** These policies must: (i) be written in accordance with the requirements of the paragraphs above, as applicable; (ii) be endorsed in form acceptable to include a provision that should the policy be canceled, materially changed, or not renewed, notice shall be delivered in accordance with the insurance policy provisions to the Permitter, and (iii) state or be endorsed to provide that the coverage afforded under the Permittee's policies shall apply on a primary and not on an excess or contributing basis with any policies which may be available to the Permitter/MTA, and also that the Permittee's policies, primary and excess, must be exhausted before implicating any Permitter/MTA policy available. (iv) In addition, Permittee's policies shall state or be endorsed to provide that, if a subcontractor's policy contains any provision that may adversely affect whether Permittee's policies are primary and must be exhausted before implicating any Permitter/MTA policy available, Permittee's and subcontractor's policies shall nevertheless be primary and must be exhausted before implicating any Permitter/MTA policy available. At least two (2) weeks prior to the expiration of the policies, the Permittee shall endeavor to provide evidence of renewal or replacement policies of insurance, with terms and limits no less favorable than the expiring policies.

**SECTION D: SUBMISSION OF INSURANCE**

Certificates of Insurance may be supplied as evidence of policies except for Railroad Protective Liability. However, if requested by the Permittor, the Permittee shall deliver to the Permittor within forty-five (45) days a copy of such policies, certified by the insurance carrier as being true and complete. If a Certificate of Insurance is submitted, it must: (1) be provided on the Permittor Certificate of Insurance; (2) be signed by an authorized representative of the insurance carrier or producer and notarized; (3) disclose any deductible, self-insured retention, sub-limit, aggregate limit or any exclusions to the policy that materially change the coverage; (4) indicate the Additional Insureds as required herein under Section B; The Permittee must provide a copy of the Additional Insured Endorsement (ISO) Form CG 20 26 07/04 or its equivalent and must reference the policy information; (5) indicate project name and location on the certificate; and (6) expressly reference the inclusion of all required endorsements.

The Permittee or its Contractor/Subcontractor performing the work shall furnish evidence of all policies before any work is started to the appropriate department:

**New Agreements:**

MTA/NYCT MOW Engineering  
Attention: Mr. John Malvasio  
130 Livingston Street  
Brooklyn, NY 11201

**Renewal Insurance:**

MTA Risk Insurance Management  
Attention: Ruth Apostol  
2 Broadway – 21<sup>st</sup> Floor  
New York, NY 10004

**SECTION E: NO LIMIT OF LIABILITY**

The minimum amounts of insurance required in the detail description of policies above shall not be construed to limit the extent of the Permittee's liability under this Agreement.

**SECTION F: RIGHT TO REQUEST ADDITIONAL INSURANCE**

Permittee further agrees to provide, at Permittee's sole cost and expense, such increased or expanded insurance coverage as Permittor may from time to time as deem appropriate.

**SECTION G: EVENT OF DEFAULT**

If, at any time during the period of this Agreement, insurance as required is not in effect, or proof thereof is not provided to the Permittor, the Permittor shall have the options to: (i) direct the Permittee to suspend work or operation with no additional cost or extension of time due on account thereof; or (ii) treat such failure as an Event of Default.

**SECTION H: NOTICE OF CLAIM**

The Permittee shall immediately file with NYCT/MTA's Tort Division (with a copy to the Project Manager), 130 Livingston Street, 11th Floor, Brooklyn, New York 11201, a notice of any occurrence likely to result in a claim against NYCT/MTA and shall also file with the Torts Division detailed sworn proof of interest and loss with the claim. This paragraph shall survive the expiration or earlier termination of the Contract.

MTA RIM - 08/15/2013

**TF-PAGES**

**TIGER/FHWA FUNDED PROJECTS  
TIGER/FHWA FUNDING ATTACHMENTS**

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**(NO TEXT ON THIS PAGE)**

# **Transportation Investment Generating Economic Recovery ("TIGER") and Federal Highway Administration ("FHWA") Funding Attachments**

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

## **THIS ATTACHMENT IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS**

1. Any substantial modification of the Contract shall be subject to approval by the State Commissioner of Transportation and the Federal Highway Administration, in addition to the New York City ("City") agencies involved.
2. The Contractor shall be responsible for compliance with all the provisions of the following Schedules of Federal and State requirements which are hereby made a part of the original contract documents and are annexed hereto:
  - Attachment "A" – Required Contract Provisions for Federal-Aid Construction Contracts – FHWA 1273
  - Attachment "B" – Standard Clauses for New York State Contracts, Labor and Employment Provisions, and Public Notices
  - Attachment "C" – Notice to All Prospective Bidders, Federal-Aid Contracts - Assurance of Non-Discrimination, Subcontracts, Appendix A-1 Supplemental Title VI Provisions (Civil Rights Act)
  - Attachment "D" – Disadvantaged Business Enterprise Requirements
  - Attachment "E" – "Buy America" Requirements & Waivers
  - Attachment "F" – Equal Employment Opportunity Requirements
  - Attachment "G" – Standardized Changed Conditions Clauses
  - Attachment "H" – Civil Rights Monitoring and Reporting
  - Attachment "I" – False Claims Certification, United States Department of Transportation Hotline, New York State Inspector General Hotline
  - Attachment "J" – Debarment History Certification, Lobbying Activity Certification
  - Attachment "K" – Provisions Relating to the New York State Labor Law, Prevailing Wages, and the Use of Convict Labor and Materials on Federal & State Contracts

In addition to compliance with the above Federal and State requirements, the Contractor shall also be required to comply with all City requirements as depicted in the Information for Bidders and Standard Construction Contract herein. Wherever a conflict may exist, the Federal Regulations shall take precedence.
3. The Contractor shall not pay less than the highest minimum hourly rates as set forth by Federal, State or City laws.

4. The Contractor shall maintain his records in conformity with the current NYSDOT "Manual for Uniform Record Keeping", referred to as MURK, copies of which are available on line at the NYSDOT website [www.dot.ny.gov/publications](http://www.dot.ny.gov/publications).
5. In accordance with 23 US C315 and Order 1321.1C, FHWA Directives Management, issued January 6, 2010, the construction work performed under this Contract shall be available to be subject to inspection at all times by the New York State Department of Transportation and the Federal Highway Administration.
6. Amendments to Information for Bidders:
  - a) Refer to Pages 6 and 7, Subsection 21.(C), Rejection of All Bids and Negotiation With All Responsible Bidders;  
Delete Sub-Article 21.(C) and Sub-Article 21.(D) in their entirety and substitute the words "(C) (NO TEXT)." And "(D) (NO TEXT)." respectively.
  - b) Refer to Page 9, SECTION 27. Failure to Execute Contract, 6th, 7th and 8th lines;  
Delete the sentence beginning with the words: "No plea of mistake in such . . ." in its entirety.
  - c) Refer to Page 10, SECTION 30. Labor Law Requirements, Sub-Article (A) General;  
Add the following at the end of the Sub-Article (A): "This provision shall apply to subcontractors also."
  - d) Refer to Page 11, Subsection 33.(B), Variations from Engineer's Estimate;  
Delete Subsection 33.(B) in its entirety. See Attachment "G", Standardized Change Condition Clauses, Sub-Article (3).(iv).(B).
  - e) Refer to Pages 12 and 13, SECTION 37. Locally Based Enterprise Requirements (LBE);  
Delete the SECTION, in its entirety. See Attachment "D" Disadvantaged Business Enterprise Utilization Requirements.
7. Amendments to Standard Construction Contract:
  - a) Refer to Page 5, Sub-Article 5.2;  
Delete the last sentence starting with the words: "In the event of . . ." and ending with the words ". . . shall take precedence."
  - b) Refer to Pages 11 and 12, ARTICLE 7. PROTECTION OF WORK AND OF PERSONS AND PROPERTY; NOTICES AND INDEMNIFICATION;  
Add the following:

"7.6 In addition to the requirements stipulated herein, all work performed under this Contract shall comply with the safety and health standards of the Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor."
  - c) Refer to Page 13, Sub-Article 9.3;  
Delete the first sentence starting with the words: "If the Contractor . . ." and ending with the words ". . . progress schedule."
  - d) Refer to Page 23, ARTICLE 16. OCCUPATION OR USE PRIOR TO COMPLETION;  
Delete Sub-Article 16.1.4, in its entirety.

- e) Refer to Page 25, ARTICLE 17. SUBCONTRACTS;  
Delete Sub-Article 17.11.1, in its entirety;  
Substitute the following revised Article 17.11.1:  
"17.11.1 Payment to **Subcontractors**: The agreement between the **Contractor** and its **Subcontractors** shall contain the same terms and conditions as to method of payment for **Work**, labor, and materials, as are contained in this **Contract**."
- f) Refer to Pages 26 and 27, ARTICLE 19. SECURITY DEPOSIT;  
Delete Sub-Article 19.2, in its entirety;  
Substitute the following Sub-Article 19.2:  
  
"19.2 If performance and payment bonds are not required, the bid security shall be retained by the **City** as security for the **Contractor's** faithful performance of the **Contract**. If partial payments are provided, the bid security will be returned to the **Contractor** subject to the other provisions of this **Contract**. If partial payments are not provided, the bid security will be released when final payment is certified by the **City** for payment."
- g) Refer to Pages 29 and 30, ARTICLE 21. RETAINED PERCENTAGE;  
Delete Article 21, in its entirety;  
Substitute the following:  
  
**"ARTICLE 21. (NO TEXT)"**
- h) Refer to Page 37, ARTICLE 24. MAINTENANCE AND GUARANTY;  
Delete Sub-Article 24.1 in its entirety;  
Substitute the words "24.1 (NO TEXT)".
- i) Refer to Page 37, ARTICLE 24. MAINTENANCE AND GUARANTY;  
Add the following to Sub-Article 24.9:  
  
"On any **contract** which requires the furnishing and/or installing of electrical or mechanical equipment, the **Contractor** shall provide the following:
- (1) Manufacturers' warranties or guarantees on all electrical and mechanical equipment, consistent with those provided as customary trade practice.
  - (2) **Contractor's** guarantees providing for satisfactory in-service operation of the mechanical and electrical equipment and related components for a period of not less than one (1) year following project acceptance.
  - (3) On any **contract** which requires maintenance and guarantee for landscape items including trees, the maintenance and guarantee period shall be twenty-four (24) months."
- j) Refer to Page 38, ARTICLE 25. CHANGES;  
Add the following paragraph:  
  
"25.5 **Extra Work**: It is anticipated that the preliminary engineering and the preparation of **plans, specifications** and **contract documents** have been performed with sufficient thoroughness, accuracy and care, and that changes and **extra work** during the construction can be held to a minimum and limited almost exclusively to revisions and additions necessitated by conditions that could not reasonably be

anticipated before the **project** was advertised for bids or force account operations commenced."

- k) Refer to Pages 57, 58 and 59, ARTICLE 36. NO DISCRIMINATION;  
Change in Paragraph 36.1.1, 4th line, "citizen of the State of New York" to "person";

Add "or sex or age" to the expression "race, creed, color or national origin", and "or sex or age" to the expression "race, color or creed", wherever these expressions appear in Article 36.

- l) Refer to Page 66, ARTICLE 43. PROMPT PAYMENT;  
Add the following sentence to the end of Sub-Article 43.5:

"The Contractor shall not hold any retainage, but may deduct an amount necessary to satisfy any claims, liens or judgments against a Subcontractor or materialman which have not been fully discharged."

- m) Refer to Pages 66 and 67, ARTICLE 44. SUBSTANTIAL COMPLETION PAYMENT;  
Delete Sub-Articles 44.2 and 44.3, in their entirety;  
Substitute the following:

"44.2 The **Commissioner** shall issue a voucher calling for payment of any part or all of the balance due for **Work** performed under the **Contract**, less any and all deductions authorized to be made by the **Commissioner**, under this **Contract** or by **Law**, and less twice the amount the **Commissioner** considers necessary to ensure the completion of the balance of the **Work** by the **Contractor**. Such a payment shall be considered a Partial and not a Final Payment. No **Substantial Completion** payment shall be made under this Article 44 where the **Contractor** shall fail to complete the **Work** within the time fixed for such completion in the Schedule A of the General Conditions, or within the time to which completion may have been extended, until an extension or extensions of time for the completion of **Work** have been acted upon pursuant to Article 13.

44.3 No further partial payments shall be made to the **Contractor** after **Substantial Completion**, except the **Substantial Completion** payment and **Contractor's** requisition that were properly filed with the **Commissioner** prior to the date of **Substantial Completion**; however, the **Commissioner** may grant a waiver for further partial payments after the date of **Substantial Completion** to permit payments for change order **Work**. Such waiver shall be in writing."

- n) Refer to Pages 67 and 68, ARTICLE 45. FINAL PAYMENT;  
Delete Sub-Article 45.1, in its entirety;  
Substitute the following:

"45.1 After completion and **Final Acceptance** of the **Work**, the **Contractor** shall submit all required certificates and documents, together with a requisition for the balance claimed to be due under the **Contract**. Such submission shall be within 90 days of the date of the **Commissioner's** written determination of **Final Acceptance**, or within such additional time as may be granted by the **Commissioner** in writing. If the **Contractor** fails to submit all required certificates and documents within the time allowed, no payment of the balance claimed shall be made to the **Contractor** and the **Contractor** shall be deemed to have forfeited its right to payment of any balance



claimed. A verified statement similar to that required in connection with applications for partial payments shall also be submitted to the **Commissioner**."

- o) Refer to Page 74, ARTICLE 59. SERVICE OF NOTICES;  
Delete the words "deposited in a post office box regularly maintained by the United States Postal Service in a properly addressed, postage prepaid envelope".
- p) Refer to Pages 78, 79 and 80, ARTICLE 64. TERMINATION BY THE CITY;  
Delete the text of the 1st paragraph;  
Substitute the following:  
  
"64.1 In addition to termination pursuant to any other article of this **Contract**, the **Commissioner** may, by written notice, terminate the **Contract** or any portion thereof after determining that for reasons beyond either **Department** or **Contractor** control it is not feasible to proceed with or complete the **work** as originally contracted for, and that termination would therefore be in the public interest. Such reasons for termination may include, but need not be necessarily limited to, executive orders of the President relating to prosecution of war or national defense, national emergency which creates a serious shortage of materials, orders from duly constituted authorities relating to energy conservation, and restraining orders or injunctions obtained by third-party citizen action resulting from national or local laws or regulations, or where the issuance of such order or injunction is primarily caused by acts or omissions of persons or agencies other than the **Contractor**, or where the orderly progression of a project is interfered with or delayed by acts or omissions of persons or agencies other than the **Contractor**. The **Contractor** specifically understands that the issuance of such notice by the **Commissioner** shall be conclusive as to its necessity. In such event the **Contractor** shall upon receipt of such notice:"
- q) Refer to Page 82, ARTICLE 67. LOCALLY BASED ENTERPRISE PROGRAM;  
Delete Article 67, in its entirety, and Substitute the following "ARTICLE 67. (NO TEXT)". See Attachment "D" Disadvantaged Business Enterprise Requirements.
- r) Refer to Pages 83 and 84, ARTICLE 69. MacBRIDE PRINCIPLES PROVISIONS;  
Delete Article 69, in its entirety, and Substitute the following "ARTICLE 69. (NO TEXT)".
- s) Refer to Page 85, ARTICLE 75. COMPENSATION TO BE PAID TO CONTRACTOR;  
Delete Article 75, in its entirety and Substitute the following "ARTICLE 75. (NO TEXT)".
- t) Add the following to Pages 92, 93, 94, 95, 96, 97, 98, and 99, PERFORMANCE BOND:

"Prior to or at the time of execution of the contract, successful bidder must deliver to the City of New York an executed bond equal to one hundred percent (100%) of the contract price, to secure the faithful performance of the contract, and an executed bond in an amount equal to one hundred percent (100%) of the contract price, as security for the payment of all persons performing labor or furnishing materials in connection with this contract, prepared on the forms of bonds authorized by The City of New York, and made a part of the contract documents, copies of which are annexed hereto, and having as surety thereunder such surety company or companies as are approved by The City of New York and are authorized to do business in the State of New York. Premium of such bonds shall be included in the base bid.

In lieu of a performance and completion bond and labor and material bond, a contractor may deposit with the Comptroller, money or obligations of The City of New

York which the Comptroller shall approve as of equal value with the amount of the performance and completion bond required.

Whenever a contractor deposits obligations of The City of New York, in lieu of a performance and completion bond and a labor and material bond, it shall be with the understanding that the Comptroller of the City of New York, or his successors, may sell and use the proceeds thereof, for any purpose for which the principal or surety on such bond would be liable under the terms of the contract. If money is deposited with the Comptroller, the Contractor shall not be entitled to receive interest on such money from The City of New York.

If the bidder to whom the contract is awarded refuses to execute it, or fails to furnish the required security and insurance within ten (10) days after receipt of notice to him of the award, the amount of his deposit, or as much thereof as may be applicable to the amount of the award made to him, shall be forfeited and shall be retained by the City as liquidated damages."

- u) Refer to Pages 87, 88, 90, 91, 92, 93, and 94, ARTICLE 79. PARTICIPATION BY MINORITY - OWNED AND WOMEN - OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT;  
Delete Article 79, in its entirety, and Substitute the following "ARTICLE 79. (NO TEXT)"

8. Amendments to General Conditions of the Standard Highway Specifications:

- a) Refer to Pages 38 and 39, of the Standard Highway Specifications, Article 1.06.46. Project Sign;  
Delete the Article 1.06.46, in its entirety;  
Substitute the following:

"1.06.46. Project Sign. No project signs will be required on this project."

9. Amendments to the Standard Highway Specifications:

- a) Refer to Pages 290 through 292, SECTION 5.05 – Maintenance;  
Delete Section 5.05, in its entirety, and any references thereto;  
Substitute the following:

**"SECTION 5.05 – Maintenance"**

**(A) CONTRACTOR TO KEEP HIMSELF INFORMED OF CONDITIONS**

The Contractor must keep himself informed of the condition of the trees which are under maintenance, and will be required to make replacements without notice from the Commissioner. In case of failure or neglect on his part to do so, then the Commissioner shall have the right to purchase such plant material as he shall deem necessary, and to employ such person or persons as he shall deem proper, and to undertake and complete said replacements by contract or otherwise and to charge the expense thereof against the Performance Bond or any sum of money retained by The City, as herein provided, and the excess cost to the Contractor, and the Contractor shall pay all such expense to which The City may have been put by reason of the neglect of the Contractor to make such replacements as aforesaid.

**(B) CONTRACTOR TO MAKE REPAIRS OR REPLACEMENTS**

The Contractor shall remove and replace all trees under maintenance which die or, in the opinion of the Engineer, seem unhealthy, stunted or unable to flourish, within the period of maintenance,

except as otherwise provided, and replace said trees with new trees of the same size and species as originally planted, except when such death, unhealthiness, stunting or inability to flourish is due to vandalism or damage resulting from causes over which the Contractor has no control, as certified by the Engineer. However, the Engineer may, at his discretion, direct a substitution of species.

(C) PERIOD OF MAINTENANCE

The period of maintenance for each individual tree planted or transplanted shall begin upon planting or transplanting and shall end twenty-four (24) months thereafter. The Contractor shall obtain the said certificate from the Department of Parks and Recreation, in writing, and file such certificate with the Engineer.

