Beach 108th Streetscape Improvements
Rockaway West, Rockaway Peninsula in Queens, New York

Environmental Review Record
Environmental Assessment

New York State Governor's Office of Storm Recovery

December 6, 2018

Beach 108th Streetscape Improvements

Environmental Review Record

December 6, 2018

Project Name: **Beach 108th Streetscape Improvements**

Project Location: Beach 108th Street – Between Beach Channel Drive and Shore Front Parkway
Responsible Entity: New York State Homes and Community Renewal

Responsible Agency's Certifying Officer:
Matt Accardi,
Governor's Office of Storm Recovery
25 Beaver Street, 5th Floor, New York, New York 10004
(212) 480-6265, matt.accardi@stormrecovery.ny.gov

Project Sponsor:
NYC Mayor's Office of Recovery and Resiliency
253 Broadway, 10th Floor
New York, New York 1007
Primary Contact:
Carrie Grassi
cgrassi@cityhall.nyc.gov

Project NEPA Classification:

Certification	The undersigned hereby certifies that New York State Homes and Community Renewal has conducted an environmental review of the project identified above and prepared the attached environmental review record in compliance with all applicable provisions of the National Environmental Policy Act of 1969, as amended (42 USC Sec. 4321 et seq.) and its implementing regulations at 24 CFR Part 58.
Signature	Matt Accardi

Environmental Review Prepared By:
Alicia Shultz
Senior Environmental Scientist
Governor's Office of Storm Recovery

CERTIFICATION OF NEPA CLASSIFICATION

It is the finding of the New York State Housing Trust Fund Corporation that the activities proposed in its 2019 NYS CDBG-DR project, Beach 108th Streetscape Improvements Project are:

Check the applicable classification.

☐ Exempt as defined in 24 CFR 58.34 (a).

☐ Categorically Excluded as defined in 24 CFR 58.35(b).

☐ Categorically Excluded as defined in 24 CFR 58.35(a) and no activities are affected by federal environmental statues and executive orders [i.e., exempt under 58.34(a)(12)].

☐ Categorically Excluded as defined in 24 CFR 58.35(a) and some activities are affected by federal environmental statues and executive orders.

☒ "Other" neither exempt (24 CFR 58.34(a)) nor categorically excluded (24 CFR 58.35).

☒ Part or all of the project is located in an area identified as a floodplain or wetland. For projects located in a floodplain or wetland, evidence of compliance with Executive Orders 11988 and/or 11990 is required.

For activities excluding those classified as "Other", attached is the appropriate Classification Checklist (Exhibit 2-4) that identifies each activity and the corresponding citation.

Signature of Certifying Officer

December 6, 2018
Date

Matt Accardi
Print Name

Certifying Environmental Officer
Title

CERTIFICATION OF SEQRA CLASSIFICATION

It is the finding of the New York State Housing Trust Fund Corporation that the activities proposed in its 2019 NYS CDBG-DR project, Downtown Far Rockaway Urban Design and Streetscape Reconstruction Project constitute a:

Check the applicable classification:

- ☐ Type I Action (6NYCRR Section 617.4)
- ☒ Type II Action (6NYCRR Section 617.5)
- ☐ Unlisted Action (not Type I or Type II Action)

Check if applicable:

- ☐ Environmental Impact Statement (EIS) Prepared
  - ☐ Draft EIS
  - ☐ Final EIS

Signature of Certifying Officer

December 6, 2018
Date

Matt Accardi
Print Name

Certifying Environmental Officer
Title

Beach 108th Streetscape Improvements

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

The City of New York is requesting CDBG-DR funding to construct improvements to the streetscape of Beach 108th Street, a 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive (the location of the ferry) to Shore Front Parkway, Rockaway West, Rockaway Peninsula in Queens, New York (See **Attachment 1**, Design Plans). The NYC Department of Transportation (DOT) will function as the implementing agency on behalf of the City of New York. The proposed project includes:

- Excavation and removal of existing roadway and sidewalk;
- Creation of new roadway and sidewalk (including typical asphalt for travel lanes and permeable materials for bike lanes, parking lanes, and sidewalks);
- Expand sidewalks in certain areas to provide safe pedestrian access and waiting space for potential bus shuttle stop;
- Provide continuous dedicated bicycle lanes, connecting the new ferry landing to the existing bike lane along Shore Front Parkway and the planned Rockaway Beach Blvd route;
- Upgrade all crosswalks and pedestrian ramps at the intersection of Shore Front Parkway to current ADA standards and reconfigure to allow for safe bicycle crossing and access to exiting bicycle pathway along the beach;
- Install bike racks;
- Installation of a dedicated left-turn bay and move signal infrastructure to improve the safety of the high crash intersection at Beach 108th Street and Rockaway Beach Blvd.;
- Landscaping and street furniture such as trees, benches, and bike racks;
- Storm water drainage improvements including catch basins and constructing new catch basis, old catch basins will be filled in;
- Replace water main lines and abandon existing water main line; and
- Install high efficiency LED streetlights with resilient means of backup power, such as small solar panels, that remain functional in a power outage.

To make way for the improvements, 23 trees will be removed. Grading will be required and would remove existing shrubbery and fences, as necessary. Tree removals will be avoided to the greatest extend possible by considering the curb detail at existing trees, by slight modifications in curb alignments, or by other methods so ordered by the engineer, in accordance with acceptable engineering practices.

Statement of Purpose and Need for the Proposal [40 CFR 1508.9(b)]:
The Beach 108th Streetscape project was identified in the *Rockaway West – NY Rising Community Reconstruction Plan*. During Superstorm Sandy, homes and businesses were destroyed by forceful wave action and storm surge. A safe, high quality corridor connecting the community to the ferry landing at Beach Channel Drive (the location of the ferry) and Shore Front Parkway is expected to improve the physical and economical residency of the Rockaway West community. The proposed project is fundamental to the overall recovery of Rockaway West.

Existing Conditions and Trends [24 CFR 58.40(a)]:
Rockaway West's low elevation and varied coastal protection leaves the community exposed to high risks associated with future storm events, sea level rise, and frequent flooding. Access to the community is

limited to two transportation links, which are both vulnerable and limited. The project area suffered extensive flooding and infrastructure damage as a result of Superstorm Sandy. The community continues to struggle to recover as businesses remain shuttered and the Beach 108 Street corridor remains underutilized. The ongoing struggle to recover from Superstorm Sandy is hampering the full revitalization of the area at large.

The existing condition of Beach 108th Street is unsafe for pedestrians and an uninviting site for community members, local businesses and tourists to utilize. The street is flanked by vacant lots and runs under the elevated A train. The community sees this corridor as a gateway to their beach, which is a major driver for the local economy.

The Rockaway Peninsula is geographically isolated and characteristically different from the rest of New York City. It includes residential beach neighborhoods, with small pockets of largely local retail and proximity to a wealth of natural resources; an anomaly in a City more commonly associated with global commerce and communication. Rockaway West offers residents and visitors a series of local shops, restaurants, and other small businesses, but the Community's economic vitality fluctuates seasonally. Rockaway West is made up of four neighborhoods: Neponsit, Belle Harbor, Rockaway Park, and Rockaway Beach. Rockaway West is located at the midsection of the Rockaway Peninsula, bounded by Jacob Riis Park to the west and by Beach 74th Street to the east. The Planning Area includes a large, recreational beach along the Atlantic Ocean to the south and the bayside perimeter is bound primarily by Beach Channel Drive to the north, which is lined with a mix of schools, commercial, parks, housing, and utilities, and the Rockaway Wastewater Treatment Plant.

Because of its natural resources, the Rockaway West Community has long served as an escape and summertime destination for New Yorkers. Rockaway West is predominantly residential, but includes commercial pockets and numerous natural amenities. The population of Rockaway West is diverse among many demographics and relies heavily on vehicular travel as well as public transit. Rockaway West infrastructure is aging and vulnerable.

The population of Rockaway West is diverse among many demographics. While incomes vary, the median income in Rockaway West is $50,924, in line with the citywide average of $51,000 in 2012. Nearly half of Rockaway West's population is between the ages of 35 and 64. According to the 2010 U.S. Census, over two thirds of the population in Rockaway West is White (at 69.8%); 19.1% of the population is Black; and 15.7% is of Hispanic origin. Asians constitute 3% of Rockaway West's population. Residents aged 65 and older constitute 15.9% of the population. The Community contains a mix of homeowners and renters; the homeownership rate is 40%, higher than the citywide average, but lower than many other Jamaica Bay communities. The total population in the area is 6,925.

Standard Conditions for All Projects

Any change to the approved scope of work will require re-evaluation by the Certifying Officer for compliance with the National Environmental Policy Act (NEPA), State Environmental Quality Review Act (SEQRA), and other laws and Executive Orders.

This review does not address all federal, state, and local requirements. Acceptance of federal funding requires the recipient to comply with all federal state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.