(D) MAINTENANCE NOT TO TERMINATE IN WINTER MONTHS

When the termination date of the period of maintenance for planted or transplanted trees shall fall outside the planting periods specified in **Section 4.16**, hereof, the interval between the said termination date and next planting period thereafter, or such part as the Commissioner may determine, shall not be included in the computation of the period of maintenance during which the replacement of defective trees is to be made by the Contractor, and also, in that case, the payment to be made under the provisions of this contract shall not be made until after the date appearing on the Certificate of Acceptance which the Contractor shall obtain from the Department of Parks and Recreation, and file with the Engineer, for trees planted as replacements for defective trees within the said next planting period thereafter, unless otherwise specifically permitted by the Commissioner.

(E) EXPIRATION OF MAINTENANCE

Unless otherwise permitted or directed, defective trees, as determined by the Commissioner, shall be replaced with new trees by the Contractor.

The furnishing and planting of trees as replacements for defective trees shall comply, in all respects, with the contract requirements.

In the event that The City incurs any expense in pursuance of this section of the contract, the certificate of the Commissioner as to the condition of the trees, the nature and extent of the replacements made, and expense incurred for such replacements shall be binding and conclusive on the Contractor.

(F) CONTRACTOR TO NOTIFY COMMISSIONER BEFORE MAKING REPAIRS

The Contractor shall notify the Commissioner, at least two (2) days before making any replacements of the time and place of beginning such work and shall at all times keep the Commissioner or his representatives informed of the proposed prosecution of the work from day to day."

10. The Contractor is hereby notified that this is a City contract funded through apportionment available under Title 23, U.S. Code, as amended, and that the contract will be awarded by the City of New York, subject to the approval of the Commissioner of the New York State Department of Transportation and the Federal Highway Administration. Furthermore, no extensions in time for completion or other changes affecting the contract work can be granted by the City of New York without concurrence of the State of New York and approval of the Federal Highway Administration.
11. All reference to the delivery of salvageable materials to a designated City-owned yard do not apply to this Contract. All salvageable materials designated by the Engineer shall be stored on site for pick-up by City forces.

12. Wherever references are made within these specifications to "race, creed, color, national origin or sex," they shall be construed to include "sexual orientation and marital status".

*7/21/2017: Page number and section number references to the City Standard Construction Contract have been updated to match the March 2017 City Standard Construction Contract.*

**REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

**ATTACHMENTS**

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

**I. GENERAL**

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

**II. NONDISCRIMINATION**

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

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this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

**6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

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applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

**8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

**9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

### 10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

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will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or



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will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

### 2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

### 3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

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(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

##### a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

##### b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

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### d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

### 10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

## V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

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### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

### VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

### VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

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"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

### IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

### X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

#### 1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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### **2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

### **2. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

## ATTACHMENT "A"

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\*\*\*\*\*

### **Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\*\*\*\*\*

### **XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

## ATTACHMENT "A"

### ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.



# **ATTACHMENT “B” – STANDARD CLAUSES FOR NEW YORK STATE CONTRACTS, LABOR AND EMPLOYMENT PROVISIONS, AND PUBLIC NOTICES**

“Standard Clauses for New York State Contracts” is Appendix A from the NYS Office of General Services (OGS), as modified by NYS Department of Transportation (NYSDOT).

“Public Notices” text is from NYSDOT Standard Specifications, Section 107-04.

# STANDARD CLAUSES FOR NEW YORK STATE CONTRACTS

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**STANDARD CLAUSES FOR NYS CONTRACTS**

The parties to the attached contract, license, lease, amendment or other agreement of any kind (hereinafter, "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract (the word "Contractor" herein refers to any party other than the State, whether a contractor, licensor, licensee, lessor, lessee or any other party):

**1. EXECUTORY CLAUSE.** In accordance with Section 41 of the State Finance Law, the State shall have no liability under this contract to the Contractor or to anyone else beyond funds appropriated and available for this contract.

**2. NON-ASSIGNMENT CLAUSE.** In accordance with Section 138 of the State Finance Law, this contract may not be assigned by the Contractor or its right, title or interest therein assigned, transferred, conveyed, sublet or otherwise disposed of without the State's previous written consent, and attempts to do so are null and void. Notwithstanding the foregoing, such prior written consent of an assignment of a contract let pursuant to Article XI of the State Finance Law may be waived at the discretion of the contracting agency and with the concurrence of the State Comptroller where the original contract was subject to the State Comptroller's approval, where the assignment is due to a reorganization, merger or consolidation of the Contractor's business entity or enterprise. The State retains its right to approve an assignment and to require that any Contractor demonstrate its responsibility to do business with the State. The Contractor may, however, assign its right to receive payments without the State's prior written consent unless this contract concerns Certificates of Participation pursuant to Article 5-A of the State Finance Law.

**3. COMPTROLLER'S APPROVAL.** In accordance with Section 112 of the State Finance Law (or, if this contract is with the State University or City University of New York, Section 355 or Section 6218 of the Education Law), if this contract exceeds \$50,000 (or the minimum thresholds agreed to by the Office of the State Comptroller for certain S.U.N.Y. and C.U.N.Y. contracts), or if this is an amendment for any amount to a contract which, as so amended, exceeds said statutory amount, or if, by this contract, the State agrees to give something other than money when the value or reasonably estimated value of such consideration exceeds \$10,000, it shall not be valid, effective or binding upon the State until it has been approved by the State Comptroller and filed in his office. Comptroller's approval of contracts let by the Office of General Services is required when such contracts exceed \$85,000 (State Finance Law Section 163.6-a). However, such pre-approval shall not be required for any contract established as a centralized contract through the Office of General Services or for a purchase order or other transaction issued under such centralized contract.

**4. WORKERS' COMPENSATION BENEFITS.** In accordance with Section 142 of the State Finance Law, this

contract shall be void and of no force and effect unless the Contractor shall provide and maintain coverage during the life of this contract for the benefit of such employees as are required to be covered by the provisions of the Workers' Compensation Law.

**5. NON-DISCRIMINATION REQUIREMENTS.** To the extent required by Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex (including gender identity or expression), national origin, sexual orientation, military status, age, disability, predisposing genetic characteristics, marital status or domestic violence victim status. Furthermore, in accordance with Section 220-e of the Labor Law, if this is a contract for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within the State of New York, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, disability, sex, or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. If this is a building service contract as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its subcontractors shall by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. Contractor is subject to fines of \$50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this contract and forfeiture of all moneys due hereunder for a second or subsequent violation.

**6. WAGE AND HOURS PROVISIONS.** If this is a public work contract covered by Article 8 of the Labor Law or a building service contract covered by Article 9 thereof, neither Contractor's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the Labor Law. Additionally, effective April 28, 2008, if this is a public work contract covered by Article 8 of the Labor Law, the Contractor understands and agrees that the filing of payrolls in a manner consistent with Subdivision 3-a of Section 220 of the Labor Law shall be a condition precedent to payment by the State of

any State approved sums due and owing for work done upon the project.

**7. NON-COLLUSIVE BIDDING CERTIFICATION.** In accordance with Section 139-d of the State Finance Law, if this contract was awarded based upon the submission of bids, Contractor affirms, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further affirms that, at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to the State a non-collusive bidding certification on Contractor's behalf.

**8. INTERNATIONAL BOYCOTT PROHIBITION.** In accordance with Section 220-f of the Labor Law and Section 139-h of the State Finance Law, if this contract exceeds \$5,000, the Contractor agrees, as a material condition of the contract, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the State Comptroller within five (5) business days of such conviction, determination or disposition of appeal (2NYCRR 105.4).

**9. SET-OFF RIGHTS.** The State shall have all of its common law, equitable and statutory rights of set-off. These rights shall include, but not be limited to, the State's option to withhold for the purposes of set-off any moneys due to the Contractor under this contract up to any amounts due and owing to the State with regard to this contract, any other contract with any State department or agency, including any contract for a term commencing prior to the term of this contract, plus any amounts due and owing to the State for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto. The State shall exercise its set-off rights in accordance with normal State practices including, in cases of set-off pursuant to an audit, the finalization of such audit by the State agency, its representatives, or the State Comptroller.

**10. RECORDS.** The Contractor shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract (hereinafter, collectively, "the Records"). The Records must be kept for the balance of the calendar year in which they were made and for six (6) additional years thereafter. The State Comptroller, the Attorney General and any other person or entity authorized to conduct an examination, as well as the agency or agencies involved in this

contract, shall have access to the Records during normal business hours at an office of the Contractor within the State of New York or, if no such office is available, at a mutually agreeable and reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying. The State shall take reasonable steps to protect from public disclosure any of the Records which are exempt from disclosure under Section 87 of the Public Officers Law (the "Statute") provided that: (i) the Contractor shall timely inform an appropriate State official, in writing, that said records should not be disclosed; and (ii) said records shall be sufficiently identified; and (iii) designation of said records as exempt under the Statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, the State's right to discovery in any pending or future litigation.

**11. IDENTIFYING INFORMATION AND PRIVACY NOTIFICATION.**

(a) Identification Number(s). Every invoice or New York State Claim for Payment submitted to a New York State agency by a payee, for payment for the sale of goods or services or for transactions (e.g., leases, easements, licenses, etc.) related to real or personal property must include the payee's identification number. The number is any or all of the following: (i) the payee's Federal employer identification number, (ii) the payee's Federal social security number, and/or (iii) the payee's Vendor Identification Number assigned by the Statewide Financial System. Failure to include such number or numbers may delay payment. Where the payee does not have such number or numbers, the payee, on its invoice or Claim for Payment, must give the reason or reasons why the payee does not have such number or numbers.

(b) Privacy Notification. (1) The authority to request the above personal information from a seller of goods or services or a lessor of real or personal property, and the authority to maintain such information, is found in Section 5 of the State Tax Law. Disclosure of this information by the seller or lessor to the State is mandatory. The principal purpose for which the information is collected is to enable the State to identify individuals, businesses and others who have been delinquent in filing tax returns or may have understated their tax liabilities and to generally identify persons affected by the taxes administered by the Commissioner of Taxation and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law. (2) The personal information is requested by the purchasing unit of the agency contracting to purchase the goods or services or lease the real or personal property covered by this contract or lease. The information is maintained in the Statewide Financial System by the Vendor Management Unit within the Bureau of State Expenditures, Office of the State Comptroller, 110 State Street, Albany, New York 12236.

**12. EQUAL EMPLOYMENT OPPORTUNITIES FOR MINORITIES AND WOMEN.**

In accordance with Section 312 of the Executive Law and 5 NYCRR 143, if this contract is: (i) a written agreement or purchase order instrument, providing for a total expenditure in excess of \$25,000.00,

whereby a contracting agency is committed to expend or does expend funds in return for labor, services, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; or (ii) a written agreement in excess of \$100,000.00 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; or (iii) a written agreement in excess of \$100,000.00 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project, then the following shall apply and by signing this agreement the Contractor certifies and affirms that it is Contractor's equal employment opportunity policy that:

(a) The Contractor will not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, shall make and document its conscientious and active efforts to employ and utilize minority group members and women in its work force on State contracts and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination. Affirmative action shall mean recruitment, employment, job assignment, promotion, upgradings, demotion, transfer, layoff, or termination and rates of pay or other forms of compensation;

(b) at the request of the contracting agency, the Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of the Contractor's obligations herein; and

(c) the Contractor shall state, in all solicitations or advertisements for employees, that, in the performance of the State contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.

Contractor will include the provisions of "a", "b", and "c" above, in every subcontract over \$25,000.00 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon (the "Work") except where the Work is for the beneficial use of the Contractor. Section 312 does not apply to: (i) work, goods or services unrelated to this contract; or (ii) employment outside New York State. The State shall consider compliance by a contractor or subcontractor with the requirements of any federal law concerning equal employment

opportunity which effectuates the purpose of this section. The contracting agency shall determine whether the imposition of the requirements of the provisions hereof duplicate or conflict with any such federal law and if such duplication or conflict exists, the contracting agency shall waive the applicability of Section 312 to the extent of such duplication or conflict. Contractor will comply with all duly promulgated and lawful rules and regulations of the Department of Economic Development's Division of Minority and Women's Business Development pertaining hereto.

**13. CONFLICTING TERMS.** In the event of a conflict between the terms of the contract (including any and all attachments thereto and amendments thereof) and the terms of this Appendix A, the terms of this Appendix A shall control.

**14. GOVERNING LAW.** This contract shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

**15. LATE PAYMENT.** Timeliness of payment and any interest to be paid to Contractor for late payment shall be governed by Article 11-A of the State Finance Law to the extent required by law.

**16. NO ARBITRATION.** Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized), but must, instead, be heard in a court of competent jurisdiction of the State of New York.

**17. SERVICE OF PROCESS.** In addition to the methods of service allowed by the State Civil Practice Law & Rules ("CPLR"), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Contractor's actual receipt of process or upon the State's receipt of the return thereof by the United States Postal Service as refused or undeliverable. Contractor must promptly notify the State, in writing, of each and every change of address to which service of process can be made. Service by the State to the last known address shall be sufficient. Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.

**18. PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS.** The Contractor certifies and warrants that all wood products to be used under this contract award will be in accordance with, but not limited to, the specifications and provisions of Section 165 of the State Finance Law, (Use of Tropical Hardwoods) which prohibits purchase and use of tropical hardwoods, unless specifically exempted, by the State or any governmental agency or political subdivision or public benefit corporation. Qualification for an exemption under this law will be the responsibility of the contractor to establish to meet with the approval of the State.

In addition, when any portion of this contract involving the use of woods, whether supply or installation, is to be performed by any subcontractor, the prime Contractor will indicate and certify in the submitted bid proposal that the subcontractor has been informed and is in compliance with specifications and provisions regarding use of tropical hardwoods as detailed in §165 State Finance Law. Any such use must meet with the approval of the State; otherwise, the bid may not be considered responsive. Under bidder certifications, proof of qualification for exemption will be the responsibility of the Contractor to meet with the approval of the State.

**19. MACBRIDE FAIR EMPLOYMENT PRINCIPLES.**  
**(APPLICABLE ONLY IN NON-FEDERAL AID NEW YORK STATE CONTRACTS).** In accordance with the MacBride Fair Employment Principles (Chapter 807 of the Laws of 1992), the Contractor hereby stipulates that the Contractor either (a) has no business operations in Northern Ireland, or (b) shall take lawful steps in good faith to conduct any business operations in Northern Ireland in accordance with the MacBride Fair Employment Principles (as described in Section 165 of the New York State Finance Law), and shall permit independent monitoring of compliance with such principles.

**20. OMNIBUS PROCUREMENT ACT OF 1992.**  
**(APPLICABLE ONLY IN NON-FEDERAL AID NEW YORK STATE CONTRACTS).** It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority and women-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

Information on the availability of New York State subcontractors and suppliers is available from:

NYS Department of Economic Development  
Division for Small Business  
Albany, New York 12245  
Telephone: 518-292-5100  
Fax: 518-292-5884  
email: [opa@esd.ny.gov](mailto:opa@esd.ny.gov)

A directory of certified minority and women-owned business enterprises is available from:

NYS Department of Economic Development  
Division of Minority and Women's Business Development  
633 Third Avenue  
New York, NY 10017  
212-803-2414  
email: [mwbecertification@esd.ny.gov](mailto:mwbecertification@esd.ny.gov)  
<https://ny.newnycontracts.com/FrontEnd/VendorSearchPublic.asp>

The Omnibus Procurement Act of 1992 requires that by signing this bid proposal or contract, as applicable,

Contractors certify that whenever the total bid amount is greater than \$1 million:

(a) The Contractor has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and subcontractors, including certified minority and women-owned business enterprises, on this project, and has retained the documentation of these efforts to be provided upon request to the State;

(b) The Contractor has complied with the Federal Equal Opportunity Act of 1972 (P.L. 92-261), as amended;

(c) The Contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The Contractor agrees to document these efforts and to provide said documentation to the State upon request; and

(d) The Contractor acknowledges notice that the State may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the State in these efforts.

**21. RECIPROCITY AND SANCTIONS PROVISIONS.**  
Bidders are hereby notified that if their principal place of business is located in a country, nation, province, state or political subdivision that penalizes New York State vendors, and if the goods or services they offer will be substantially produced or performed outside New York State, the Omnibus Procurement Act 1994 and 2000 amendments (Chapter 684 and Chapter 383, respectively) require that they be denied contracts which they would otherwise obtain. NOTE: As of May 15, 2002, the list of discriminatory jurisdictions subject to this provision includes the states of South Carolina, Alaska, West Virginia, Wyoming, Louisiana and Hawaii. Contact NYS Department of Economic Development for a current list of jurisdictions subject to this provision.

**22. COMPLIANCE WITH NEW YORK STATE INFORMATION SECURITY BREACH AND NOTIFICATION ACT.** Contractor shall comply with the provisions of the New York State Information Security Breach and Notification Act (General Business Law Section 899-aa; State Technology Law Section 208).

**23. COMPLIANCE WITH CONSULTANT DISCLOSURE LAW.** If this is a contract for consulting services, defined for purposes of this requirement to include analysis, evaluation, research, training, data processing, computer programming, engineering, environmental, health, and mental health services, accounting, auditing, paralegal, legal or similar services, then, in accordance with Section 163 (4-g) of the State Finance Law (as amended by Chapter 10 of

the Laws of 2006), the Contractor shall timely, accurately and properly comply with the requirement to submit an annual employment report for the contract to the agency that awarded the contract, the Department of Civil Service and the State Comptroller.

**24. PROCUREMENT LOBBYING.** To the extent this agreement is a "procurement contract" as defined by State Finance Law Sections 139-j and 139-k, by signing this agreement the contractor certifies and affirms that all disclosures made in accordance with State Finance Law Sections 139-j and 139-k are complete, true and accurate. In the event such certification is found to be intentionally false or intentionally incomplete, the State may terminate the agreement by providing written notification to the Contractor in accordance with the terms of the agreement.

**25. CERTIFICATION OF REGISTRATION TO COLLECT SALES AND COMPENSATING USE TAX BY CERTAIN STATE CONTRACTORS, AFFILIATES AND SUBCONTRACTORS.**

To the extent this agreement is a contract as defined by Tax Law Section 5-a, if the contractor fails to make the certification required by Tax Law Section 5-a or if during the term of the contract, the Department of Taxation and Finance or the covered agency, as defined by Tax Law 5-a, discovers that the certification, made under penalty of perjury, is false, then such failure to file or false certification shall be a material breach of this contract and this contract may be terminated, by providing written notification to the Contractor in accordance with the terms of the agreement, if the covered agency determines that such action is in the best interest of the State.

**26. IRAN DIVESTMENT ACT.** By entering into this Agreement, Contractor certifies in accordance with State Finance Law §165-a that it is not on the "Entities Determined to be Non-Responsive Bidders/Offerers pursuant to the New York State Iran Divestment Act of 2012" ("Prohibited Entities List") posted at:  
<http://www.ogs.ny.gov/about/regs/docs/ListofEntities.pdf>

Contractor further certifies that it will not utilize on this Contract any subcontractor that is identified on the Prohibited Entities List. Contractor agrees that should it seek to renew or extend this Contract, it must provide the same certification at the time the Contract is renewed or extended. Contractor also agrees that any proposed Assignee of this Contract will be required to certify that it is not on the Prohibited Entities List before the contract assignment will be approved by the State.

During the term of the Contract, should the state agency receive information that a person (as defined in State Finance Law §165-a) is in violation of the above-referenced certifications, the state agency will review such information and offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment activity which is in violation of the Act within 90 days after the determination of such violation, then the state

agency shall take such action as may be appropriate and provided for by law, rule, or contract, including, but not limited to, imposing sanctions, seeking compliance, recovering damages, or declaring the Contractor in default.