Funding Information

Estimated Total HUD Funded Amount: $13,323,552

HUD	**Project Costs:**	**$13,108,999.00**
	Project Delivery:	**$214,553.00**
	HUD Total:	**$13,323,552.00**
City Capital		**$3,819,769.00**
Project Total		**$17,143,321.00**

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]:
$17,143,321

Compliance with 24 CFR 58.5 and 58.6 Laws and Authorities

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	Based on guidance provided by the Department of Housing and Urban Development (HUD) in Fact Sheet #D1, the National Plan of Integrated Airport Systems was reviewed for civilian, commercial service airports within the vicinity of the project sites. No known civil airports are located within 2,500 feet and no known military airports are located within 15,000 feet of the project site **(Appendix A)**. No impacts would result. https://www.michigan.gov/documents/mshda/mshda_cd_nsp2_air_accident_315724_7.pdf
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	The project site is not located within a coastal barrier resource area or buffer zone **(Appendix A)**. https://www.fws.gov/CBRA/Maps/Mapper.html
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☒ No ☐	The project activities are located in a floodplain according to the 2015 NYC preliminary FEMA FIRM. Proof of National Flood Insurance Program (NFIP) insurance is not required as the proposed project does not involve insurable structures (**Appendix A**). https://msc.fema.gov/portal
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☒ No ☐	The proposed project is located in Queens, which is within a nonattainment area for inhalable particulate matter (PM2.5), a marginal nonattainment area for the eight-hour ozone standard and considered an area source for

		hazardous air pollutants (HAPs) emissions (**Appendix A**). Construction of the proposed project would not generate new vehicular traffic; therefore, no exceedances of the National Ambient Air Quality Standard (NAAQS) associated with carbon monoxide (CO) or particulate matter (PM) would occur. The proposed project would not adversely affect the State Implementation Plan (SIP). Any air quality impacts would be short-term and localized during construction and therefore no significant impacts to air quality would occur. A temporary increase in emissions will result from equipment used during construction, however, no permanent increased emissions will result through this Program which is aimed at flood mitigation. Therefore, a conformity and screening analysis was performed according to the requirements of 40 CFR 93, Subpart B (federal general conformity regulations). The screening analysis assumed that the emissions intensity per expenditure (tons per dollar) for the proposed project will be similar to the average intensity of the construction sector in the county. The proposed project with a projected construction expenditure substantially lower than the average construction de minimis expenditure will not exceed de minimis emissions levels for general conformity purposes. Based on the screening analysis, the construction expenditure threshold for Queens County is $410 million before a project may be expected to exceed the de minimis expenditure thresholds requiring further analysis or conformity determination (**Appendix B**). The estimated construction cost of the proposed project is approximately $17,143,321 (total all funds), which is less than the $410 million threshold; thus, further analysis is not required for a conformity determination. Construction will not generate significant levels of vehicular traffic; therefore, no exceedances of the National Ambient Air Quality Standard (NAAQS) associated with carbon monoxide (CO) or particulate matter (PM) is anticipated to occur. No siting of any new source of air pollutants is proposed and the project activities will not adversely affect the State Implementation Plan (SIP). Any air quality impacts will be short-term and

		localized during construction and, therefore, no significant adverse impacts to air quality are anticipated. Additionally, the following measures are recommended: **Idling Restriction**. In addition to adhering to the local law restricting unnecessary idling on roadways, on-site vehicle idle time will also be restricted to five minutes for all equipment and vehicles that are not using their engines to operate a loading, unloading, or processing device (e.g., concrete mixing trucks) or otherwise required for the proper operation of the engine. **Utilization of Newer Equipment**. EPA's Tier 1 through 4 standards for non-road engines regulates the emission of criteria pollutants from new engines, including PM, CO, NOx, and hydrocarbons (HC). All non-road construction equipment with a power rating of 50 horsepower (hp) or greater will meet emissions standard to the extent practicable. **Best Available Tailpipe Reduction Technologies**. Non-road diesel engines with a power rating of 50 hp or greater and controlled truck fleets (i.e., truck fleets under long-term contract with the Project) including but not limited to concrete mixing and pumping trucks will utilize the best available tailpipe (BAT) technology for reducing DPM emissions. Diesel particulate filters (DPFs) have been identified as being the tailpipe technology currently proven to have the highest reduction capability. Construction contracts will specify that all diesel non-road engines rated at 50 hp or greater will utilize DPFs, either installed by the original equipment manufacturer (OEM) or retrofitted. Retrofitted DPFs must be verified by EPA or the California Air Resources Board (CARB). Active DPFs or other technologies proven to achieve an equivalent reduction may also be used. EPA, Nonattainment Areas for Criteria Pollutants https://www.epa.gov/green-book Ozone specific: https://www3.epa.gov/airquality/greenbook/hbca.html#Ozone_8-hr.2008.New_York

		EPA, Recent Updates: Federal Register Notices Published or Effective After May 31, 2018 http://www.epa.gov/airquality/greenbook/adden.html
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6		
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☒ No ☐	The project area is located within the boundary of the New York State Coastal Zone (**Appendix A**). Pursuant to the Coastal Zone Management Act, a Federal Consistency Assessment Form and an analysis of the applicable policies was sent to the Department of State (DOS), Division of Coastal Resources for review. DOS responded with no objections to funding the project (**Appendix C**). The proposed project area is also situated within the New York City Coastal Zone Boundary and was subject to New York City Waterfront Revitalization Program consistency review. A WRP Consistency Assessment Form and supporting documentation was submitted to the New York Department of City Planning (**See Appendix D**). http://www.dos.ny.gov/opd/atlas/ http://www.nyc.gov/html/dcp/html/wrp/wrpcoastalmaps.shtml On October 26, 2018, the New York City Department of City Planning, acting as the City Coastal Commission, stated "Based on the information submitted, the Waterfront Open Space Division, on behalf of the New York City Coastal Commission, having reviewed the waterfront aspect of this action, finds that the actions will not substantially hinder the achievement of any Waterfront Revitalization Program (WRP) policy and provides its finding to the New York State Department of State (DOS). Please note that the proposed action(s) are subject to consistency review and approval by the New York State Department of State (DOS) in accordance with the New York State Coastal Management Program. This determination is only applicable to the information received and the current proposal. Any additional information or project modifications would require an independent consistency review. For your records, this project has been assigned WRP # 18-148." (**See Appendix D**). https://docs.dos.ny.gov/opd-

		lwrp/LWRP/New%20York%20City/IndexAmd2.html http://www.dos.ny.gov/opd/atlas/ http://www.nyc.gov/html/dcp/html/wrp/wrpcoastalmaps.shtml
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6		
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	It is HUD policy, as described in 24 CFR Part 50.3(i) and 24 CFR 58.5(i)(2), that "all property proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gasses, and radioactive substances, where a hazard could affect the health and safety of occupants or conflict with the intended utilization of the property." (See 24 CFR 50.3(i)(1).) Since the Program is aimed at flood mitigation through road raising, drainage improvements, and bulkhead installation, repair or reconstruction at roads in developed, residential neighborhoods and/or commercial/ industrial areas, hazards are not anticipated to affect the health and safety of occupants or conflict with the intended utilization of the project site for its current use. The EPA and NYSDEC data bases were accessed to view records of sources of hazardous materials, contamination, toxic chemicals and gasses, and radioactive substances. Several EPA permitted facilities were identified within a mile radius of the project area. These facilities do not pose a threat to the health and safety of occupants or conflict with the intended utilization of the property. One facility was found to be in violation of an air permit which does not pose a threat to the health and safety of occupants or conflict with the intended utilization of the property. See **Appendix E** for a summary of those facilities. **Appendix A** provides a figure showing the location of a bulk storage petroleum facility and NYSDEC environmental remediation sites. One NYSDEC remediation site was found. The remediation was completed in 1996; no known residual environmental issues. One petroleum storage facility was identified west of the project area. This facility has no known releases that would be a threat to the health and safety of occupants or

		conflict with the intended utilization of the property. **NYS Superfund Site** **<u>K - Rockaway Park Manufacturing Gas Plant</u>** One NYS superfund site is located adjacent to the project area at Beach Channel Drive & Beach 108th Street. The site is the former K - Rockaway Park Manufacturing Gas Plant (MGP). The Rockaway Park MGP site is a 9-acre parcel bounded by Beach Channel Drive to the north, Beach 108th Street to the east, and Rockaway Freeway to the west and south. The parcel was the site of a large MGP from the late 1800's through the 1950's. That historic use led to coal tar contamination escaping from the gas holders, tar separator, and various independent disposal areas in the north and west portions of the site, including the bulkhead area north of Beach Channel Drive. The primary contaminants of concern known at this time are benzene, toluene, ethylbenzene, xylene (BTEX) and polycyclic aromatic hydrocarbons (PAHs). Investigations indicate a plume of dense non-aqueous phase liquid (DNAPL) proceeds vertically underneath the site roughly 110 feet and to the north of the site. A Record of Decision was issued for the site in October 2004. The remedy included a large-volume soil removal and two subsurface barrier walls to prevent further off-site migration of coal tar. Remedial construction began on the site in October of 2008 and is ongoing. The remedial action on the main site is complete. This work removed contaminated soils across the site to a depth of 8 feet. A clean soil cover was placed at the surface of the site. Also, a barrier wall was placed at the northern edge of the site and DNAPL collection wells were installed at several points across the site. Since the site is fenced and covered by two feet of clean sand and gravel, people will not come into contact with site related soil and groundwater contamination unless they dig below the surface. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air

		spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. Environmental sampling indicates soil vapor intrusion is not a concern for off-site buildings (**Appendix E)**. **NYSDEC Brownfields** **<u>Gas Drive Station</u>** A NYSDEC Brownfields Cleanup Program site is located adjacent to the MGP, the Gas Drive Station at 112-01 Beach Chanel Drive (**see Appendix A**, Figures, Environmental Remediation Sites). During reconstruction activities at the Mobil Site in May 1995, several construction workers were overcome with fumes and were hospitalized. Subsequently, air monitoring and soil sampling were conducted by Mobil, NYSDEC, NYS Department of Health, NYC Department of Environmental Protection and the US Environmental Protection Agency. The surficial waste primarily appears to be coal purification waste. The chemicals found in the waste include sulfur, lead, cyanides and naphthalene. The site has two distinct waste layers separated by one foot to two feet of sandy material. The top layer consists of purification waste and is approximately two feet in thickness. The lower layer contains coal ash/ coal tar like materials and varies from six inches to one foot in thickness. Analysis of this material showed the presence of Polycyclic Aromatic Hydrocarbons. Mobil excavated the top two feet layer of visually contaminated wastes and all underlying stained soils from the site to the depth of groundwater. The excavated soils were shipped off-site for disposal and the excavated areas were backfilled by two to three feet of clean soil and covered by cement concrete and/or asphalt layer. Groundwater is five feet below grade and is shown to be saline. After soil removal, a groundwater monitoring program was undertaken and indicated no contamination. Site has been cleaned up. No environmental concerns remain (**Appendix E)**.
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6		
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	On September 5, 2018, a formal request was submitted to the NYSDEC Natural Heritage Program (NHP) for records of threatened or endangered species in the Program area. NYSDEC responded that there are “no records of rare or state-listed

		animals or plants, or significant natural communities at the project site. Given the location and nature of the proposed work, we have no concerns regarding any impacts to rare or state-listed animals or significant natural communities in the general vicinity of the project site." (**Appendix F**, NHP Correspondence). The USFWS lists the following protected species as having the potential to occur within the Program area: • Roseate Tern (Sterna dougallii dougallii) (Endangered) • Piping Plover (Charadrius melodus) (Threatened) • Red Knot (Calidris canutus rufa) (Threatened) • Seabeach Amaranth (Amaranthus pumilus) (Threatened) The project activities will have no effect on these species because the actions will have no impact on the habitat in which they depend. The project area is developed with roads and infrastructure that does not provide habitat for these species. According to the USFWS Resource List, there are bird species protected by the Migratory Birds Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) that could potentially be affected by project activities (**Appendix G**). However, the project does not provide suitable habitat for migratory birds. It is anticipated that any transient passerine birds that may potentially be located in the vicinity of the project area during construction will temporarily leave the area due to noise and disturbance (See **Appendix G**, USFWS Correspondence). The project area is located in substantially developed areas, with no contiguous forested/ wooded habitat. Additionally, there are no records of rare or state-listed animals or plants, or significant natural communities anticipated in the vicinity of the project area. As such, the proposed action will have no effects on the above species.
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	Not applicable. This criterion is applicable to HUD-assisted projects that involve new residential construction, conversion of non-residential buildings to residential use, rehabilitation of residential properties that increase the number of

		units, or restoration of abandoned properties to habitable condition. The project does not include these activities. Further, the project does not involve the introduction of bulk storage of hazardous materials
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6		
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	Not applicable. This criterion is applicable to HUD-assisted projects that involve new residential construction, conversion of non-residential buildings to residential use, rehabilitation of residential properties that increase the number of units, or restoration of abandoned properties to habitable condition. The project does not include these activities.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☒ No ☐	Based on best available data, the 2015 NYC Preliminary FIRM, the project location is located in 100-year floodplain (**See Appendix A**). A 5-step Floodplain Management Plan pursuant to 24 CFR 55.20 was completed (See Appendix H). Pursuant to 24 CFR §55.12(a)(4), steps 2, 3, and 7 of the 8-step process for floodplain management do not apply to projects involving the improvement of existing nonresidential buildings and structures, in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and are in good standing, provided that the action does not meet the thresholds for "substantial improvement" under §55.2(b)(10) and that the footprint of the structure and paved areas is not significantly increased. Drainage structures and roads are not an insurable structure under the NFIP. The proposed project will not have any impact on the 100-year flood plain. The drainage system upgrades which would reduce the accumulation of storm water on the roadbeds. None of the construction will have any impact on potential coastal flooding elevations. The project will not have any adverse impact on wetlands vegetation. Additionally, potential environmental impacts during construction will be mitigated by erosion and sediment control measures. GOSR has determined that the proposed project will have no direct or indirect adverse impacts to

		the floodplain, waterway or wetlands and decided to proceed with the proposed project. Project implementation is conditioned upon issuance of applicable local, state and federal permits and the project will be constructed in accordance with the permit conditions, as regulated by the ACOE, NYSDEC and municipality.