The state agency reserves the right to reject any bid, request for assignment, renewal or extension for an entity that appears on the Prohibited Entities List prior to the award, assignment, renewal or extension of a contract, and to pursue a responsibility review with respect to any entity that is awarded a contract and appears on the Prohibited Entities list after contract award.

## LABOR AND EMPLOYMENT PROVISIONS

The provisions of NYS Labor Law, as amended, and referred to in *Standard Clauses for All New York State Contracts*, shall be applicable. On contracts financed with Federal-Aid, any provisions of NYS Labor Law that are in conflict with mandatory Federal-Aid construction contract compliance requirements, as contained in 23 CFR 635.117 are superseded. Any provisions of NYS Labor Law that are not in conflict with mandatory Federal-Aid construction contract compliance requirements, or the Davis-Bacon Act, but are more restrictive, shall apply.

The Contractor shall directly employ those members of its own organization. Employee leasing and other similar arrangements under which workers are employed by another organization are not permitted. No procedures or requirement shall be imposed by any state which will operate to discriminate against the employment of labor from any other state, possession or territory of the United States, in the construction of a Federal-Aid project. The selection of labor to be employed by the Contractor on any Federal-Aid project shall be of its choosing.

The Contractor shall not use convict labor unless performed by convicts who are on parole, supervised release, or probation for construction, maintenance or any other purpose at the site or within the contract limits from the time of contract award until contract final acceptance by the Department.

**A. Wages.** The Department will identify in the contract proposal whether the NYS Department of Labor (NYSDOL) has determined the work under the contract to be prevailing wage eligible, and if so, provide the Prevailing Rate Case (PRC) number. The PRC number is found on NYSDOL Form PW-200. The Contractor shall ensure that workers are paid the appropriate wages and supplemental (fringe) benefits. If the contract is prevailing wage eligible, all on-site work shall be paid prevailing wages. When both State and Federal prevailing wages apply, the Contractor shall pay the higher of the wages, and the higher of the combination of the wages and supplemental (fringe) benefits. The Contractor shall obtain periodic wage rate schedule updates from the NYSDOL. Wage rate amendments and supplements are available on the NYSDOL web site at [www.labor.ny.gov](http://www.labor.ny.gov). All changes or clarification of labor classification(s) and applicability of prevailing wage rates shall be obtained in writing from the Office of the Director, NYSDOL Bureau of Public Work. The Contractor shall include the cost of changes in wage rate schedules and supplements (fringes) over the contract duration in the contract bid prices.

**B. Overtime Dispensation.** All bidders, in submitting their bids, should base their bids and work progression on the assumption that Overtime Dispensation pursuant to Article 8 of the New York State Labor Law, for any workers, laborers, and mechanics to work more than 8 hours in any one calendar day or more than 5 days in any one week will not be granted for any operation for the contract duration. Regardless of approval or disapproval of overtime by the NYSDOL, no adjustment will be made in any bid prices.

Subsequent to award, where the contract proposal has imposed specific scheduling and/or phasing requirements or where it is determined by the Department to be in the best interest of the public, the Department may process, for approval by the NYSDOL, requests for overtime dispensation on certain specific operations.

The Contractor shall submit requests for overtime dispensation to the Department on Form PW- 30, Application for Dispensation for Hours, which will be provided by the Engineer upon request. The Department will review applications for overtime dispensation submitted by the Contractor associated with contracts subject to (A+B) Bidding, Incentive/Disincentive (I/D) or Lane Rental work favorably, but the application should not request more than 60 hours per week. The 60 hours per week may be either 6 - 10 hour days or 5 - 12 hour days. Overtime dispensations will be supported by the Department to advance Department goals and priorities, subject to specific circumstances and conditions associated with each contract.

The Department cannot guarantee that the NYSDOL will grant dispensation from restrictions pursuant to the provisions of Article 8 of the State Labor Law, however with the Department's certification, it is anticipated that they will act favorably, provided that the Contractor is in compliance with Labor Law requirements at the time of application.

**C. Payrolls.** The Contractor shall provide the Engineer, each week, a certified payroll and statement of compliance with respect to the wages paid each of its employees subject to prevailing wage requirements and a certified payroll from each Subcontractor engaged on work during the preceding weekly payroll period. If the Contractor or Subcontractor does not



maintain a place of business in New York State and the amount of the contract exceeds \$25,000., payroll records and certifications shall be kept on the worksite.

Certified payrolls shall contain for each employee, name, race, gender, home address, an individually identifying number (e.g. the last 4 digits of the employee's social security number), work class, hours worked, wage rate, supplemental (fringe) benefits paid or provided, payroll taxes, withholdings and actual wages paid. Certified payrolls shall not include full social security numbers of employees. Certified payrolls shall be submitted on Form WH-347 or Form HC-231-1 for Federal-Aid contracts and on HC-231-1 for non Federal-Aid contracts. At the Contractor's option, other payroll formats, which supply the required data and certifications, may be used. Each payroll submitted shall be accompanied by a Statement of Compliance signed by the Contractor.

Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to NYSDOL or USDOL for purposes of an investigation or audit of compliance with prevailing wage requirements. Contractors may require subcontractors to provide addresses and social security numbers to the Contractor for its own records, without weekly submission to the Department.

#### **D. Apprenticeship.**

##### **(1) Apprenticeship Program Requirements**

Notice to Bidders: Please be advised that, pursuant to the authority granted to the City under Labor Law Section 816-b, the Department of Design and Construction hereby requires that the contractor awarded a contract as a result of this Invitation for Bids, and any of its subcontractors with subcontracts worth two million dollars or over, have, prior to entering into such contract or subcontract, apprenticeship agreements appropriate for the type and scope of work to be performed that have been registered with, and approved by, the New York State Commissioner of Labor. In addition, the contractor and its subcontractors will be required to show that such apprenticeship program/s have successfully passed the two year Probation period following the initial registration date of such program/s with the New York State Department of Labor.

The failure to prove, upon request, that these requirements have been met shall result in the contract not being awarded to the contractor or the subcontract not being approved.

Please be further advised that, pursuant to Labor Law Section 220, the allowable ratio of apprentices to journeypersons in any craft classification shall not be greater than the ratio permitted to the contractor as to its workforce on any job under the registered apprenticeship program.

##### **(2) Apprenticeship Program Questionnaire**

The bidder must submit a completed and signed Apprenticeship Program Questionnaire. The Questionnaire is located in the Bid Booklet, in Volume 1 of 3 of this contract.

**PUBLIC NOTICES**

Before commencing any work on the site, the Contractor shall provide a satisfactory weather resistant surface, and post, in a location accessible to all workers, a copy of the NYSDOL schedules of prevailing wages and supplements for this contract, a copy of all redeterminations of such schedules for the contract, the Workers' Compensation Law notice, required safety notices, and all other notices required by law to be posted at the site. The Contractor shall maintain such notices in a legible manner and shall replace any notice or schedule which is damaged, defaced, illegible or removed for any reason. The notices shall be maintained until all work on the site is complete.

**NOTICE TO ALL PROSPECTIVE BIDDERS  
FEDERAL-AID CONTRACTS**

**ASSURANCE OF NON-DISCRIMINATION**

The New York State Department of Transportation, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation and Title 23 Code of Federal Regulations, Part 200, Title VI Program and Related Statutes, as amended, issued pursuant to such Acts, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, sex, age, disability/handicap and income status in consideration for an award.

**SUBCONTRACTS**

The attention of the Contractor is directed to the requirement that the standard contract clauses, as set forth in the Proposal and in the NYS Department of Transportation Labor Compliance Manual (Federal-aid Construction, Appendix D-2, 3) must be physically incorporated in all subcontracts.

Copies of the Labor Compliance Manual referred to above may be examined in the office of the NYS Department of Transportation Regional Director.

**SUPPLEMENTAL TITLE VI PROVISIONS (CIVIL RIGHTS ACT)**

(To be included in all contracts)

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- (1) **Compliance with Regulations:** The contractor shall comply with the Regulation relative to nondiscrimination in Federally assisted programs of the Department of Transportation of the United States, Title 49, Code of Federal Regulations, Part 21, and the Federal Highway Administration (hereinafter "FHWA") Title 23, Code of Federal Regulations, Part 200 as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- (2) **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, religion, age, color, sex or national origin, sex, age, and disability/handicap in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by 49 CFR, section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

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- (3) Solicitations for Subcontractors, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin, sex, age, and disability/handicap.
- (4) Information and Reports: The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by NYSDOT or the FHWA to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the contractor shall so certify to NYSDOT's Office of Civil Rights or FHWA, as appropriate, and shall set forth what efforts it has made to obtain the information.
- (5) Sanctions for Noncompliance: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, NYSDOT shall impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
- a) Withholding of payments to the contractor under the contract until the contractor complies; and/or
  - b) Cancellation, termination or suspension of the contract, in whole or in part.
- (6) Incorporation of Provisions: The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

The contractor shall take such action with respect to any subcontractor procurement as NYSDOT or the FHWA may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request NYSDOT to enter into such litigation to protect the interests of NYSDOT, and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

**DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS**

**DBE UTILIZATION.** DBE refers to a Disadvantaged Business Enterprise (DBE). The DBE program applies to Federal-Aid contracts. The program seeks to:

- Ensure nondiscrimination in the award and administration of Federal-Aid contracts;
- Create a level playing field on which DBEs can fairly compete for Federal-Aid contracts;
- Ensure that the DBE program is narrowly tailored in accordance with applicable law;
- Ensure that only firms that fully meet DBE eligibility standards are permitted to participate as DBEs;
- Help remove barriers to the participation of DBEs in Federal-Aid contracts;
- Promote the use of DBEs in all types of federally-assisted contracts and procurement activities conducted by recipients of Federal financial assistance;
- Assist in the development of firms that can compete successfully in the marketplace outside the DBE program; and
- Provide appropriate flexibility to recipients of Federal financial assistance in establishing and providing opportunities for DBEs.

The parties to this contract shall take all necessary and reasonable steps in accordance with the laws, rules and regulations cited in this subsection to promote the objectives outlined above. The Contractor shall comply with the applicable laws, rules and regulations and the DBE Program Assurance stated below.

**DBE Program Assurance.** The Contractor or Subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of Federal-Aid contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Department deems appropriate, which may include, but is not limited to: (1) withholding contract payments; (2) assessing sanctions; (3) liquidated damages; and/or (4) disqualifying the Contractor from future bidding as non-responsible.

**A. Statutory Authority.** The statutory authority for the DBE Program is contained in the Surface Transportation Assistance Act ("STAA") of 1982 (Public Law 97-424, §105(f)), the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Public Law 100-17, §106(c)), the Intermodal Surface Transportation Efficiency Act of 1991, the Transportation Equity Act for the 21st Century ("TEA-1") of 1998 (Public Law 105-178, §1101(b)), the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users ("SAFETEA-LU") of 2005 (Public Law 109-59 §1101(b)), the Moving Ahead for Progress in the 21st Century Act ("MAP-21") of 2012 (Public Law 112-141, §1101(b)), and the Fixing America's Surface Transportation Act ("FAST-ACT") of 2015 (Public Law 114-94, §1101(b)). New York State has enacted Section 85 of the Highway Law and Section 428 of the Transportation Law. Regulations have been promulgated under 49 CFR 21, 49 CFR 26 and 17 NYCRR 35.

**B. DBE Goal(s).** Federal-aid construction contracts have a single DBE goal. The Department will monitor the Contractor's attainments towards DBE goals in accordance with Attachment H, *Civil Rights Monitoring and Reporting*.

**1. Established Goal(s).** The Department may have established contract utilization goal(s) for DBEs, which are expressed as a percentage of the total contract price. The goal(s) are stated in the proposal and remain in effect throughout the life of the contract. In executing the contract or bid documents the Bidder declares that it subscribes to the utilization goal(s) and shall meet the goal(s) or demonstrate that it could not meet them

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despite its best efforts. Failure to provide commitments to meet the established goal(s) for the contract or failure to meet the good faith efforts shall be grounds for rejection of the bid as non-responsive. Good faith efforts shall meet the requirements of 49 CFR 26 Appendix A.

**2. Zero Percent Goal(s).** When a zero goal(s) for participation by DBEs has been established, and the Bidder proposes the use of a Subcontractor, the purchase of materials, the use of a Service or the use of Trucking at any time during the life of the contract, the Contractor shall promote the objectives outlined in this subsection by providing opportunities for DBEs to participate in these areas, with such participation to be credited towards the race-neutral component of the DBE Program.

**C. DBE Eligibility.** Only those DBE firms that are certified under the New York State Unified Certification Program are eligible to be used for goal attainment. DBE certification is not an endorsement of the quality or performance of the business but simply an acknowledgment of the firm's status as a DBE. Furthermore, DBEs must be certified for the type of work to be performed. A business directory is available on the NYS Unified Certification Program website at <https://nysucp.newnycontracts.com>.

**D. Counting DBE Participation Towards the DBE Goal(s).** The value of the work performed by a DBE, including that of a DBE prime contractor, with its own equipment, with its own forces, and under its own supervision will be counted toward the goal(s), provided the utilization is a commercially useful function. A DBE prime contractor shall still provide opportunities for participation by other DBEs. Work performed by DBEs on the contract will be counted as set forth below. If the Department determines that some or all of a DBE's work does not constitute a commercially useful function, only the portion of the work considered to be a commercially useful function will be credited toward the goal(s).

**1. Joint Ventures.** When a DBE performs as a participant in a joint venture, a portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work of the contract that the DBE performs with its own forces will be counted toward DBE goals.

**2. Subcontractors.** 100% of the value of the work performed by a DBE Subcontractor will be counted toward the DBE goal(s), including the cost of materials and supplies purchased by the DBE. The DBE may not rent or lease equipment from the Contractor or its affiliates. When a DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE's subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count toward DBE goals.

**3. Manufacturers/Fabricators.** 100% of the expenditure to a DBE Manufacturer or Fabricator will be counted toward the DBE goal(s). Manufacturers or Fabricators may provide materials to the Contractor, a Subcontractor, or other firm working on the contract for installation.

**4. Material Suppliers.** 60% of the expenditure to a DBE Material Supplier will be counted toward the DBE goal. A Material Supplier, also known as a regular dealer, is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. Packagers, brokers, manufacturer's representatives, or other persons who arrange or expedite

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transactions are not Material Suppliers. Material Suppliers may provide materials to the Contractor, a Subcontractor, or other firm working on the contract for installation.

**5. Brokers/Manufacturer's Representatives.** 100% of the expenditures for fees or commissions charged for assistance in the procurement of, or fees for transportation charges for the delivery of, materials or supplies provided by a DBE Broker/Manufacturer's Representative will be counted toward the DBE goal(s), provided they are determined to be reasonable and not excessive as compared with fees customarily allowed for similar services. The cost of the materials and supplies themselves will not be counted. Brokers may supply materials to the Contractor, Subcontractor, or other firm working on the contract.

**6. Services.** 100% of the expenditure for fees charged by a DBE for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of the contract will be counted toward the DBE goal(s), provided the fee is reasonable and not excessive as compared with fees customarily allowed for similar services.

**7. Trucking Operations.** A DBE trucking firm shall own and operate at least one registered, insured, and fully operational truck used on the contract and shall be responsible for the management and supervision of the trucking operation for which it is responsible. The DBE trucking firm shall control the day-to-day DBE trucking operations, and shall be responsible for: (1) Negotiating and executing rental/leasing agreements; (2) Controlling the work force; (3) Coordinating the daily trucking needs with the Contractor or Subcontractor; and (4) Scheduling and dispatching trucks.

*a. DBE Owned/Leased Trucks.* 100% of the value of the trucking operations the DBE provides on the contract using trucks it owns or leases on a long-term basis that are registered, insured, and operated by the DBE using drivers it employs, will be counted toward the DBE goal. A lease shall indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks shall display the name and identification number of the DBE.

*b. Other DBE Trucks.* The DBE may obtain trucks from another DBE, including an owner/operator. 100% of the value of the trucking operations that the other DBE provides will also be counted toward the DBE goal.

*c. Non-DBE Trucks.* The DBE may obtain trucks from a non-DBE, including an owner-operator. Only the value of the fee or commission that the DBE receives as a result of the arrangement with the non-DBE will be counted toward the DBE goal.

**E. Conditions of Participation.** DBE participation will be counted toward meeting the DBE contract goal(s), subject to the following conditions:

**1. Commercially Useful Function.** A DBE is considered to perform a commercially useful function when it is responsible for the execution of a distinct element of work on a contract and carries out its responsibilities by actually performing, managing, and supervising the work involved in accordance with normal industry practice. The arrangement cannot be contrived solely for the purpose of meeting the DBE goal. Regardless of whether an arrangement between the Contractor and the DBE represent standard industry practice, if the arrangement erodes the ownership, control or independence of the DBE or in any other way does not meet the commercially useful function requirement, the Contractor will receive no credit toward the goal(s) and shall

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take all necessary and reasonable steps to backfill the participation. Additionally, a DBE not performing a commercially useful function may, in some instances, warrant further investigation of the DBE's certification status or review of the DBE for fraud. A DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction or contract through which funds are passed in order to obtain the appearance of DBE participation.

A DBE may present evidence to rebut a determination by the Department that the DBE is not performing a commercially useful function. Commercially useful function determinations by the Department are subject to review by the Federal Highway Administration (FHWA) but the determination may not be administratively appealed to USDOT.

**2. Work Force.** The DBE shall employ a work force, (including administrative and clerical) separate and apart from that employed by the Contractor, other Subcontractors on the contract, or their affiliates. The DBE shall perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force. This does not preclude the employment by the DBE of an individual that has been previously employed by another firm involved in the contract, provided that the individual was independently recruited by the DBE in accordance with customary industry practice. The routine transfer of work crews from another employer to the DBE shall not be allowed.

**3. Supervision.** All work performed by the DBE must be controlled and supervised by the DBE without duplication of supervisory personnel from the Contractor, other Subcontractors on the contract, or their affiliates. This does not preclude routine communication between the supervisory personnel of the DBE and other supervisors necessary to coordinate the contract work.

**4. Materials.** DBE Subcontractors shall negotiate price, determine quality and quantity, order and pay for the material(s) required to perform the work.

**5. Equipment.** DBE Subcontractors may supplement their equipment by renting or leasing additional equipment in accordance with customary industry practice. The DBE shall obtain approval of the Department prior to renting equipment from the Contractor or its affiliates, and shall provide documentation demonstrating that similar equipment and terms could not be obtained at a lower cost from other customary sources of equipment. The required documentation shall include, but not be limited to, copies of the rental or leasing agreements, and the names, addresses, and terms quoted by other sources of equipment.

### **F. Not Used.**

**G. Good Faith Efforts.** To determine whether a bidder that has failed to meet the DBE contract goal(s) may receive the contract, the Department, in consultation with NYSDOT, will decide whether the efforts the Bidder made to obtain DBE participation were "good faith efforts" to meet the goal(s). Efforts to obtain DBE participation that are merely pro forma are not good faith efforts, nor are efforts that, even if they are sincerely motivated, given all relevant circumstances, they could not reasonably be expected to produce a level of DBE participation sufficient to meet the goal(s).

In order to award a contract to a bidder that has failed to meet the DBE contract goal(s), the Department, in consultation with NYSDOT, will determine that the Bidder's good faith efforts were those that, given all relevant circumstances, a bidder actively and aggressively seeking to meet the goal(s) would make.