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.6		
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800; Tribal notification for new ground disturbance.	Yes ☐ No ☒	A consultation letter was sent to the New York State Office of Parks, Recreation and Historic Preservation (SHPO) on September 19, 2018. A response was received on October 5, 2018, which stated that SHPO has determined that no historic properties will be affected by this undertaking (**Appendix H**). The project does not include new ground disturbance. Therefore, no consultations were sent to tribes per the Programmatic Agreement Among Federal Emergency Management Agency, The New York State Historic Preservation Office, The New York State Office of Emergency Management, The Delaware Nation, The Delaware Tribe of Indians, The Shinnecock Nation, The Stockbridge-Munsee Community Band of Mohicans, The New York City Landmarks Preservation Commission and the Advisory Council on Historic Preservation as a result of Hurricane Sandy, May 2013.
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.6		
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☒ No ☐	The proposed project would cause temporary increases in noise levels during construction that will be mitigated by complying with local noise ordinances using construction best practices. Construction activities would result in localized increases in noise and vibration during the construction period. Impacts on community noise levels during construction could include noise and vibration from construction equipment operation, and noise from construction and delivery vehicles traveling to and from the work site. 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 also depend on the distance from the construction site.

		Construction noise is regulated by the recently amended New York City Noise Control Code and by USEPA noise emission standards for construction equipment. These federal and local requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emissions standards. Construction noise is also regulated by the requirements of the New York City Noise Control Code (also known as Chapter 24 of the Administrative Code of the City of New York, or Local Law 113) and the DEP Notice of Adoption of Rules for Citywide Construction Noise Mitigation (also known as Chapter 28). All work will be completed in accordance with an approved noise mitigation plan from DEP that complies with the City's Noise Code as well as Federal requirements. Therefore, no significant noise impacts would occur as a result of the proposed project. The proposed project is not proposing any actions that include a noise-sensitive use. The proposed activities are not expected to generate excessive noise during the short-term construction work and will adhere to local noise control standards. The proposed project will be completed in accordance with all applicable federal, state and local permit requirements and conditions. Therefore, the project activities will not generate any significant adverse noise impacts.
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.6		
Sole Source Aquifers Safe Drinking Water Act (SDWA) of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☒ No ☐	The project activities are located within the boundaries of the Brooklyn-Queens Sole Source Aquifer (SSA) (**Appendix A**). The project activities include road and sidewalk improvements and replacement of water lines in developed mixed residential and commercial areas where water services have already been established, and there is no effect is anticipated on sole source aquifers. The project activities were reviewed according to the non-housing project activity initial screen criteria form included in **Appendix I**. A formal sole source aquifer review and consultation with the EPA is not required. http://www.nassaucountyny.gov/3054/11581/Ground-Water-Protection

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	The project is not located adjacent or within a wetland area (**Appendix A**)
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	The proposed project is not in proximity of a listed Wild and Scenic River (**Appendix A**) (http://www.dec.ny.gov/permits/32739.html)

ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☒ No ☐	The proposed site is located in a potential environmental justice area identified by the New York State Department of Environmental Conservation (see **Appendix A**). This project will not raise environmental justice issues and has no potential for new or continued disproportionately high and adverse human health and environmental effects on minority or low-income populations. http://www.dec.ny.gov/docs/permits_ej_operations_pdf/ulsterej.pdf

Appendices

A – Figures
B – Confirmatory Determination
C - New York State Department of State Consistency Assessment and Response
D - NYC WRP Consistency Assessments and Responses
E - Environmental Database Results
F – NYS DEC Natural Heritage Correspondence
G – USFWS Correspondence
H – SHPO Correspondence
I – Sole Source Aquifer – Non-Housing Screening Criteria
J – 5-Step Floodplain Management Plan

Attachments

1 - Design Plans

Environmental Assessment Factors [24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27] Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits of approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

Impact Codes: Use an impact code from the following list to make the determination of impact for each factor.
(1) Minor beneficial impact
(2) No impact anticipated
(3) Minor Adverse Impact – May require mitigation
(4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
LAND DEVELOPMENT		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	The character of project area is primary commercial and office buildings with mixed industrial and manufacturing and public facilities and institutions surrounded by residential (see **Appendix A**). The project does not require zoning changes. The proposed project would not result in a change in land use different from surrounding land uses. The project is within City's Waterfront Revitalization Program and is compatible with the program. The project does not include any new buildings or any substantial physical alteration to the streetscape or public space near the proposed project that is not currently allowed by existing zoning. The proposed project is consistent with applicable PlaNYC goals and initiatives. With regard to PlaNYC's open space goals, the proposed project would create new open space and community focal points by installing new lights, benches, and bike racks. Overall, the proposed project would be consistent with PlaNYC and supportive of its relevant policies and initiatives. The proposed road reconstruction is an important element of the NYC Special Initiative for Rebuilding and Resiliency (SIRR) initiative on Community and Economic Recovery to ensure the long-term activation of the beach and waterfront. The project activities will enhance public access throughout the project area by creating more reliable and resilient travel routes. The project activities are intended to provide enhanced flood, hurricane and stormwater control, and increase the economic and environmental resiliency of community.