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When a contract is awarded with DBE commitment(s) that is less than the contract goal(s), the Contractor shall continue good faith efforts. The Contractor shall continuously review items that are available for DBE participation, especially before the beginning of a new construction season and when significant new items of work are added to the contract, and conduct additional DBE solicitation.

In order to evaluate the Bidder's good faith efforts, the Department will consider the quality, quantity, and intensity of the different kinds of efforts that the Bidder has made. Below is a list of the types of actions which the Department will consider as part of the Bidder's good faith efforts to obtain DBE participation. It is not a mandatory checklist, nor is it intended to be exhaustive or exclusive. Other factors or types of efforts may be relevant in appropriate cases.

1. a. Conducting market research to identify small business contractors and suppliers and soliciting through all reasonable and available means the interest of all certified DBEs that have the capability to perform the work of the contract. This may include attendance at pre-bid and business matchmaking meetings and events, advertising and/or written notices, posting of Notices of Sources Sought and/or Requests for Proposals, written notices or emails to all DBEs listed in the State's directory of transportation firms that specialize in the areas of work desired (as noted in the DBE directory) and which are located in the area or surrounding areas of the project.
- b. The bidder should solicit this interest as early in the acquisition process as practicable to allow the DBEs to respond to the solicitation and submit a timely offer for the subcontract. The bidder should determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
2. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units (for example, smaller tasks or quantities) to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces. This may include, where possible, establishing flexible timeframes for performance and delivery schedules in a manner that encourages and facilitates DBE participation.
3. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation with their offer for the subcontract.
4. a. Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional Agreements could not be reached for DBEs to perform the work.
- b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to

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perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

5. a. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union status) are not legitimate causes for the rejection or non-solicitation of bids in the contractor's efforts to meet the project goal. Another practice considered an insufficient good faith effort is the rejection of the DBE because its quotation for the work was not the lowest received. However, nothing in this paragraph shall be construed to require the bidder or prime contractor to accept unreasonable quotes in order to satisfy contract goals.
- b. A prime contractor's inability to find a replacement DBE at the original price is not alone sufficient to support a finding that good faith efforts have been made to replace the original DBE. The fact that the contractor has the ability and/or desire to perform the contract work with its own forces does not relieve the contractor of the obligation to make good faith efforts to find a replacement DBE, and it is not a sound basis for rejecting a prospective replacement DBE's reasonable quote.
6. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
7. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
8. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, State, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

**H. DBE Pre-Award Utilization Package.** Together with its bid, each bidder shall submit a completed DBE Schedule of Utilization, as outlined below.

Low Bidders that do not have access to the approved civil rights reporting software shall contact the Department for guidance on submission of the Utilization Package. As soon as practicable, but not later than prior to the first contract payment, the Contractor shall enter all current utilization data into the approved civil rights reporting software.

For each DBE Subcontractor, the Low Bidder shall indicate the contract pay item number(s) of the work to be performed. The Low Bidder shall explain, in writing, the scope of work to be performed by the DBE for any item which is not completely performed by the DBE Subcontractor. This does not include items for which the Contractor is performing less than the total contract quantity for that item.

For each DBE Manufacturer, Fabricator, Material Supplier, or Broker, the Low Bidder shall indicate the contract pay item number(s) of the material to be manufactured, fabricated, supplied, or otherwise provided. If the material, equipment or service does not correspond to a specific contract pay item, the Low Bidder shall use a contract pay item(s) to which the activity relates.

For each DBE Service, the Low Bidder shall indicate the contract pay item number(s) of the service to be provided. If the equipment or service does not correspond to a specific

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contract pay item, the Low Bidder shall use a contract pay item(s) to which the activity relates.

For each DBE Trucking Operation, the Low Bidder shall indicate the contract pay item number(s) for which the trucking operations are to be performed. If the trucking operation does not correspond to a specific contract pay item, the Low Bidder shall use a contract pay item(s) to which the activity relates. The Low Bidder shall indicate the type of trucking operation to be performed, the number of trucks owned/leased, the number of trucks working on-site or off-site, rate per hour/ton/load/etc., duration or amount, and total dollar value of the proposed DBE commitment. The Low Bidder shall provide copies of all lease agreements utilized by the DBE.

If the Low Bidder has met or exceeded the established DBE goal(s) for the contract utilizing certified DBEs it is not necessary to submit documentation of good faith efforts.

If the Low Bidder has not met the DBE goal(s), it shall submit the *Solicitation Log*, together with other documentation that substantiates good faith efforts. Such documentation shall include, at a minimum, all envelopes of solicitation inquiries that were returned as undeliverable, quotations submitted by DBEs that are not included in the *DBE Schedule of Utilization*, and relevant non-DBE quotations with an explanation for the Bidder's action in each case.

After contract award, the Contractor shall promptly execute subcontracts, agreements, or purchase orders, as appropriate, with each DBE for the type and amount of work identified in the approved *DBE Utilization Worksheet*.

**I. Bidder's Failure to Comply With DBE Program Requirements.** The Department's acceptance of the Low Bidder's bid is conditioned upon the Low Bidder's fulfillment of the DBE utilization requirements. If the Low Bidder fails to submit a complete DBE utilization package with its bid and/or fails to attain the DBE utilization goal(s) and to satisfactorily document its good faith efforts, the bid shall be declared non-responsive and the deposit may be subject to forfeiture pursuant to Section 27 of the Information for Bidders. The Low Bidder, upon receipt of written notification of its failure to comply with the DBE utilization requirements shall have 5 work days to carry out the corrective action(s) described in the notification.

If the Department determines that the Low Bidder has failed to meet the good faith effort requirements, the Department will, before awarding the contract, provide the Low Bidder an opportunity for administrative reconsideration by an official who did not take part in the original determination that the Low Bidder failed to meet the goal(s) or make adequate good faith efforts to do so. As part of this reconsideration, the Low Bidder shall have the opportunity to provide written documentation or argument and to meet in person with the Department's reconsideration official concerning the issue of whether it met the goal(s) or made adequate good faith efforts to do so. The Department will send the Low Bidder a written decision on reconsideration, explaining the basis for finding that the Low Bidder did or did not meet the goal(s) or make adequate good faith efforts to do so.

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**(NO TEXT THIS PAGE)**

**"BUY AMERICA" REQUIREMENTS & WAIVERS**

**BUY AMERICA** In accordance 41 U.S.C. §10a et. seq., 23 CFR 635.410 and Section 146 of the State Finance Law permanently incorporated predominantly steel and/or iron products materials shall be domestically produced, regardless of the percentage they comprise in a manufactured product, or form they take.

The Contractor may permanently incorporate in the construction of this contract a minimal amount of foreign steel and/or iron materials that are subject to Buy America requirements, if the combined cost of such materials does not exceed one-tenth of one percent (0.1 %) of the total contract cost or \$2,500, whichever is greater. The combined cost of foreign steel and/or iron materials will be the value of the materials as they are delivered to the contract, documented by invoice or bill of sale to the Contractor.

To qualify as domestic, all manufacturing processes, including manufacture, fabrication, grinding, drilling, welding, finishing, and coating of any product containing steel and/or iron materials, must have been performed in the United States. To further define the coverage, a domestic product is a manufactured steel and/or iron materials construction material that was produced in one of the 50 States, the District of Columbia, Puerto Rico, or in the territories and possessions of the United States. Raw materials used in the steel and/or iron materials may be imported. Raw materials are materials such as iron ore, limestone, waste products, etc., which are used in the manufacturing process to produce the steel and/or iron materials products. Waste products include scrap; i.e., steel no longer useful in its present form from old automobiles, machinery, pipe, railroad rail, steel trimmings from mills or product manufacturing, and the like. Extracting, crushing, and handling the raw materials which are customary to prepare them for transporting are exempt from Buy America. The use of foreign source steel or iron billets is not acceptable under Buy America.

**A. Control of Materials.** All items, regardless of origin, shall comply with their individual specification requirements and with the requirements stated elsewhere in this subsection. In the event the contract is awarded based on using only domestic steel and/or iron materials, the Contractor shall supply only domestic steel and/or iron materials and will be paid the domestic bid prices. The Contractor shall ensure the domestic steel and/or iron materials are supplied in conformance with the above referenced laws. The Contractor shall inform all affected Subcontractors and material suppliers of these specific requirements and ascertain that steel and/or iron materials being supplied is in conformance with these requirements.

**B. Waivers.** Waivers to the Buy America requirement may be requested by the Contractor if it can be demonstrated that the use of domestic steel and/or iron materials would be inconsistent with the public interest, such materials and products are not produced in the United States in sufficient and reasonably available quantities and of satisfactory quality.

Provided one or more of the above requirements are met, the Contractor may submit a request for a waiver to the Engineer. The request shall include copies of all documentation verifying the unavailability of the material or product, and/or justification of the application for a waiver.

The Department will submit approved waiver requests to the FHWA for review. The Contractor shall investigate and respond to any public comments made to the FHWA Office of Program Administration, indicating that a domestic supplier can provide the material for which a waiver has been requested. Final approval of the Buy America Waiver request will be made by the Administrator, Federal Highway Administration. The waiver will be effective when it is posted in the Federal Register.

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**CERTIFICATIONS AND TRACKING OF FOREIGN STEEL AND/OR IRON.** In order to ensure compliance with this contract requirement, all manufacturer's certifications for steel and/or iron and items including steel and/or iron must contain a statement of domestic origin, and material suppliers must certify that what they provide is the same material certified by the manufacturer. If the material or product certification does not properly identify conformance to the specification the product will be rejected and must be removed from the project site. If however the manufacturer and/or material supplier requests to leave the product in place and provide a revised certification only, the revised certification must be accompanied with a letter of explanation to the satisfaction of the Resident Engineer. The explanation shall indicate the basis for using the revised certification rather than the original supplied. The letter shall also include corrective action to assure that future certifications will be representative of the material or product supplied. The letter must be signed by a company representative that can legally bind the firm.

If the Contractor proposes to use foreign steel/iron in small amounts under the threshold, the amount allowed will be based on the material price to the Contractor, as verified by invoice and approved by the Resident Engineer. The amount is cumulative for the entire contract, so subsequent requests will have to be added to any previous requests before comparison to the allowable threshold.

The "Buy America" contract specification does not apply to iron or steel that is to be used for temporary means which will be removed during or at the end of the project.

### **DEFINITIONS:**

**Steel** - Steel material of any type, including welding rod.

**Iron** - Iron material of any type, including cast and ductile iron, but not pig iron.

**Domestic** - The 50 States, the District of Columbia, Puerto Rico and territories/possessions of the US.

**Foreign** - Any location other than those defined as Domestic.

**Manufacturing Processes** - Steel and/or iron manufacturing processes must be domestic; e.g. manufacture, fabrication, grinding, drilling, welding, finishing and coating of steel. Ore, scrap, and pig iron may be foreign or domestic; however, transformation into steel and/or iron and all subsequent processes and fabrication must be domestic. The fabrication of composite items using domestic steel (e.g. casting reinforced concrete box culvert using reinforcing cut and bent to final shapes) is not considered a manufacturing process, and the composite item is acceptable.

**Fabricated Product Containing Steel and/or Iron** - Items, products or materials containing any amount of steel and/or iron materials; e.g., a metal pipe may be steel or iron, a reinforced concrete pipe contains steel, a prestressed beam contains steel, iron castings are iron, a steel beam is steel and steel laminated bridge bearings contain steel.

## **EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS**

The Department seeks to ensure nondiscrimination in employment under all Department contracts. The Contractor shall comply with the following Equal Employment Opportunity (EEO) requirements. *Goals for Equal Opportunity Employment Participation* are listed in the required contract provisions section of the contract proposal. The covered area is the county or counties in which the work is located.

For Federal-Aid contracts, Equal Employment Opportunity provisions are also found in Attachment "A" - *Required Contract Provisions Federal-Aid Construction Contracts – FHWA 1273*.

Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

**A. Statutory Authority.** The Federal statutory authority for Equal Employment Opportunity provisions is contained in 23 U.S.C. 140(a), and Executive Order 11246. State statutory authority is contained in Section 85 of the Highway Law, Section 428 of the Transportation Law, and NYS Executive Law Articles 15 and 15-A. Regulations have been promulgated under 23 CFR 230, 41 CFR 60, 49 CFR 21, and 5 NYCRR 140-145.

### **B. Definitions.**

For Federal-Aid contracts, a minority group member is defined under this subsection as someone who is, and can demonstrate membership in, one of the following groups:

- a. Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
- b. Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
- c. Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
- d. American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

**C. Employment Goals.** An employment goal(s) for minorities and a separate goal for women are presented in the contract documents. The Contractor shall provide equal employment opportunity and shall take affirmative action for all minority groups, both male and female; and women, both minority and non-minority. If the Contractor performs work outside of the covered area, it shall apply the goals established for the county where the work is actually performed. The Department will monitor the Contractor's attainments towards EEO goals in accordance with Attachment H - *Civil Rights Monitoring and Reporting*.

The goals set for the contract are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress in meeting its goals in each trade. The hours of minority and female employment and training shall be substantially uniform

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throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its contracts. The transfer of minority or female employees, apprentices, or trainees from contractor to contractor or from contract to contract for the sole purpose of meeting the Contractor's goals is a violation of the contract.

**D. Contractor Obligations.** The Contractor shall comply with all provisions of Federal Executive Order 11246 and the provisions of State and Federal laws and regulations. The Contractor shall furnish all information and reports required by Executive Order 11246 and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the Department and the U.S. Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders. The Contractor shall develop and implement an EEO policy in accordance with Attachment A, *Required Contract Provisions Federal-Aid Construction Contracts – FHWA 1273* and in accordance with Attachment B, *Standard Clauses for All New York State Contracts*.

**1. Non-Discrimination.** The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, age, disability or marital status. The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, sexual orientation, military status, sex, disability, predisposing genetic characteristics, marital status, or domestic violence victim status and shall also follow the requirements of the Human Rights Law with regard to non-discrimination on the basis of prior criminal conviction and prior arrest. Such actions shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Department setting forth the provisions of this non-discrimination clause.

The Contractor shall state in all solicitations or advertisements for employees that, in the performance of the contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of age, race, creed, color, national origin, sexual orientation, military status, sex, disability, predisposing genetic characteristics, marital status, or domestic violence victim status.

The Contractor shall not use the goals or affirmative action requirements to discriminate against any person because of age, race, creed, color, national origin, sexual orientation, military status, sex, disability, predisposing genetic characteristics, marital status, or domestic violence victim status.

**2. Solicitations.** The Contractor shall state in all solicitations or advertisements for employees placed by or on behalf of the Contractor, that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, age, disability or marital status.

**3. Collective Bargaining Agreements.** The contractor shall send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments to equal employment opportunities, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.



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The Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union, or representative will not discriminate on the basis of race, creed, color, national origin, sex age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of the Contractor's obligations herein.

Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations.

**4. Complaints of Alleged Discrimination.** The Contractor shall promptly investigate all complaints of alleged discrimination made to the Contractor in connection with its obligations under this contract, shall attempt to resolve such complaints, and shall take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, corrective action shall include such other persons. Upon completion of each investigation, the Contractor shall inform every complainant of all available avenues of appeal.

**5. Non-Compliance.** In the event of the contractor's non-compliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further contracts in accordance with procedures authorized in Executive Order 11246, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246, or by rule, regulation, or order of the U.S. Secretary of Labor, or as otherwise provided by law.

**6. Subcontracts/Purchase Orders.** The Contractor shall include the provisions of Subsection D, *Contractor Obligations*, of this Attachment F, in every subcontract or purchase order, so that such provisions will be binding upon each subcontractor or vendor. In the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Department, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

**E. Affirmative Action Steps.** The Contractor shall take specific affirmative actions to promote equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

1. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, shall assign two or more women to each construction contract. The Contractor shall specifically ensure that all forepersons, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

2. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

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3. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.

4. Provide immediate written notification to the Department when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

5. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by either the NYS Department of Labor or the US Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under E.2. above.

6. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

7. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as superintendents, forepersons, etc., prior to the initiation of construction work at any contract site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

8. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other contractors and Subcontractors with whom the Contractor does or anticipates doing business.

9. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

10. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of the Contractor's work force.

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**11.** Validate all tests and other selection requirements in accordance with state and Federal laws, rules and regulations.

**12.** Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities. Encourage these employees to seek or to prepare for promotional opportunities through appropriate training, etc.

**13.** Ensure that seniority practices, labor classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

**14.** Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

**15.** Document and maintain a record of all solicitations of offers for Subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

**16.** Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

**F. Associations.** Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations. The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling one or more of its obligations, provided that the Contractor actively participates in the group, makes every effort to ensure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

**G. Hometown Plans (Federal-Aid Contracts Only).** If a Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the USDOL in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors participating in Hometown Plans shall be able to demonstrate their participation and document their compliance with the provision of the Hometown Plan. Each Contractor participating in an approved plan is individually required to comply with its obligation under the EEO clause and to make a good faith effort to achieve each goal under the plan in each trade in which it has employees. The overall good faith performance by other Contractors toward a goal in an approved plan does not excuse any covered Contractor's failure to take good faith efforts to achieve the Plan goals and timetables.

**Notice of Requirement for Affirmative Action To Ensure Equal Employment Opportunity (Executive Order 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation and female participation are in the "Goals for Equal Employment Opportunity (EEO) Participation" section at the end of this Attachment "F".
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These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is the five Boroughs of New York City.

**Standard Federal Equal Employment Opportunity Construction Contract  
Specifications (Executive Order 11246)**

**1. As used in these specifications:**

- a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
- b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
- c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
- d. "Minority" includes:
  - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
  - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
  - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

**2.** Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

**3.** If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

**4.** The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and

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female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a

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minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

## **ATTACHMENT "F"**

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, sexual orientation, gender identity, or national origin.

11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any



## **ATTACHMENT "F"**

Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

**13.** The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

**14.** The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

**15.** Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

**GOALS FOR EQUAL EMPLOYMENT OPPORTUNITY (EEO) PARTICIPATION**

**GOALS FOR MINORITY PARTICIPATION**

COUNTY	%	COUNTY	%	COUNTY	%
Albany .....	3.2	Herkimer .....	2.1	* Richmond	
Allegany .....	6.3	Jefferson .....	2.5	Rockland .....	22.6
Broome .....	1.1	* Kings		St. Lawrence .....	2.5
* Bronx		Lewis .....	2.5	Saratoga .....	3.2
Cattaraugus .....	6.3	Livingston .....	5.3	Schenectady .....	3.2
Cayuga .....	2.5	Madison .....	3.8	Schoharie .....	2.6
Chautauqua .....	6.3	Monroe .....	5.3	Schuyler .....	1.2
Chemung .....	2.2	Montgomery .....	3.2	Seneca .....	5.9
Chenango .....	1.2	Nassau .....	5.8	Steuben .....	1.2
Clinton .....	2.6	* New York		Suffolk .....	5.8
Columbia .....	2.6	Niagara .....	7.7	Sullivan .....	17.0
Cortland .....	2.5	Oneida .....	2.1	Tioga .....	1.1
Delaware .....	1.2	Onondaga .....	3.8	Tompkins .....	1.2
Dutchess .....	6.4	Ontario .....	5.3	Ulster .....	17.0
Erie .....	7.7	Orange .....	17.0	Warren .....	2.6
Essex .....	2.6	Orleans .....	5.3	Washington .....	2.6
Franklin .....	2.5	Oswego .....	3.8	Wayne .....	5.3
Fulton .....	2.6	Otsego .....	1.2	Westchester .....	22.6
Genesee .....	5.9	Putnam .....	22.6	Wyoming .....	6.3
Greene .....	2.6	* Queens		Yates .....	5.9
Hamilton .....	2.6	Rensselaer .....	3.2		

\* The following goal ranges are applicable to the indicated trades in the Counties of Bronx, Kings, New York, Queens and Richmond:

Electricians .....	9.0 to 10.2	Asbestos workers .....	22.8 to 28.0
Carpenters .....	27.6 to 32.0	Roofers .....	6.3 to 7.5
Steam fitters .....	12.2 to 13.5	Iron Workers (ornamental) .....	22.4 to 23.0
Metal lathers .....	24.6 to 25.6	Cement masons .....	23.0 to 27.0
Painters .....	26.0 to 28.6	Glaziers .....	16.0 to 20.0
Operating engineers .....	25.6 to 26.0	Plasterers .....	15.8 to 18.0
Plumbers .....	12.0 to 14.5	Teamsters .....	22.0 to 22.5
Iron Workers (structural) .....	25.9 to 32.0	Boilermakers .....	13.0 to 15.5
Elevator constructors .....	5.5 to 6.5	All others .....	16.4 to 17.5
Bricklayers .....	13.4 to 15.5		

**GOAL FOR PARTICIPATION OF WOMEN**

The last publication of a goal for the participation of women was April 7, 1978 (43 FR 14888, 14900). Pursuant to 41CFR 60-4.6, the 6.9% goal published on that date is hereby made the goal for all contracts and grant agreements, until further notice.

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**STANDARDIZED CHANGED CONDITIONS CLAUSES**

**FHWA CHANGED CONDITION CLAUSES (23CFR635.109)**

*(1) Differing site conditions.*

(i) During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the site is disturbed and before the affected work is performed.

(ii) Upon written notification, the engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipated profits, will be made and the contract modified in writing accordingly. The engineer will notify the contractor of the determination whether or not an adjustment of the contract is warranted.

(iii) No contract adjustment which results in a benefit to the contractor will be allowed unless the contractor has provided the required written notice.

(iv) No contract adjustment will be allowed under this clause for any effects caused on unchanged work.

*(2) Suspensions of work ordered by the engineer.*

(i) If the performance of all or any portion of the work is suspended or delayed by the engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the contractor shall submit to the engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.

(ii) Upon receipt, the engineer will evaluate the contractor's request. If the engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the engineer will make an adjustment (excluding profit) and modify the contract in writing accordingly. The contractor will be notified of the engineer's determination whether or not an adjustment of the contract is warranted.

(iii) No contract adjustment will be allowed unless the contractor has submitted the request for adjustment within the time prescribed.

(iv) No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

*(3) Significant changes in the character of work.*

(i) The engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete

## **ATTACHMENT "G"**

the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the contractor agrees to perform the work as altered.

(ii) If the alterations or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding anticipated profit, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the contractor in such amount as the engineer may determine to be fair and equitable.

(iii) If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for as provided elsewhere in the contract.

(iv) The term "significant change" shall be construed to apply only to the following circumstances:

(A) When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or

(B) When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

### **MAJOR ITEM OF WORKS**

The term "major item" of work shall mean any item for which the original bid price multiplied by the original contract quantity exceeds \$50,000 or 2% of the total contract bid price, whichever is less.

## CIVIL RIGHTS MONITORING AND REPORTING

The approved civil rights reporting software is *Equitable Business Opportunity Solution* (EBO). The EBO software is a web-based system owned and maintained by the New York State Department of Transportation, and provided to the Contractor at no cost. The Contractor shall use the approved civil rights reporting software on all contracts. The Contractor shall submit complete, accurate, electronic data to the Department for each month, not later than the 15th of the following month, using the approved civil rights reporting software. Data shall be current through the end of the last full payroll week for that month, or as otherwise approved by the Engineer to coordinate with contract payment submittals.

**A. Civil Rights Officer(s).** The Contractor shall designate a Corporate Civil Rights Officer, a Corporate DBE Representative, and a contract site Equal Employment Opportunity (EEO) Representative; and each Subcontractor shall designate a Corporate Civil Rights Officer, and a contract site Equal Employment Opportunity (EEO) Representative in the approved civil rights reporting software. The designated individuals shall have the responsibility to and shall be capable of effectively administering and promoting an active program of equal employment opportunity and who shall be assigned adequate authority and responsibility to do so. A single individual may fulfill multiple roles. The Contractor shall update the approved civil rights reporting software within 10 calendar days of any changes in these roles.

**B. Workforce Participation Plan.** At the pre-construction meeting, the Contractor shall submit a *Workforce Participation Plan* covering the Contractor's workforce and the workforce of its Subcontractors with subcontracts over \$10,000, together and coordinated with the contract progress schedule that addresses the Equal Employment Opportunity goals.

The Contractor shall not start work until the Department and the Contractor have agreed upon has accepted the *Workforce Participation Plan*. The Contractor shall submit a revised plan when a significant work force build-up or reduction will substantially affect goal attainment, or when a revised schedule is requested by the Department. Such revised *Workforce Participation Plan* must be agreed upon by the Department or the original will remain in effect.

**C. Equal Employment Opportunity (EEO) Monitoring and Reporting.** The Contractor's compliance with the EEO Requirements will be based on its Employment Utilization, affirmative action steps and its good faith efforts to meet the goals.

The Department, in evaluating the Contractor's good faith efforts to meet the EEO goal(s), will first analyze the Contractor's goal attainment on an individual contract. If the Contractor is not meeting the goal(s) for a single trade or contract, the Department will analyze, progressively, the Contractor's goal attainment on all contracts held by the Contractor. This method of analysis shall be applied primarily but not solely to contracts with small population numbers. Other factors to be considered include, but are not limited to; the location of the contracts, the relative proximity of the contracts to each other, and the nature of the work.

**1. Employee Utilization Data.** The Contractor shall submit employee utilization data for its workforce and for each Subcontractor with a subcontract exceeding \$10,000 on a monthly basis showing hours worked for each payroll week, for each trade and classification, by gender and ethnicity. Employee utilization data shall include data from

## **ATTACHMENT "H"**

the start of the contract up to and including the month being reported. For the purpose of determining utilization percentages, the hours of female and minority employment shall be tabulated separately and attainment percentages calculated separately.

**2. Federal-Aid Highway Construction Contractors Annual EEO Report.** The Contractor shall submit all required employee utilization data to produce a Form FHWA 1391 *Federal-Aid Highway Construction Contractors Annual EEO Report* to the Department annually not later than August 15<sup>th</sup>, covering the last payroll period worked in July, for all ongoing Federal-Aid contracts. The data shall indicate the number of minority men, minority women, non-minority men, and non-minority women employees currently engaged in each trade.

**3. Subcontractor Sanctions.** *The Contractor shall carry out such sanctions and penalties for violation of Attachment F - Equal Employment Opportunity Requirements, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246.*

**4. Contractor Compliance.** If the Contractor fails to meet the EEO goal(s) for minorities or women, the Department may require training of minorities and women to satisfy the employment goals. If the Contractor fails to meet the EEO goal(s) or is in noncompliance with the nondiscrimination clauses, the Department may determine that one of the following actions should be taken:

- a. *entering into an agreement with the Contractor allowing the Contractor to cure the violation;*
- b. *revoking the Contractor's pre-qualification to bid or make proposals for future contracts;*
- c. *making a finding that the Contractor is in default of the Contract;*
- d. *terminating the Contract;*
- e. *declaring the Contractor to be in breach of Contract;*
- f. *withholding payment or reimbursement;*
- g. *determining not to renew the Contract;*
- h. *assessing actual and consequential damages;*
- i. *assessing liquidated damages or reducing fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the EEO Requirements, or in meeting the purposes of the Contract, the costs of meeting utilization goals through additional procurements, the administrative costs of investigation and enforcement, or other factors set forth in the Contract;*
- j. *exercising rights under the Contract to procure goods, services or construction from another contractor and charge the cost of such contract to the Contractor that has been found to be in noncompliance;*  
*or*
- k. *taking any other appropriate remedy.*

The Contractor may also be referred to the U.S. Department of Labor, Office of Federal Contract Compliance Programs (OFCCP), which has the sole authority to determine compliance with Executive Order 11246 and its implementing regulations.

## ATTACHMENT "H"

OFCCP may declare the Contractor ineligible for further Federal-Aid contracts in accordance with procedures authorized in Executive Order 11246, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246, or by rule, regulation, or order of the U.S. Secretary of Labor, or as otherwise provided by law.

**D. DBE Monitoring and Reporting.** The Engineer will monitor the work to ensure that the identified DBEs perform the work as identified in the Contractor's commitments. Attainments will be measured based on payments made to DBEs. Attainments based on work completed by DBEs that are no longer certified will be counted towards the original contract goal, but will not be counted towards the overall corporate goal.

**1. Monitoring Commercially Useful Function (CUF) by DBEs.** Each DBE Subcontractor shall provide confirmation to the Engineer that the workforce provided meets the requirements of Attachment D, Subsection E.2, *Work Force*. Each DBE Subcontractor shall provide a copy of invoices for all material incorporated into the work to the Engineer, in order to confirm that the DBE has met the requirements of Attachment D, Subsection E.4, *Materials*. Each DBE Subcontractor shall provide a copy of a rental agreement for all non-owned equipment used to perform the work to the Engineer, in order to confirm that the DBE has met the requirements of Attachment D, Subsection E.5, *Equipment*.

The Contractor shall provide a copy of an invoice for all material provided by a DBE Manufacturer, Fabricator or Material Supplier to the Engineer. The Contractor shall provide a copy of a rental agreement with each DBE Equipment Rental firm to the Engineer. The Contractor shall provide a copy of an invoice that details the work product(s) provided from each DBE Professional Service to the Engineer.

**2. Report of Payments to Subcontractors and DBEs.** The Contractor shall report payments made to all Subcontractors and all DBEs, in order to measure goal attainment and to gauge the effect of DBE goal(s) on the industry. The Contractor shall submit payment data for all Subcontractors and for all DBEs approved by the Department that are due a payment or have received a payment within the last month. The Subcontractor or DBE shall acknowledge payment not later than 7 calendar days after receipt. The date of receipt is: (1) the date the payment was made by electronic funds transfer to an account identified and agreed to by both parties; (2) the date the envelope containing the payment was date stamped by the US Postal Service; or (3) the date the payment was physically provided to a previously authorized representative of the Subcontractor or DBE, either by the Contractor, or by a delivery service.

The Contractor shall enter the final payment to each Subcontractor or DBE and designate it as such when the final payment is made, or as a separate \$0.00 entry indicating final payment has been made, prior to contract final acceptance, excepting those payments due from work contained in a change order that have not been approved. The Subcontractor or DBE shall acknowledge payment not later than 7 calendar days after receipt.

**3. Revisions to DBE Utilization.** The Contractor shall utilize the DBEs committed to to perform the work or supply materials for which each is listed. The Contractor shall obtain Department approval for substantial revisions in DBE utilization prior to implementing any proposed change through submission of a revised *DBE Utilization Worksheet* using

## ATTACHMENT "H"

the approved civil rights reporting software. Unless approval for revision is granted, the Contractor will not be entitled to any payment for work or material committed to a DBE unless it is performed or supplied by the approved DBE.

If the reduction of the DBE's work or the removal of the DBE, including for reasons of commercially useful function violations, causes the DBE utilization to fall below the goal(s), the Contractor shall make good faith efforts to find another DBE to substitute for the original DBE to perform at least the same amount of work as the DBE that was terminated, to the extent needed to meet the contract goal(s).

A DBE may be substituted if the work committed to the DBE is deleted or reduced by the Department and enough work remains to substitute an equal commitment amount to the affected DBE. If not enough work remains, the Department may relieve the Contractor from attaining that portion of the commitments.

The following modifications will be considered a substantial revision in DBE utilization:

1. Adding, removing or substituting a DBE;
2. Adding new item(s) of work to a DBE within a NAICS Code for which the DBE is not currently approved;
3. Significantly reducing the dollar value of or eliminating the DBE's item(s) of work. Significant reduction will be determined by comparison to the total DBE contract goal.

The following modifications will not be considered a substantial revision in DBE utilization:

1. Increasing the dollar value of an item(s) of work or adding new item(s) of work within the same NAICS Code to a DBE;
2. Substituting similar dollar values of work within NAICS Codes that the DBE is currently approved for;
3. Changes in utilization due to differences between estimated quantities and actual work performed.

*a. DBE Program.* In accordance with 49 CFR 26.53(f)(1), the Contractor shall not terminate a DBE listed on the approved DBE Utilization plan without the prior written consent of the Department. This includes, but is not limited to, instances in which a contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.

The Department will consent only if the Contractor has good cause to terminate the DBE firm. Good cause includes, at a minimum, one the following circumstances:

- The listed DBE fails or refuses to execute a written contract;
- The listed DBE fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor;
- The listed DBE fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements.
- The listed DBE becomes bankrupt, insolvent, or exhibits credit unworthiness;



## ATTACHMENT "H"

- The listed DBE is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1,200 or applicable state law;
- The Department has determined that the listed DBE is not a responsible contractor;
- The listed DBE voluntarily withdraws from the project and provides to the Department written notice of its withdrawal;
- The listed DBE is ineligible to receive DBE credit for the type of work required;
- A DBE owner dies or becomes disabled with the result that the listed DBE is unable to complete its work on the contract;
- Other documented good cause that you determine compels the termination of the DBE. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after contract award.

Before submitting its request to terminate and/or substitute a DBE to the Department, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Engineer, of its intent to request to terminate and/or substitute, and the reason for the request.

The Contractor shall give the DBE five days to respond to the notice and advise the Department and the Contractor of the reasons, if any, why the DBE objects to the proposed termination of its subcontract and why the Department should not approve the Contractor's action. If required in a particular case as a matter of public necessity (e.g., safety), the Department may approve a response period shorter than five days.

**3. Contractor DBE Program Compliance.** If the Contractor fails to meet the DBE utilization goal(s), to exert a good faith effort, or otherwise fails to comply with the DBE requirements, the Department may take further actions, as follows. The Department may determine that one of the following actions should be taken:

- a. entering into an agreement with the Contractor allowing the Contractor to cure the violation;
- b. revoking the Contractor's pre-qualification to bid or make proposals for future contracts;
- c. making a finding that the Contractor is in default of the Contract;
- d. terminating the Contract;
- e. declaring the Contractor to be in breach of Contract;
- f. withholding payment or reimbursement;
- g. determining not to renew the Contract;
- h. assessing actual and consequential damages;
- i. assessing liquidated damages or reducing fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the DBE program, or in meeting the purposes of the Contract, the costs of meeting utilization goals through additional procurements, the administrative costs of investigation and enforcement, or other factors set forth in the Contract;

## **ATTACHMENT "H"**

- j. exercising rights under the Contract to procure goods, services or construction from another contractor and charge the cost of such contract to the Contractor that has been found to be in noncompliance; or
- k. taking any other appropriate remedy.

The Contractor may also be referred to the USDOT for possible suspension or debarment as provided in 49 CFR 29 and such other sanctions as may be imposed and remedies invoked as provided under the authority of 49 CFR 26, or by rule, regulation, or order of the Commissioner or as otherwise provided by law.

**E. Apprenticeship Monitoring and Reporting.** The Contractor shall report all apprenticeship participation as part of its Employee Utilization Data submitted monthly per Subsection C.1 of this Attachment "H". The Contractor shall provide, with the final request for payment, a Certification of Compliance that:

- a. lists all New York State Department of Labor approved apprenticeship programs utilized in the execution of the Contract;
- b. certifies that all apprenticeship participation has been submitted as part of the monthly Employee Utilization Data;
- c. certifies that the requirements of the above listed apprenticeship programs have been met.

**F. Compliance Reviews.** The New York State Department of Transportation and the Department conduct annual civil rights contract compliance reviews of selected Federal-aid contracts in accordance with 23 CFR 230.409. A compliance review consists of a thorough review of all civil rights contract requirements, including Nondiscrimination in Labor/Employment, EEO, Training, and DBE requirements. A Contractor will typically not be selected for more than one compliance review per year statewide. Based on contract monitoring and/or the results of compliance review(s), the New York State Department of Transportation and the Department may conduct a review of some or all ongoing contracts with a single Contractor, regardless of funding source.

**False Claims Certification  
(31 USC §3729, NYS Finance Law Article 13)**

Under the Federal False Claims Act, 31 US Code §3729, any person or entity who knowingly presents, or causes to be presented to the Federal Government, a false or fraudulent claim for payment or approval is liable to the United State Government for a civil penalty of not less than \$5,000 and not more than \$10,000, plus three times the amount of damages the Government sustains.

Under the New York State False Claims Act, NYS Finance Law Article 13, any person or entity who knowingly presents or causes to be presented to the State of New York or Local Governments within the State of New York, a false or fraudulent claim for payment or approval is liable to the Government for a civil penalty of not less than \$6,000 and not more than \$12,000, plus three times the amount of damages the Government sustains.

"Knowingly" is defined as: (1) actual knowledge; (2) acting in deliberate ignorance of the truth or falsity of information; or (3) acting in reckless disregard of the truth or falsity of information; no proof of specific intent to defraud is required.

The Contractor to whom the above-identified contract is to be awarded does hereby certify to New York State Department of Transportation that it understands the prohibitions under the Federal and New York State False Claims Acts, and that it has not and will not submit or caused to be submitted any fraudulent claims in the submission of this bid or in connection with the above-identified contract. The Contractor further certifies that it understands retaliatory actions, against employees and officers who initiate a *Qui Tam* (public) action on behalf of the government or cooperate in the investigation of a false claim, are prohibited and are subject to an assessment of damages and penalties, under the provisions of the Federal and New York State False Claims Acts.

**UNITED STATES DEPARTMENT OF TRANSPORTATION HOTLINE**

Persons with knowledge of bid collusion (i.e., contractors, suppliers, work persons, etc.), or other questionable contract related practices (inadequate materials, poor workmanship, theft of materials, etc.), are encouraged to report such activities by calling the U.S. DOT HOTLINE. The HOTLINE number is 1-800-424-9071 and calls will be answered from 8:00 A.M. to 5:00 P.M. EST, Monday through Friday.

This HOTLINE is under the direction of the U.S. DOT's Inspector General. All information will be treated confidentially and the caller's anonymity will be respected.

**NEW YORK STATE INSPECTOR GENERAL HOTLINE**

Reports of New York State Governmental Misconduct may be made in strict confidence to the New York State Inspector General on the Toll Free Statewide HOTLINE or by writing to the Office of the State Inspector General. The Toll-Free Statewide HOTLINE telephone number is 1-800-367-4448 and calls will be answered between 9:00 A.M. and 5:00 P.M., Monday through Friday. The address of the Office of the Inspector General is P.O. Box 9, One Commerce Plaza, Albany, New York 12260.

**ATTACHMENT "I"**

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MA 2A (03-09-33)  
NYCDOT

**NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DEBARMENT HISTORY CERTIFICATION  
CONTRACT NO. \_\_\_\_\_**

I, \_\_\_\_\_, being duly sworn, certifies that,  
**(PRESIDENT OF AUTHORIZED OFFICIAL)**

except as noted herein, \_\_\_\_\_ or any person  
**(THE COMPANY)**

associated therewith in the capacity of owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of Federally Aided Projects:

is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any governmental entity;

has not been suspended, debarred, voluntarily excluded or determined ineligible by any governmental entity within the past three (3) years;

does not have a proposed debarment pending; and

has not been indicted, convicted, or had a civil judgement rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years.