		According to the Rockaway West NY Rising Community Reconstruction Plan, this project would provide support for ongoing ferry service to Rockaway West, a significant transportation amenity valued widely across the Community, and would support new development at the large National Grid site at Beach 108th Street and Beach Channel Drive, expanding parking and offering an opportunity to revitalize this important corridor and the area surrounding the Rockaway Ferry landing. By improving the public realm of Beach 108th Street, this project would build on proposed efforts to support permanent Rockaway Ferry service and development of the National Grid site to support and revitalize the area. A bus circulator service in Rockaway West would improve access to the transformed new Rockaway Ferry stop, providing improved transportation options while supporting ferry ridership and revenues. The project activities will be completed in accordance with BMPs and all applicable federal, state, and local permits and their requirements and conditions, which will be obtained prior to commencing work. Thus, the individual projects will incorporate mitigative measures and BMPs to reduce construction-related pollutants
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	2	Urban land, sandy substratum, 0 to 3 percent slopes (61.8 %); Urban land-Verrazano complex, 0 to 3 percent slopes (17.7%); Urban land, reclaimed substratum, 0 to 3 percent slopes (14.7%); Breeze loamy sand, 0 to 3 percent slopes (5.8%) (**Appendix A**). All work will be completed in accordance with the Storm Water Pollution Prevention Plan (SWPPP) that minimizes the pollutants entering the storm sewer system and local waterbodies by complying with New York's State Pollutant Discharge Elimination System (SPDES) General Permit for Storm Water Runoff from Construction Activity. The SWWPP will describe in detail "Soil and Erosion and Sediment Controls" and at a minimum include, but not be limited to, the following: construction-limiting fence, staked straw bales, reinforced silt fence, sediment trap with filter, sediment filter, portable sediment tank, storm drain inlet protection, and sandbags. Following review and approval of the SWPPP, a qualified professional will ensure that all the appropriate control measures specified in the SWPPP are implemented during construction. Should any project-generated stormwater runoff contravene state water quality standards, immediate steps will be taken to correct the cause of the violation and prevent any additional pollutants from entering the storm sewer system. Prior to starting construction, the contractor must certify in the site logbook that the SWPPP meets all federal, state, and local erosion and sediment control requirements. During construction, a qualified professional must conduct a site inspection at least once a week and also after each rainfall of 0.5 inches or more and must also perform a final site inspection to certify that the project area has been stabilized using either vegetative or structural methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. All soil and erosion and sediment control

		practices must also be located in the existing street bed and may not intrude into nearby parkland unless approved by the New York City Department of Parks & Recreation (DPR). With these measures in place, the proposed project would not result in any significant adverse impacts due to construction runoff. The project activities will enhance existing public access throughout the project area by creating more reliable and resilient travel routes. The project activities are intended to provide enhanced flood, hurricane and stormwater control, and increase the economic and environmental resiliency of these affected communities to future climate-related events. This project will improve access to transportation routes for the local community, provide greater protection for property in vulnerable areas, and reduce the harm caused by storm events. Furthermore, the drainage improvements will protect life and property during extreme weather events, protect and secure evacuation access routes, and enable better emergency access to critical services (food and pharmacies). The project activities will be completed in accordance with BMPs and all applicable federal, state, and local permits and their requirements and conditions, which will be obtained prior to commencing work. Thus, the individual projects will incorporate mitigative measures and BMPs to reduce construction-related pollutants.
Hazards and Nuisances including Site Safety and Noise	2	Improving the Beach 108th Street streetscape will have intrinsic benefits by upgrading the pedestrian experience of the corridor and contributing a unique sense of place to the beach-going experience. Investing in the physical improvement of this corridor would improve economic resiliency and create a safer and more inviting atmosphere for both residents and businesses. The temporary ferry landing at Beach 108th Street and Beach Channel Drive, a hub of commuter activity since Sandy remains bleak, uninviting and unsafe for pedestrians. The improvements will create slower traffic for safety, promote of mass-transit, pedestrian and bike traffic improvements that promote health and environmental benefits. At a minimum, a Health and Safely Plan prepared for the construction phase of the project should identify the possible locations of and risks associated with potential contaminants that may be encountered during construction, and the administrative and engineering controls that would be utilized to avoid potential impacts on health and safety. The potential noise impacts of the proposed project were not evaluated relative to HUD noise criteria, because the project would not create a new noise-sensitive land use. Therefore, no impact with regard to HUD noise criteria would result from the proposed project. Construction noise is regulated by the recently amended New York City Noise Control Code and by USEPA noise emission standards for construction equipment. These federal and local requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emissions standards.