**(INSERT EXCEPTIONS HERE. ATTACH SUPPLEMENTAL SHEETS AS  
NECESSARY)**

Exceptions will not necessarily result in denial of approval, but will be considered in determining responsibility. For any exception noted herein, indicate to whom it applies, initiating governmental entity and dates of action. A material false statement willfully or fraudulently made in connection with this certification may result in rendering the company not responsible for the project and any future projects, and in addition may subject the person making the false statement to criminal charges.

\_\_\_\_\_  
(PRINT NAME)

\_\_\_\_\_  
(SIGNATURE)

\_\_\_\_\_  
(TITLE)

\_\_\_\_\_  
(DATE)

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

**ATTACHMENT "J"**

MA 2A (03-09-33)  
NYCDOT

**NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DEBARMENT HISTORY CERTIFICATION  
CONTRACT NO. \_\_\_\_\_**

**GOVERNMENTAL ENTITY:**

Governmental Entities shall include any/all city, state and federal public agencies, quasi-public agencies, authorities and corporations, public development corporations, and local development corporations.

**COMPANY:**

Companies shall include the persons or affiliates for which a suspension or debarment decision has been rendered, and shall include all subsidiaries, divisions and other organizational elements thereof unless said decision is limited by its terms to one or more specifically identified individuals or organizational elements or to specific types of transactions.

**PERSON:**

Persons shall include any individual, corporation, partnership, association or legal entity however organized, including any subsidiary of the foregoing.

**SUBSIDIARY:**

Subsidiaries shall include any corporation, partnership, association or legal entity however organized, which is owned or controlled by another person.

**AFFILIATE:**

Persons are affiliates of one another if, directly or indirectly, one owns, controls, or has the power to control the other, or a third person owns, controls, or has the power to control both.

**CONTROL:**

Control shall be taken to mean the power to exercise, either directly or indirectly, a controlling influence over management, policies or activities of a person, whether through ownership of voting securities, through one or more intermediary persons, or otherwise. Indications of control shall include, but not be limited to: a person who owns or has the power to vote more than 25 percent of the voting securities of another person, or 25 percent of the total equity if the other person has no voting securities; interlocking management or ownership; identity of interests among family members; shared facilities and equipment; common use of employees; and establishment, following debarment, suspension or other exclusion decision, of any organization or entity which is to operate in the same business or activity and is to have substantially the same management, owner-ship or principal employees as the debarred, suspended or excluded person.

**LOBBYING ACTIVITY CERTIFICATION**

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions. (See Exhibit 1 annexed hereto)

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

**ATTACHMENT "J"**

**DISCLOSURE OF LOBBYING ACTIVITIES**

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

Approved by OMB

0348-0046

(See reverse for public burden disclosure.)

<b>1. Type of Federal Action:</b> <input type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance		<b>2. Status of Federal Action:</b> <input type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award		<b>3. Report Type:</b> <input type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change <b>For Material Change Only:</b> year _____ quarter _____ date of last report _____	
<b>4. Name and Address of Reporting Entity:</b> <input type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, if known:  Congressional District, if known:			<b>5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime:</b>   Congressional District, if known:		
<b>6. Federal Department/Agency:</b>			<b>7. Federal Program Name/Description:</b>  CFDA Number, if applicable: _____		
<b>8. Federal Action Number, if known:</b>			<b>9. Award Amount, if known:</b> \$		
<b>10. a. Name and Address of Lobbying Registrant</b> (if individual, last name, first name, MI):			<b>b. Individuals Performing Services</b> (including address if different from No. 10a) (last name, first name, MI):		
<b>11.</b> Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.			Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____		
<b>Federal Use Only:</b>				Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)	



## INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.  
  
(b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.

**ATTACHMENT "J"**

**DISCLOSURE OF LOBBYING ACTIVITIES  
CONTINUATION SHEET**

APPROVED BY OMB  
0346-0046

REPORTING ENTITY: \_\_\_\_\_ PAGE \_\_\_\_\_ OF \_\_\_\_\_

Authorized for Local Reproduction - Standard form LLL

**PROVISIONS RELATING TO THE NEW YORK STATE LABOR LAW,  
PREVAILING WAGES, AND THE USE OF CONVICT LABOR AND  
MATERIALS ON FEDERAL & STATE CONTRACTS**

**GENERAL PROVISIONS.** All projects funded with Federal aid and let to contract in New York State shall conform to the provisions of the New York State Labor Law, except that in accordance with the authorization in Article 4, Section 85 of the New York State Highway Law, any provisions of the above referenced Labor Law which are in conflict with the following enumerated mandatory Federal Aid highway construction compliance requirements, as contained in Section 635 of the Code of Federal Regulations, Title 23-Highways, and other Federal legislation, rules, and regulations, as referenced below, are superseded:

**CONVICT LABOR.** No convict labor, unless performed by convicts who are on parole, supervised release, or probation, shall be employed in construction or used for maintenance or any other purposes at the site or within the limits of any Federal Aid highway construction project from the time of award of the contract or the start of work on force account until final acceptance of the work by the Owner.

**SELECTION OF LABOR.** No procedures or requirements shall be imposed by any state or municipal subdivision thereof which will operate to discriminate against the employment of labor from any other state, possession, or territory of the United States, in the construction of a Federal Aid project. The selection of labor to be employed by the Contractor on any Federal Aid project shall be of his/her own choosing.

**WAGE RATES ON FEDERAL AID PROJECTS.** Attention is directed to the statutory provisions governing the prevailing rates of wages for workmen, mechanics, and laborers who are employed on this project. Section 220 of the New York State Labor Law, as amended, requires that the wages paid for a legal day's work shall be not less than the rate of wages plus the supplements prevailing at the time the work is performed, the current schedules of which shall be included in the contract documents. Such schedules may be amended or supplemented from time to time, and such amendments or supplements shall be forwarded to the Contractor.

The Federal Aid Highway Act of 1968 provides for the payment of wages at rates not less than those determined in accordance with the Davis-Bacon Act (40 USC, Section 276-a), the schedule of which shall also be included in the contract documents.

On-site materials suppliers, in addition to all subcontractors, are subject to the provisions of the Davis-Bacon Act. This will not necessarily be construed as causing the on-site material suppliers to be classified as subcontractors as part of the 50% limitation on the subcontracting of this project.

In case of a variance between (1) the schedules of prevailing rates of wages and supplements as determined under Section 220 of the New York State Labor Law, and (2) the schedule of rates of wages as determined pursuant to the Davis-Bacon Act, the Contractor shall accept and use the schedule or schedules that establish the higher rate of wages as the minimum for the workmen who are employed on the project.

## **ATTACHMENT "K"**

**CONSTRUCTION BY FEDERAL AGENCIES.** When construction on Federal Aid highways is being performed by any Federal agency under its procedures and by Federal contract, the labor standards relating to direct federal contracts shall be applicable.

**NON-DISCRIMINATION.** Employment shall be provided without regard to race, color, religion, sex, or national origin.

**CONVICT-PRODUCED MATERIALS.** The use of convict-produced materials on any Federal or Federally-assisted contract must comply with the following requirements:

a. Materials produced by convict labor may only be incorporated in a Federal Aid highway construction project if such materials have been:

1. Produced by convicts who are on parole, supervised release, or probation from a prison; or
2. Produced in a qualified prison facility and the cumulative annual production amount of such materials for use in Federal Aid highway construction does not exceed the amount of such materials produced in such facility for use in Federal Aid highway construction during the 12-month period ending July 1, 1987.

b. "Qualified prison facility" means any prison facility in which convicts, during the 12-month period ending July 1, 1997, produced materials for use in Federal Aid highway construction projects.

c. Standard State and Federal Aid contract procedures may be used to assure compliance with the requirements of this paragraph.

### **FEDERAL WAGE RATES**

The following pages contain the Federal Wage Rates in effect at the time of bidding. Current rates can be found at: [www.wdol.gov/wdol/scafiles/davisbacon/ny3.dvb](http://www.wdol.gov/wdol/scafiles/davisbacon/ny3.dvb)

General Decision Number: NY180003 04/06/2018 NY3

Superseded General Decision Number: NY20170003

State: New York

Construction Types: Building, Heavy, Highway and Residential

Counties: Bronx, Kings, New York, Queens and Richmond  
Counties in New York.

BUILDING & RESIDENTIAL CONSTRUCTION PROJECTS (includes single family homes and apartments up to and including 4 stories),  
HEAVY AND HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/05/2018
1	01/12/2018
2	01/19/2018
3	02/09/2018
4	02/16/2018
5	04/06/2018

\* ASBE0012-001 01/01/2018

	Rates	Fringes
Asbestos Workers/Insulator		
Includes application of		
all insulating materials,		
protective coverings,		
coatings and finishes to		
all types of mechanical		
systems.....	\$ 67.11	33.56
HAZARDOUS MATERIAL HANDLER.....	\$ 39.00	12.75

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BOIL0005-001 01/01/2017

	Rates	Fringes
BOILERMAKER.....	\$ 55.23	33%+24.12+a

## FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Thanksgiving Day, Memorial Day, Independence Day, Labor Day and Good Friday, Friday after Thanksgiving, Christmas Eve Day and New Year's Eve

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BRNY0001-001 07/01/2017

	Rates	Fringes
BRICKLAYER.....	\$ 60.18	26.84
MASON - STONE.....	\$ 62.67	30.59

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BRNY0001-002 07/01/2017

	Rates	Fringes
Pointer, cleaner and caulker.....	\$ 52.62	26.12

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BRNY0004-001 01/01/2018

	Rates	Fringes
MARBLE MASON.....	\$ 58.53	36.22

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BRNY0007-001 07/01/2017

	Rates	Fringes
TERRAZZO FINISHER.....	\$ 53.03	34.26
TERRAZZO WORKER/SETTER.....	\$ 54.63	34.28

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BRNY0020-001 01/01/2018

	Rates	Fringes
MARBLE FINISHER.....	\$ 46.66	34.03

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BRNY0024-001 01/01/2018

	Rates	Fringes
BRICKLAYER MARBLE POLISHERS.....	\$ 40.89	26.69

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BRNY0052-001 06/05/2017

	Rates	Fringes
Tile Layer.....	\$ 49.97	26.96

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BRNY0088-001 12/07/2015

	Rates	Fringes
TILE FINISHER.....	\$ 42.42	29.13

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CARP0001-009 07/01/2016

	Rates	Fringes
CARPENTER		
Carpenters.....	\$ 52.50	45.58
Soft Floor Layers.....	\$ 50.50	45.18

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CARP0740-001 08/01/2017

	Rates	Fringes
MILLWRIGHT.....	\$ 52.10	52.21

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CARP1556-006 07/01/2017

	Rates	Fringes
Dock Builder & Piledrivermen		
DOCKBUILDERS.....	\$ 52.63	48.96

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CARP1556-007 07/01/2017

	Rates	Fringes
Diver Tender.....	\$ 47.34	48.96
Diver.....	\$ 66.66	48.96

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CARP1556-011 07/01/2017

	Rates	Fringes
Carpenters:		
TIMBERMEN.....	\$ 48.00	48.46

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ELEC0003-001 05/10/2017

	Rates	Fringes
ELECTRICIAN		
Electricians.....	\$ 56.00	70.718%+14.75+a
Jobbing, and maintenance		
and repair work.....	\$ 28.50	51.243%+7.50+a

## PAID HOLIDAYS:

a. New Years Day, Martin Luther King, Jr.'s Birthday,  
Washington's Birthday, Memorial Day, Independence Day,  
Labor Day, Columbus Day, Election Day, Thanksgiving Day,  
the day after Thanksgiving Day, and Christmas Day

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ELEC1049-001 04/02/2017

QUEENS COUNTY

	Rates	Fringes
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Line Construction (Substation and Switching structures pipe type cable installation and maintenance jobs or projects; Railroad electrical distribution/transmission systems maintenance (when work is not performed by railroad employees) Overhead and Underground transmission/distribution line work. Fiber optic, telephone cable and equipment)

Groundman.....	\$ 32.31	21.94
Heavy Equipment Operator....	\$ 43.08	25.27
Lineman and Cable Splicer...	\$ 53.85	28.62
Tree Trimmer.....	\$ 30.09	14.12

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\* ELEV0001-002 03/17/2018

	Rates	Fringes
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## ELEVATOR MECHANIC

Elevator Constructor.....	\$ 64.48	42.103+a+b
Modernization and Repair....	\$ 50.49	40.399+a+b

## FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Good Friday, President's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

b. PAID VACATION: An employee who has worked less than 5 years shall receive vacation pay credit on the basis of 4% of his hourly rate for all hours worked; an employee who has worked 5 to 15 years shall receive vacation pay credit on the basis of 6% of his hourly rate for all hours worked; an employee who has worked 15 or more years shall receive vacation pay credit on the basis of 8% of his hourly rate for all hours worked.

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ENGI0014-001 07/01/2016

	Rates	Fringes
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POWER EQUIPMENT OPERATOR  
(HEAVY & HIGHWAY)

GROUP 1.....	\$ 92.76	31.15
GROUP 2.....	\$ 76.51	31.15
GROUP 3.....	\$ 78.96	31.15
GROUP 4.....	\$ 77.07	31.15
GROUP 5.....	\$ 75.55	31.15
GROUP 6.....	\$ 72.53	31.15
GROUP 7.....	\$ 73.90	31.15



GROUP 8.....	\$ 71.78	31.15
GROUP 9.....	\$ 70.24	31.15
GROUP 10.....	\$ 67.16	31.15
GROUP 11.....	\$ 62.73	31.15
GROUP 12.....	\$ 64.13	31.15
GROUP 13.....	\$ 64.63	31.15
GROUP 14.....	\$ 48.73	31.15
GROUP 15.....	\$ 45.27	31.15
POWER EQUIPMENT OPERATOR (PAVEMENT-HEAVY & HIGHWAY)		
Asphalt Plants.....	\$ 59.14	31.15+a
Asphalt roller.....	\$ 69.91	31.15+a
Asphalt spreader.....	\$ 71.78	31.15+a
POWER EQUIPMENT OPERATOR (STEEL ERECTION)		
Compressors, Welding Machines.....	\$ 45.34	31.15
Cranes, Hydraulic Cranes, 2 drum derricks, Forklifts, Boom Trucks.....	\$ 76.43	31.15
Three drum derricks.....	\$ 79.54	31.15
POWER EQUIPMENT OPERATOR (UTILITY)		
Horizontal Boring Rig.....	\$ 68.25	31.15
Off shift compressors.....	\$ 56.70	31.15
Utility Compressors.....	\$ 44.98	31.15

## POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Tower crane

GROUP 2: Rubber Tire Backhoes over 37,000 lbs, Track Backhoes, power shovel, Hydraulic clam shells, moles and machines of a similar type

GROUP 3: Mine hoists and crane, etc. used as mine hoists

GROUP 4: Gradalls, keystones, cranes (with digging buckets), bridge cranes, trenching machines, vermeer cutter and machines of a similar nature

GROUP 5: Piledrivers, derrick boats, tunnel shovels

GROUP 6: All drills, and machines of a similar nature

GROUP 7: Back filling machines, cranes, mucking machines, dual drum pavers

GROUP 8: Mixers (concrete w/loading attachments), concrete pavers, cableways, land derricks, power house (low pressure units), concrete pumps

GROUP 9: Concrete plants, well drilling machines, stone crushers double drum hoist, power house (other than above)

GROUP 10: Concrete mixers

GROUP 11: Elevators

GROUP 12: Concrete breaking machine, Hoists (single drum),  
load masters, locomotive and dinkies over 10 tons

GROUP 13: Vibratory console

GROUP 14: Compressors (portable 3 or more in battery), tugger  
machine (caissons), well point pumps, chum drill

GROUP 15: Boilers, (high pressure, compressors (portable,  
single, or 2 in battery, not over 100' apart), pumps (river  
cofferdam and welding machines (except where arc is  
operated by members of local 15) push button machines, all  
engines irrespective of power (power pac) used to drive  
auxilliary equipment, air, hydraulic etc.

PREMIUMS ON CRANES (Crawler or Truck):

100' to 149' boom - add .50  
150' to 249' boom - add .75  
250' to 349' boom - add 1.00  
350' to 450' boom - add 1.50

Premiums for Cranes on Steel Erection:

100' to 149' boom - add 1.75  
150' to 249' boom - add 2.00  
250' to 349' boom - add 2.25  
350' to 450' boom - add 2.75  
Tower crane - add 2.00

FOOTNOTE:

a. Paid Holidays: New Year's Day; Lincoln's Birthday;  
Washington's Birthday; Memorial Day; Independence Day;  
Labor Day; Veterans Day; Columbus Day; Election Day;  
Thanksgiving Day; and Christmas Day; provided the employee  
works one day the payroll week in which the holiday occurs.

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ENGI0014-002 07/01/2016

	Rates	Fringes
Power Equipment Operator		
BUILDING & RESIDENTIAL		
GROUP 1.....	\$ 71.85	31.15+a
GROUP 2.....	\$ 76.12	31.15+a
GROUP 3.....	\$ 69.39	31.15+a
GROUP 4.....	\$ 63.12	31.15+a
GROUP 5.....	\$ 47.26	31.15+a

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Double drum

GROUP 2: Stone derrick, cranes, hydraulic cranes, boom  
trucks

GROUP 3: 4 pole Hoist, Single Drum Hoists

GROUP 4: Fork lift, house cars, plaster (platform machine),  
plaster bucket, concrete pump and all other equipment used

for hoisting material

GROUP 5: Compressors, welding machines (cutting concrete work), paint spraying, sand blasting, pumps (with the exclusion of concrete pumps), house car (settlement basis only), all engines irrespective of power (power pac) used to drive auxiliary equipment, air, hydraulic, etc., boilers

Premiums for Cranes:

100'-149' boom - add	1.75
150'-249' boom - add	2.00
250'-349' boom - add	2.25
350'-450' boom - add	2.75
Tower cranes add	2.00

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Lincoln's Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Columbus Day, Election Day, Thanksgiving Day, and Christmas Day, provided the employee works one day in the payroll week in which the holiday occurs

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ENGI0015-001 07/01/2016

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
HEAVY AND HIGHWAY		
GROUP 1.....	\$ 65.94	32.95
GROUP 2.....	\$ 63.98	32.95
GROUP 3.....	\$ 60.69	32.95
GROUP 4.....	\$ 57.42	32.95
GROUP 5.....	\$ 39.70	32.95

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cherrypickers 20 tons and over and loaders (rubber-tired and/or tractor type with a manufacturer's rated capacity of six cubic yards and over

GROUP 2: Rubber Tire Backhoes up to and including 37,000 lbs, Basin Machines, Groover, Mechanical Sweepers, Bobcat, Boom Truck, Barrier Transport (Barrier Mover) and machines of a similar nature, Boat Captains, Boat Operators, operation of Churn Drills and machines of a similar nature, Stetco Silent Hoist and machines of a similar nature, Vac-alls, Meyers Machines, John Beam and machines of a similar nature, Ross Carriers and Travel Lifts and machines of a similar nature, Bulldozers, Scrapers, and Turn-a Pulls, Tugger Hoist (used exclusively for handling excavated material), Tractors with attachments, Hyster and Roustabout Cranes, Cherrypickers, Austin Western, Grove and machines of a similar nature, Scoopmobiles, Monorails, Conveyors, Trenchers, Loaders- Rubber-tired and Tractor, Barber Greene, Eimco Loaders and Eimco Backhoes, Mighty Midget and similar breakers and tampers, Curb and Gutter Pavers and Motor Patrol, Motor Graders and all machines of a similar nature, Locomotives ten (10) tons or under, Mini-Max,

Break-Tech and machines of a similar nature, Milling Machines, robotic and demolition machines and machines of a similar nature including Bobcat, Pile Rig Rubber-tired Excavator (37,000 lbs. and under), 2 man auger

GROUP 3: Minor Equipment such as Tractors, Post Hole Diggers and Drivers, Ditch Witch (Walk Behind), Road Finishing Machines, Rollers (five (5) tons and under), Tugger Hoists, Dual Purpose Trucks, Fork Lifts and Dempsey Dumpsters

GROUP 4: Oilers for the following equipment: (all gasoline, electric, diesel, or air operated) gradalls and concrete pumps or similarly equipment manned by two-men

GROUP 5: Oilers for the following equipment: (all gasoline, electric, diesel, or air operated) shovels, cranes (draglines), backhoes, pavers, trenching machines, gunite machines, compressors (3 or more in battery)

#### Premiums for Cranes:

100'-149' boom - add	1.75
150'-249' boom - add	2.00
250'-349' boom - add	2.25
350'-450' boom - add	2.75
Tower cranes add	2.00

#### FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Lincoln's Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Columbus Day, Election Day, Thanksgiving Day, and Christmas Day, provided the employee works one day in the payroll week in which the holiday occurs

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ENGI0015-002 07/01/2016

	Rates	Fringes
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#### POWER EQUIPMENT OPERATOR

##### BUILDING

GROUP 1.....	\$ 65.94	32.95
GROUP 2.....	\$ 63.98	32.95
GROUP 3.....	\$ 57.42	32.95

#### POWER EQUIPMENT OPERATORS CLASSIFICATIONS

##### GROUP 1: Oiler

GROUP 2: Oilers on Crawler Cranes, Backhoes, Trenching machines, Gunite machines, Compressors (3 or more in Battery)

GROUP 3: Gradalls: Concrete Pumps, Power Houses - All equipment in same is manned by two (2) men only, Driving Truck Cranes

#### FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Lincoln's Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Columbus Day, Election Day, Thanksgiving Day, and Christmas Day, provided the employee works one day in the payroll week in which the holiday occurs

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IRON0040-002 07/01/2017

BRONX, NEW YORK, RICHMOND

	Rates	Fringes
IRONWORKER, STRUCTURAL.....	\$ 50.05	72.53

IRON0046-003 07/01/2017

	Rates	Fringes
IRONWORKER METALLIC LATHERS AND REINFORCING IRONWORKERS.....	\$ 56.28	20.62

IRON0197-001 07/01/2017

	Rates	Fringes
IRONWORKER STONE DERRICKMAN.....	\$ 48.17	38.95

IRON0361-002 07/01/2017

KINGS, QUEENS

	Rates	Fringes
Ironworkers: (STRUCTURAL).....	\$ 50.05	72.53

IRON0580-001 01/01/2017

	Rates	Fringes
IRONWORKER, ORNAMENTAL.....	\$ 44.00	50.57

LAB00006-001 07/01/2016

	Rates	Fringes
LABORER (Cement and Concrete Workers).....	\$ 42.48	17.35

LAB00029-001 07/01/2017

	Rates	Fringes
Laborers: Heavy Blasters (hydraulic trac drill).....	\$ 47.15	35.49
Blasters.....	\$ 46.27	35.49
Hydraulic Trac Drill.....	\$ 41.29	35.49
Jackhammers, Chippers, Spaders, Concrete Breakers, All Other Pneumatic Tools, Walk		

Behind Self-Propelled Hydraulic Asphalt and Concrete Breaker.....	\$ 39.34	35.49
Powder Carriers.....	\$ 35.17	35.49

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LABO0078-001 12/01/2016

	Rates	Fringes
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## LABORERS

## BUILDING CONSTRUCTION

ASBESTOS (Removal,  
Abatement, Encapsulation  
or Decontamination of  
asbestos); LEAD; &  
HAZARDOUS WASTE LABORERS  
(Hazardous Waste,  
Hazardous Materials,  
Biochemical and Mold  
Remediation, HVAC, Duct  
Cleaning, Re-spray  
Fireproofing, etc).....

\$ 36.00	16.15
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LABO0079-001 07/01/2017

	Rates	Fringes
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## Laborers Building Construction

Common or General Laborer...	\$ 40.15	28.34
Demolition Laborers		
Tier A.....	\$ 38.48	26.17
Tier B.....	\$ 27.06	19.38
Mason Tenders.....	\$ 39.80	27.30

## CLASSIFICATIONS

TIER A: Responsible for the removal of all interior partitions and structural partitions that can consist of sheet rock, block or masonry. Also, all structural slab openings for ducts, mechanical, shafts, elevators, slab openings and exterior walls where the building is not being completely demolished.

TIER B: Responsible for shoveling of debris into containers, pushing containers from the inside to the outside of the building.

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LABO0147-001 07/01/2016

	Rates	Fringes
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LABORERS (FREE AIR & TUNNEL).....	\$ 72.67	47.72
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Maintenance Men, Inside Muck Lock Tenders, Pump Men,  
Electricians, Cement Finishers, Caulkers, Hydraulic Men,  
Shield Men, Monorail Operators, Motor Men, Conveyor Men,  
Powder Carriers, Pan Men, Riggers, Chuck Tenders, Track Men  
Painters, Nippers, Brakemen, Cable Men, Hose Men, Grout

Men, Gravel Men, Form Workers, Concrete Workers, Tunnel Laborers, Mole Nipper (one (1) Mole Sipper per Working Shaft per Shift for up to and including Two (2) Moles

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LABO0731-001 07/01/2016

	Rates	Fringes
LABORER		
Building, Heavy and Residential Construction		
LABORER: (Asbestos, Lead, Hazardous Waste Removal (including		
soil)/CEMENT/CONCRETE.....	\$ 41.00	38.53
UTILITY LABORER.....	\$ 40.85	38.53

Paid Holidays: Labor Day and Thanksgiving Day

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LABO1010-001 07/01/2017

	Rates	Fringes
Laborers:		
HIGHWAY CONSTRUCTION		
Fence Installer & Repairer.....	\$ 41.98	40.28
FORMSETTERS.....	\$ 45.85	40.28
LABORERS.....	\$ 41.98	40.28
Landscape Planting & Maintenance.....	\$ 41.98	40.28
Maintenance Safety Surface.....	\$ 41.98	40.28
Slurry/Sealcoater/Play Equipment Installer.....	\$ 41.98	40.28
Small Equipment Operator (Not Operating Engineer)....	\$ 41.98	40.28
Small Power Tools Operator.....	\$ 41.98	40.28

FOOTNOTES:

a. PAID HOLIDAYS: Memorial Day, Fourth of July, Labor Day, Columbus Day, Election Day and Thanksgiving Day, provided the employee has worked one (1) day in the calendar week in which the said holiday occurs.

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LABO1010-002 07/01/2017

	Rates	Fringes
Laborers-Asphalt Construction:		
Micro Paver.....	\$ 46.45	40.28
Raker.....	\$ 45.85	40.28
Screedperson.....	\$ 46.45	40.28
Shoveler (Production Paving Only).....	\$ 42.37	40.28
Small Equipment Operator (Asphalt).....	\$ 42.37	40.28

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PAIN0009-001 05/01/2017

	Rates	Fringes
GLAZIER.....	\$ 44.70	38.42
PAINTER		
Painters, Drywall		
Finishers, Lead Abatement		
Worker.....	\$ 44.10	27.02
Spray, Scaffold and		
Sandblasting.....	\$ 47.10	27.02

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PAIN0806-001 10/01/2017

	Rates	Fringes
Painters:		
Structural Steel and Bridge.	\$ 49.50	38.93

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PAIN1974-001 12/28/2016

	Rates	Fringes
Painters:		
Drywall Tapers/Pointers.....	\$ 47.82	22.66

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PLAS0262-001 08/01/2017

	Rates	Fringes
PLASTERER.....	\$ 45.58	25.87

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PLAS0262-002 08/01/2017

KINGS AND QUEENS COUNTIES

	Rates	Fringes
PLASTERER.....	\$ 45.58	25.87

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PLAS0780-001 07/01/2017

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 50.97	39.56

-----  
PLUM0001-001 07/01/2016

	Rates	Fringes
PLUMBER		
MECHANICAL EQUIPMENT AND		
SERVICE		
Any repair and/or		
replacement of the		
present plumbing system		
that does not change the		
existing roughing.....	\$ 39.92	14.41
PLUMBERS:.....	\$ 67.25	29.30



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PLUM0638-001 12/28/2016

	Rates	Fringes
PLUMBER		
SERVICE FITTERS.....	\$ 26.30	2.55
SPRINKLER FITTERS,		
STEAMFITTERS.....	\$ 61.81	48.30

Service Fitter work shall consist of all repair, service and maintenance work on domestic, commercial and industrial refrigeration, air conditioning and air cooling, stoker and oil burner apparatus and heating apparatus etc., including but not exclusively the charging, evacuation, leak testing and assembling for all machines for domestic, commercial and industrial refrigeration, air conditioning and heating apparatus. Also, work shall include adjusting, including capacity adjustments, checking and repairing or replacement of all controls and start up of all machines and repairing all defects that may develop on any system for domestic, commercial and industrial refrigeration and all air conditioning, air cooling, stoker and oil burner apparatus and heating apparatus regardless of size or type.

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ROOF0008-003 07/01/2017

	Rates	Fringes
ROOFER.....	\$ 41.50	32.37

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SHEE0028-002 07/31/2014

	Rates	Fringes
SHEET METAL WORKER		
BUILDING CONSTRUCTION.....	\$ 50.91	36.70
RESIDENTIAL CONSTRUCTION....	\$ 27.22	16.48

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TEAM0282-001 07/01/2017

	Rates	Fringes
TRUCK DRIVER		
Asphalt.....	\$ 42.68	46.9025+a
Euclids & Turnapulls.....	\$ 42.78	46.9025+a
High Rise.....	\$ 50.36	46.0925+a

## FOOTNOTES:

PAID HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Election Day, Veterans' Day (Armistice Day), Thanksgiving Day, Day after Thanksgiving and Christmas Day. Employees working two (2) days in the calendar week in which a holiday falls are to be paid for such holiday, provided that they shape each remaining workday during such calendar week.

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted

because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

**NOTICE**

The Standard Sewer And Water Main Specifications of the Department of Environmental Protection (dated July 1, 2014), Sewer Design Standards of the Department of Environmental Protection (dated (September 2007) Revised January 5, 2009), Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), and Specifications For Trunk Main Work of the Department of Environmental Protection (dated July 2014) shall be included as part of the contract documents. These said specifications and standard drawings are hereby revised under the following section headings:

- A. NOTICE TO BIDDERS
- B. REVISIONS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS
- C. REVISIONS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK

(NO TEXT ON THIS PAGE)

**A. NOTICE TO BIDDERS**

- (1) The Contractor is notified that a Notice To Proceed (NTP) date will be issued for work to commence within twenty-one (21) to thirty (30) days of Contract Registration.
- (2) The Contractor shall furnish, install, maintain and subsequently remove temporary Protective Tree Barriers. Protective Tree Barriers shall be Type B, unless otherwise directed by the Engineer, and shall be constructed and installed as shown on the Protective Tree Barrier sketch in Department Of Transportation, Standard Highway Details Of Construction, Drawing No. H-1046A, as directed by the Engineer, and in accordance with Department of Parks and Recreation requirements.
- (3) All utility locations and invert elevations are not guaranteed, nor is there any guarantee that all existing utilities, whether functional or abandoned within the project area are shown.
- (4) All existing house connections shall be maintained and supported during construction. The Contractor shall replace any existing house connection damaged as a result of the Contractor's construction operations as ordered by the Engineer at no cost to the City.
- (5) The Contractor is advised that any City owned light poles, traffic signals, street name signs, traffic signs and encumbrances including, but not limited to, underground conduit displaced as the result of the installation of the new sewers, water mains, catch basins, catch basin connections and appurtenances shall be replaced in kind and as directed by the Engineer. The cost of such work shall be deemed included in the prices bid for all items of work under this contract.
- (6) The Contractor is notified that Victaulic Style 77 Coupling is no longer acceptable for use in any steel water main work. All reference to Victaulic Style 77 Coupling within the Standard Sewer And Water Main Specifications of the Department of Environmental Protection (dated July 1, 2014), the Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), the Specifications For Trunk Main Work (dated July 2014), and the contract drawings, shall be replaced with Bolted Split-Sleeve Restrained Coupling.
- (7) The Contractor is notified that wherever the Item No. "6.52" and words "flagger", "flagperson" and "flagman" are used in the contract documents and drawings it shall mean the Item No. "6.52 CG" and the words "Crossing Guard", respectively. The Contractor is advised that until the Comptroller of the City of New York sets a prevailing wage rate for crossing guards, there are no prevailing wage rates for crossing guards.
- (8) The Contractor is notified that the fuel cost per gallon used in the formula under **Sub-Article 26.2.8** of the Standard Construction Contract for **Extra Work** will be derived from the fuel price index for the United States East Coast published weekly by the United States Energy Information Administration ("USEIA"), and available on its website at <http://www.eia.gov/petroleum/gasdiesel/>. The USEIA published cost per gallon for the applicable fuel on the East Coast for the week in which the first day of each calendar quarter during the contract term occurs (i.e., January 1<sup>st</sup>, April 1<sup>st</sup>, July 1<sup>st</sup> and September 1<sup>st</sup>) will be used in the reimbursement formula for all **Extra Work** invoiced that was performed during that calendar quarter. Should the USEIA stop publishing this fuel price index, the fuel cost per gallon will be determined by reference to a substitute index to be agreed upon by the Contractor and the City.
- (9) The Contractor is responsible for any damage to the existing street and traffic signal equipment, including underground conduits and the safety of both pedestrian and vehicular traffic for the duration of the contract.

Should any conduits, cables or foundations need repair due to the Contractor's negligent operations during construction, all work shall be performed according to NYCDOT Bureau of Traffic's Standard Drawings and Specifications at the sole expense of the Contractor.

**DATED: December 17, 2017**

**PROJECT ID.: P-1STARLP**

It is the Contractor's responsibility to secure an approved electrical contractor to perform all traffic signal work (if any). For list of approved electrical contractors, contact Mr. Michael R. LeFosse of New York City Department of Transportation at (212) 839-3799.

**NO FURTHER TEXT ON THIS PAGE**



**B. REVISIONS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS**

- (1) **Refer to Subsection 10.21 - Contractor To Notify City Departments, Page I-13:**  
**Add the following to Subsection 10.21:**

(1) N.Y.C. D.E.P., BUREAU OF WATER AND SEWERS OPERATIONS

The Contractor shall notify Mr. Peter Gordon, P.E., Chief, Linear Capital Program Management Division at the Department of Environmental Protection, 59-17 Junction Blvd., 3rd floor low rise, Corona N.Y. 11368, at least thirty (30) days prior to the start of construction.

(2) N.Y.C. DEPARTMENT OF TRANSPORTATION

The Contractor shall notify Mr. Michael Lofesse/Ghanshyam Patel - Signal/Street Lighting Operations, 34-02 Queens Blvd., Long Island City, N.Y. 11101 at (212) 839-3799/ (212) 839-3359, at least seventy-two (72) hours prior to the start of construction.

- (2) **Refer to Subsection 10.30 - Contractor To Provide For Traffic, Page I-15:**  
**Add the following to Subsection 10.30:**

(1) Traffic Stipulations:

The Contractor shall refer to Traffic Stipulations identified in the maintenance of traffic requirements under Highway Contract No. P-1STARLP.

- (3) **Refer to Subsection 71.41.4 - Specific Pavement Restoration Provisions, Page VII-67:**  
**Add the following to Subsection 71.41.4:**

(E) Specific Pavement Restoration Provisions:

- (1) Within the limits of the highway reconstruction the restoration shall be accomplished and paid for in accordance with Highway Construction Plans, Details and Specifications for Highway Project ID. P-1STARLP.

**C. REVISIONS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK**

- 1) **Refer to Part 1 – Furnishing And Delivering Steel Pipes And Appurtenances 30 Inches In Diameter And Larger, Section 11. Fabrication:, Page 4;**  
**Add the following to Section 11:**

All steel water mains shall be spiral welded pipes, and all steel water main fittings shall be fabricated from qualified spiral welded pipe. Can type pipe is not acceptable.

- 2) **Refer to Part 1 – Furnishing And Delivering Steel Pipes And Appurtenances 30 Inches In Diameter And Larger, Section 13. Special Fittings:, Page 5;**  
**Add the following to Section 13:**

The steel reducer shall have a length of seven (7) feet for every twelve (12) inches reduction in diameter.

**END OF SECTION**

**This Section consists of four (4) pages.**

**U - PAGES**

## **SECTION U (VERSION 2.0)**

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### **NOTICE**

THE PAGES CONTAINED IN THIS SECTION U VERSION 2.0 (U-PAGES) REPRESENT ADDITIONAL CONTRACT REQUIREMENTS APPLYING TO WORK PERFORMED IN THE PRESENCE OF PRIVATELY OWNED UTILITY FACILITIES.

(NO TEXT ON THIS PAGE)

SECTION U (VERSION 2.0)

DATED: May 25, 2017

1. The Contractor shall be responsible for compliance with all the provisions of the following Sections and Schedules, which are hereby made a part of the original contract documents:
  - A. "SECTION U: Additional Contract Requirements Applying to Work Performed in the Presence of Privately Owned Utility Facilities" (Pages U-3 through U-13)
  - B. Schedule U-1 (Page U-15)
  - C. Schedule U-2 listing scope of utility interferences is no longer included in City contract. Such information will be part of Interference Agreement between Utility Operator and the Contractor.
  - D. Schedule U-3 Page U-16 (as per the Private Utilities reference document for SECTION U called "CET SPECIFICATIONS AND SKETCHES", dated November 2010).
2. Each facility operator shall provide inspectors at the work site to inspect methods of interference work, verify quantities and items of Utility Work, and coordinate all phases of the facility operator operations.
3. In addition, the following statements are made to provide clarification of various paragraphs under Section U:
  - A. Section U, Paragraph 3, requires the Contractor to immediately commence negotiations with each Company for an Interference Agreement under which the Company will compensate the Contractor for any Interference Work which the Company does not elect to perform with its own forces or by specialty contractors retained by the Company. Thus the Contractor is on notice that its work under the Contract may be affected by Interference Work performed by (a) the Contractor pursuant to a separate Interference Agreement with the Company, (b) the Company, or (c) partly by each.

- B. The City has no contract with any of the Companies for work on or adjacent to the site of work under this Contract, and the Companies are not "Other Contractors" as defined for the purposes of this Contract. The Contractor is reminded, however, that pursuant to Section U, Paragraph 3, the City will not compensate the Contractor for any direct and/or indirect costs related to Interference Work, regardless of whether such Interference Work is covered by an Interference Agreement between the Contractor and the Company or is performed by the Company using its own forces or by specialty contractors retained by the Company.
- C. Section U, Paragraph 13, provides that the provisions of Section U are material provisions of the Contract and that the Contractor's failure to comply with the procedures set forth in Section U are sufficient for the Commissioner to declare the Contractor in default pursuant to Article 48 of the Contract.

Pursuant to this Section, the Contractor is informed that the Performance Bond required of the Contractor pursuant to the Contract is not deemed to guarantee performance of any of the Interference Work.

**Section U: Additional Contract Requirements Applicable to Work Performed in the Presence of Privately Owned Utility Facilities**

The Contractor is hereby notified that pursuant to the law and franchise agreements issued by the City, certain private utility and public service companies named in Schedule U-1 ("the Companies") own and/or operate surface and/or subsurface facilities within the limits of this contract. The existence of these facilities impacts the productivity of the City work called for in the contract. In order to improve coordination of the City construction with the private utility facilities owned and/or operated by the Companies named in Schedule U-1, Article 1.06.30 of the Standard Highway Specifications of the New York City Department of Transportation, Dated August 1, 2015; and/or Articles 10.15 through 10.18 of the Standard Sewer and Water Main Specifications of the New York City Department of Environmental Protection, Dated July 1, 2014; as applicable, are amended and will be implemented as follows:

**1. Means and methods for City work:**

- a) The Contractor is hereby notified that the utility interferences may impact the performance of, and/or interferes with, City work. The Contractor will be required to perform such utility work as directed by the Resident Engineer in order to clear all utility interferences from the project site as required for satisfactory completion of City work within specified contract schedule.
- b) In areas serviced by overhead lines on poles carrying electric, telecommunication and cable system, the Contractor understands and by bidding for this contract agrees that he/she will be required to perform the public work in the presence of energized electrical overhead lines and appurtenances located in areas adjacent and/or within the project area. As a consequence he/she will select means and method of construction appropriate to maintain the safety clearances required or as permitted by electric operators in order to avoid damaging the insulation or shielding of these lines and also to prevent knocking them down.

**2. *Field inspection prior to construction:***

Prior to the start of any contract work in areas serviced by overhead electric lines, and after the award to the apparent low bidder for this contract, the Contractor must request a field walk of the project area along with the operator of the overhead electrical facilities and the DDC Engineer-In-Charge. At that time the facility operator will confirm the type and condition of the overhead electrical lines and the sufficiency of their insulating properties with respect to the means and methods proposed by the Contractor. The Contractor must be prepared to describe in enough details his/her proposed means and methods of construction operations in order to anticipate the likelihood that electric lines insulation would be cut or otherwise compromised. Also such details will allow the facility operator to anticipate the need for added insulation and/or shielding of non-insulated lines.

**3. *Compensation for interference work:***

Compensation for Interference Work is a matter of adjustment between the Contractor and each private utility company located within the limits of the project area and whose utility facilities are affected by City contract work. In particular, the City will not compensate the Contractor for any direct and/or indirect costs related to Interference Work, including, but not limited to, delay, lost profit, increased overhead, or any other impact costs. Upon receipt of a Notice of Award from the City, the Contractor shall immediately commence negotiations with each of the Companies concerning the manner in which and the price for which the Contractor, through its own forces or by others hired by it, will perform and be paid by the Company for all necessary Interference Work as defined above, and at known locations of City contract work, that the Company(ies) choose(s) not to perform with its(their) own forces or by specialty contractors hired by it (them) (as per "Interference Agreement"). Specialty contractors' work is limited to (i) insulation installation and removal, (ii) live gas and steam work, (iii) cleanup and disposal of hazardous materials, (iv) splicing live electrical and telecommunications facilities, and (v) work not traditionally performed by general construction contractors.



**4. Interference Agreement:**

- a) Although the parties may negotiate an Interference Agreement in any format or manner they deem fit, the Contractor is hereby advised that the Companies have indicated to the City that they will agree to compensate the Contractor on a unit price basis for Types of Interferences encountered on this Contract in accordance to the Private Utilities reference document for SECTION U called "CET SPECIFICATIONS AND SKETCHES", dated November 2010, copy of which is available on demand.
- b) The Contractor shall notify the City upon concluding an Interference Agreement with each of the Companies.

**5. City contract work to continue without Interference Agreement :**

If, prior to the start of construction, as directed by the City's Order to work / Notice To Proceed (OTW/ NTP) date any of the Companies and the Contractor have not concluded an Interference Agreement as described above, then the City shall issue a written "48 Hours' notice to Public Corporation" as prescribed by the City of New York Administrative Code, commonly referred to as "Order-Outs" and City construction will proceed as ordered and the Contractor will be directed by the Resident Engineer (RE) to perform the City work on Time, Material and Equipment basis (T&M) as specified in standard City contract agreement Article 26.2. T&M records will include identification of types of utility facilities interfering with City work, utility facility owners, specifying the nature and quantity of any materials, plant and equipment furnished or used in connection with the performance of such work and crew size, such as: name and number of each worker employed on such work. T&M records will also indicate the hours of active time, standby time and idle time. The Company (ies) and the Contractor will maintain separate records of the actual quantity and cost of labor, materials, and equipment expended, and will provide copies of this information to the other party on a daily basis for reconciliation. These T&M records along with cost evaluations will be submitted daily to the Resident Engineer for review and approval. The total cost of City work will be based on quantity of work performed multiplied by unit price contract bid items. The total interference cost will be calculated as the difference between the total

T&M cost and total cost for City work. The Resident Engineer will conduct a monthly reconciliation session of the daily T&M records with the affected Company (ies) and the Contractor. If the Contractor and affected utility companies cannot reconcile their T&M records, by the last day of each month, then the Resident Engineer will submit the approved City's T&M records along with total cost evaluations to the DDC Director of Construction who will review these records and recommend approval and validity certification by the DDC Construction Assistant Commissioner.

- a) Copies of the DDC approved and certified T&M records will then be transmitted by the DDC to the Contractor and the utility companies. These certified records may be used by the Contractor for compensation claims against the responsible private facility owners, or may be used by any party as supporting documentation in dispute regarding compensation for performing Interference Work. The Contractor will be required to perform City work while invoices are submitted by the Contractor to the Utility companies for payment within 30 days, or while compensation disputes between the Contractor and affected company (ies) are submitted to Binding Arbitration process described in Paragraph 9.
- b) All issues related to utility work and/or delays due to compensation disputes or claims against utility companies are not allowable as justification for granting contract time extensions or delay claims against the City. The City may assess liquidated damages specified in the contract for net overall delays suffered by City contract work as a result of utility issues, disputes and claims.
- c) The standard City contract dispute resolution process specified in Article 27 "Presentation of disputes to Commissioner", of the standard City contract agreement is not applicable to any disputes related to utility work and/or compensation for such work or claim against utility companies. Utility work issues, disputes and claims may only be submitted to Binding Arbitration process described in Paragraph 9.
- d) The Contractor will notify the Resident Engineer when utility work that require the intervention of company utility specialty crews causes excessive contractor's labor and equipment standby or idleness and, thereby jeopardizing the City project

schedule. The Resident Engineer will submit the facts to the DDC Director of Construction who will recommend to the DDC Deputy Commissioner regarding the issuance of a "48 Hours' notice to Public Corporation" to the concerned utility company as authorized by the New York City Administrative Code Section 19-143 and/or Section 24-521 as applicable.

- e) Utility delays caused by utility and/or by unavailability of utility specialty crews cannot be discounted for earning any contractual bonus when such bonus clause is included in a contract. However, if such specified bonus is not earned or is disallowed by the City or if the City assesses specified liquidated damages as a result of such excessive delays, the Contractor may seek damages from the responsible utility company (ies).

**6. *Extra utility work with Interference Agreement:***

If during construction the Contractor encounters utility facilities interferences or utility scope of work that it believes is not covered by the Interference Agreement as described above, then the Contractor shall immediately notify the Company in writing, with a copy to the City, describing the nature and location of the extra work in question. The Company then has five (5) business days to investigate the conditions and then:

- a) Advise the Contractor and the City in writing that no interference with its facilities exists at the location in question, and hence that the Contractor may proceed with City work without providing for any impact from Company facilities;
- b) Advise the Contractor and the City in writing that the Interference Agreement negotiated pursuant to Paragraph 4, provides for the scope of work encountered.
- c) Advise the Contractor and the City in writing that it intends to perform the necessary utility Work with company forces or with its own contractor including, but not limited to, relocating its facility out of the way of the proposed City work. In this case, the Company shall provide a written schedule for the performance of the utility work it proposes to perform, which shall be subject to approval by

the City based on its impact to the Contractor's currently approved progress schedule. Upon approval of the Company's schedule by the City, the Contractor shall provide access to the worksite to the Company and/or any contractors hired by it to perform this utility work. If necessary, the City may grant a contract time extension for delays caused by the performance of such utility work by the company.

- d) Reasonably specify in writing the scope of work to be performed by the Contractor on behalf of the Company that is not covered under the Interference Agreement negotiated pursuant to Paragraph 5, including, but not limited to, relocating, supporting, and/or protecting the Company's facilities, and/or shifting the City facility if approved by the Resident Engineer, and/or otherwise changing its operations to work in the presence of the Company's facilities. Should the Company elect this option, it must adequately define and provide an initial price offer for the work required to be performed.

#### **7. Means and Methods for utility work:**

Upon receipt of the Company's determination pursuant to Paragraphs 6.b, or 6.d, above, the Contractor shall determine reasonable means and methods of performing the work defined by the Company. These means and methods are subject to approval of the Company, which shall not be unreasonably withheld. If, however, the Company objects to the Contractor's proposed means and methods then it shall define an alternate method of construction. Upon receipt of the Company's approval or its proposed alternate method of construction, the Contractor shall commence performance of the work defined by the Company as soon as possible, and shall perform the work in a good, workmanlike, and efficient manner, using the means and methods approved by the Company, in order to permit the City work to proceed in the most expeditious manner possible, but without imposing unreasonable and/or unnecessary costs on the Company. It is expressly understood by all parties that the City's rights pursuant to Article 4 of the Contract apply to Utility Work performed pursuant to this Section.

**8. *Disputed utility work covered by an interference agreement:***

The City Work will continue as described in Paragraph 5 above. In the event of any dispute between the Company (ies) and the Contractor regarding any issue related to the performance of, or payment for, utility work, including, but not limited to, any indirect or impact costs incurred by the Contractor due to the Utility Work and/or to the existence of facilities owned or operated by the Company (ies) on the line of the work. The Company (ies) and the Contractor hereby agree to submit to each other a "Final Offer," in writing, by certified mail. Each party shall then have three business days to consider each other's Final Offer. In the event that neither party accepts the other's Final Offer within those three days, the Company (ies) and the Contractor agree to immediately submit the dispute to binding arbitration as described in Paragraph 9. During the pendency of any arbitration, the Company (ies) and the Contractor shall maintain separate records of the actual quantity and cost of labor, materials, and equipment expended, and to provide copies of this information to the other party on a daily basis for reconciliation. Any and all disagreement with the records maintained and provided by the other, must be documented in writing to all parties. However, these records are solely for the benefit of presentation to the arbitrator, whose decision may not necessarily be based on these records and in any event is final. Both parties should be aware that the City will not confirm or deny the accuracy of any records that is not certified by DDC.. While the arbitration is pending, the Company shall pay the Contractor on a monthly basis, based on the price offered by the Company to the Contractor for the performance of the work.

**9. *Arbitration of utility work:***

The arbitration of the issues described above shall be conducted pursuant to the Construction Industry Arbitration Rules of the American Arbitration Association (hereinafter "the Rules" and "AAA") in effect on the date the arbitration is initiated except as set forth herein. The arbitration award shall be final and binding upon the parties to the arbitration and judgment upon the award may be entered in a court having jurisdiction.

- (a) Once an arbitrator(s) has been appointed by the AAA, the arbitration shall be scheduled as promptly as possible given the arbitrator(s) and the parties' schedules.
- (b) No later than seven days prior to the first arbitration hearing, Company and the Contractor shall submit to the arbitrator(s), and to each other, a summary of each party's respective position and such other information as is deemed appropriate, along with a copy of each party's Final Offer as specified in Paragraph 8.
- (c) The arbitration shall be conducted and concluded in two days.
- (d) On the morning of the first day of the arbitration, the Contractor and/or representatives shall have 3 ½ hours to make a presentation of its claim to the arbitrator. During its presentation, the Contractor shall not be permitted to produce any documents or cost records which have not already been provided to the Company. The Contractor shall be permitted to produce any analysis or description of its claim which has been prepared for the purpose of its presentation.
- (e) Company and/or its representatives shall have two hours to ask the Contractor questions about its claim and its presentation. Thereafter the arbitrator(s) shall have two hours to ask the Contractor questions about its claim and its presentation.
- (f) On the morning of the second day of the arbitration, Company and/or its representatives shall have 3 ½ hours to make a presentation of its claim to the arbitrator. During its presentation, the Company shall not be permitted to produce any documents or cost records which have not already been provided to the Contractor. The Company shall be permitted to produce any analysis or description of its claim which has been prepared for the purpose of its presentation.
- (g) The Contractor and/or its representatives shall have two hours to ask Company questions about its claim and its presentation. Thereafter the arbitrator(s) shall have two hours to ask Company questions about its claim and its presentation.
- (h) Subject to the above time limitations, the arbitrator(s) may conduct the arbitration in such manner as the arbitrator(s) deems reasonable.

- (i) The arbitrator(s) shall then have one week to select in writing, as the arbitrator ('s) award, that party's Final Offer which appears to be more reasonable, based on the presentations at the arbitration hearings.
- (j) The arbitrator shall have no discretion to grant an award other than one of the two Final Offers submitted by the parties.
- (k) Any award for work that has already been performed shall be paid on the 7<sup>th</sup> day after receipt of the arbitrator's decision, or on the 30<sup>th</sup> day after completion of the work, whichever is later. Payment for work not yet completed at the time of the arbitrator's decision shall be paid within 30 days of completion of work. Interest shall accrue from the date payment is due at the rate of 9% per annum. Either party may cause judgment to be entered in accordance with the arbitrator(s) decision in a court in the State of New York, County of New York.
- (l) The arbitrator's fees and any other costs of the arbitration shall be initially shared equally by Company and the Contractor. The non-prevailing party shall then pay all arbitrator's fees and costs of the arbitration and shall reimburse the prevailing party for its share of such fees and costs theretofore paid.
- (m) The parties may, at any time, settle any matter submitted to arbitration.

#### **10. Order-out waiver:**

The Contractor and all subcontractors hired by it, if an Interference Agreement is executed as specified between the concerned parties, agree to waive any rights they may have, if any, under law, contract or otherwise to compel the City to assert any right the City may have, including the issuance of any directives required under the New York City Administrative Code, Section 19-143 and Section 24-521, to require any or all of the Companies to maintain, repair, replace, protect, support, shift, alter, relocate, and/or remove utility facilities in connection with the work to be performed under this contract. However, nothing in this Section shall preclude the City from exercising its rights under the Law to issue such a directive to the Company.

**11. Cost of insurance:**

Each of the named Companies, at their option and if an Interference Agreement is executed as specified between the concerned parties, may be named as an additional insured on all insurance policies required to be maintained under this contract. In the event that a Company opts to be so named as an additional insured, the actual incremental cost, if any, to the Contractor of providing such insurance coverage shall be borne by that Company. The Contractor shall provide a written statement from its insurance provider documenting the actual cost of this added coverage to the Company. Under no circumstances shall the cost of insurance coverage on behalf of any Company be borne by the City. Nothing in this paragraph shall be interpreted to imply the City's acceptance of any additional responsibility or liability for any matter related to the performance of Utility Work. In particular, the Company and the Contractor bear joint and full responsibility to ensure that any Utility Work performed by the Contractor is in compliance with all applicable government and Company regulations.

**12. Cost of utility interference work:**

The Companies, by virtue of a prior agreement with the City, have agreed to perform their obligations described in this section. It is expressly understood that the cost of Utility Work or any delays cost caused by such utility work shall not be a charge against the City, but shall be a matter for adjustment between the Contractor and the Company or Companies concerned. The City and the Contractor agree that the Companies are third party beneficiaries of this Section of the contract, if an Interference Agreement is executed between the Contractor and utility company (ies). The provisions of this Section shall govern in all cases where Company property interferes with or is about to be disturbed by the City work, notwithstanding any other provision of the Contract, except for Natural Gas transmission/distribution facilities covered subject to the Gas Facility Cost Allocation Act (GFCAA) and covered separately in this contract.



**13. Default declaration:**

The Contractor agrees that the provisions of this Section are material provisions of the contract, and that the Contractor's failure to comply with the procedures set forth above are sufficient for the Commissioner to declare the Contractor in default pursuant to Article 48 of the Contract.

**14. NYS Labor Law:**

The Contractor is hereby advised that New York State Labor Law and/or, Davis-Bacon Act if federally funded, applies to public work. The work described in this Section U of the contract performed by utility company (ies) with their own forces or vendors hired by such company (ies) is not public work.

**15. Facility operators:**

The insurance requirements in Paragraph 11 of this Section U apply to: (i) additional Companies, if any, who were not named in Schedule "A" but which have executed an Interference Agreement with the Contractor for utility work; and (ii) additional coverage, if any, paid for by Utility Companies whose utility facilities are located within the project limits, that they may require for the utility work pursuant to an Interference Agreement between the Contractor and such utility company (ies).

[End]

"STANDARD UTILITY LETTER OF AGREEMENT"

(Name)

Deputy Commissioner, Infrastructure Division  
Department of Design and Construction  
30-30 Thomson Avenue  
Long Island City, NY 11101

RE: City Work Performed in the Presence of Private Utility Facilities

Project No: \_\_\_\_\_

Dear (Name):

This letter is to certify that \_\_\_\_\_, has requested the inclusion of the attached "Section U: Additional contract requirements applying to work performed in the presence of privately owned utility." The company agrees to abide by the terms of this Section U at the company's own expenses due to their facilities interferences with the Public work.

Sincerely,

\_\_\_\_\_  
By: Authorized Company Representative

\_\_\_\_\_  
Title

NOTARY PUBLIC

CERTIFIED AS TO FORM  
AND LEGAL AUTHORITY:

By: \_\_\_\_\_

**SCHEDULE U-1**

**LISTING OF COMPANIES NAMED FOR THIS CONTRACT**

<b><u>COMPANY NAME</u></b>	<b><u>CONTACT NAME</u></b>	<b><u>CONTACT TELEPHONE</u></b>
CON EDISON	THERESA KONG	212-460-4834

**SCHEDULE U-3**

(NO TEXT IN THIS SECTION)



**Department of  
Design and  
Construction**

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**INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN**

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**VOLUME 3 OF 3**

**PROJECT ID: P-1STARLP**

**BRONX RIVER GREENWAY: STARLIGHT PARK PHASE II, STAGE 2 BRIDGE THE  
CRITICAL SOUTH BRONX GAP**

**BETWEEN WESTCHESTER AVENUE AND EAST 174TH STREET**

**INCLUDING CONSTRUCTION OF EAST 172ND STREET PEDESTRIAN BRIDGE OVER  
AMTRAK (BIN#: 2-24124-0), SOUTH GREENWAY PEDESTRIAN BRIDGE OVER THE  
BRONX RIVER (BIN#: 2-26990-0), DRAINAGE, RETAINING STRUCTURES,  
GREENWAY, STREET LIGHTING, LANDSCAPING AND TRAFFIC WORK**

**Together With All Work Incidental Thereto**

**BOROUGH OF THE BRONX  
CITY OF NEW YORK**

---

*Contractor.*

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Dated \_\_\_\_\_, 20\_\_\_\_

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