Energy Consumption	2	The proposed project would not generate any new residents or employees and would involve only minimal demands for energy associated with new light fixtures. Therefore, the proposed project would not create any significant adverse impacts on energy, and no further analysis is necessary.
SOCIOECONOMIC		
Employment and Income Patterns	1	The project will not alter the employment and income patterns in the area. The proposed project would not displace residential populations or businesses, nor would it introduce development different from existing uses in the surrounding area, create a retail concentration, or affect conditions within a specific industry. Consequently, the proposed project would not result in any significant adverse impacts to socioeconomic conditions The proposed project is intended to mitigate the economic challenges faced by the community in its continued recovery effort from Superstorm Sandy.
Demographic Character Changes, Displacement	1	The proposed project would not displace residential populations or businesses, nor would it introduce development different from existing uses in the surrounding area, create a retail concentration, or affect conditions within a specific industry. Consequently, the proposed project would not result in any significant adverse impacts to socioeconomic conditions. Neighborhood character is considered to be an amalgam of the various elements that define a community's distinct personality. These elements include land use, urban design, visual and historic resources, socioeconomics, traffic, and noise. The proposed project would not have any significant adverse or moderate impacts to the neighborhood. Therefore, the proposed project would not result in significant adverse impacts to neighborhood character.
COMMUNITY FACILITIES AND SERVICES		
Educational and Cultural Facilities	2	The project would not eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, health care facilities, day care centers, police stations, or fire stations
Commercial Facilities	2	There are numerous commercial facilities within a half mile of the project. The proposed project would not result significantly increase the demand on existing commercial establishments.
Health Care and Social Services	2	The project would not increase the demand for social services as the location and the area will continue to be served by existing social service providers.
Solid Waste Disposal / Recycling	2	Construction debris would primarily be comprised of materials from the rehabilitation and renovation of roads. These materials include wood, piping, asphalt, and other materials commonly found in roadway construction. These wastes would be deposited in accordance with DOT transport regulations. Potentially hazardous material will be disposed of in accordance with State and Federal regulations and may include contaminated soils and asbestos. Manifests for the waste disposal will be maintained. The project would temporarily increase the amount of solid waste generated during construction.

Waste Water / Sanitary Sewers	2	The proposed project is limited to drainage, walkway and roadway rehabilitation and the repair and would not introduce any new development that would generate waste water. All work will be completed in accordance with the Storm Water Pollution Prevention Plan (SWPPP) that minimizes the pollutants entering the storm sewer system and local waterbodies by complying with New York's State Pollutant Discharge Elimination System (SPDES) General Permit for Storm Water Runoff from Construction Activity. The SWPPP will describe in detail a Soil and Erosion and Sediment Controls.
Water Supply	2	There will be no impacts to the water supply. The proposed project will not result in substantial new demand for water since it is not adding new residents or businesses to the service area
Public Safety - Police, Fire and Emergency Medical	1	The proposed project is limited to drainage, roadway and sidewalk rehabilitation and the repair and reconstruction, replacement and would not introduce any new development that would generate demand for police, fire, or emergency medical services. The reorganization of public transportation will improve safety and provide a more hospitable pedestrian circulation and the improved lighting will provide additional safety.
Parks, Open Space and Recreation	1	The proposed project will not have any adverse effects to open space. The improvements are anticipated to provide better resources of recreation by providing better lighting and walking areas.
Transportation and Accessibility	1	Construction of the proposed project would include a Maintenance and Protection of Traffic (MPT) plan that would be implemented during construction for the purposes of minimizing traffic delays and interruptions to traffic and transit (bus) service during the construction phase. The project would also need a plan for maintaining access to properties and to maintain pedestrian circulation to minimize impacts on local property owners and businesses for the duration of construction. The proposed project would not generate any new residents or employees and thus does not meet any of the minimum development density thresholds. With the proposed project, streets would be reconstructed with green infrastructure, new sidewalks, public space improvements, and access and site improvements
NATURAL FEATURES		
Unique Natural Features, Water Resources	2	The project area is located within the Jamaica Bay Watershed. Jamaica Bay is a 31-square-mile water body with a broader watershed of approximately 142 square miles, which includes portions of Brooklyn, Queens, and Nassau County. The bay is a diverse ecological resource that supports multiple habitats, including open water, salt marshes, grasslands, coastal woodlands and maritime shrublands, brackish and freshwaters. These habitats support 91 fish species, 325 species of birds, and many reptile, amphibian, and small mammal species. As required, all work will be completed in accordance with the Jamaica Bay Watershed Protection Plan.

		Queens County is located over the Brooklyn-Queens SSA. The action threshold for significant increases in impervious surfaces are considered to be 30 percent for Safe Drinking Water Act purposes in Region II, based on HUD's CPD-14-017, and the total change in impervious surfaces across the project sites would not exceed this threshold. Therefore, no adverse impacts on this SSA would occur. The project does require a SPDES General Stormwater Permit and would comply with local and state stormwater management codes and requirements to prevent any construction-related runoff to the storm system.
Vegetation, Wildlife	2	All construction activities would occur within existing improvements, utilities, roads, and sidewalks. Improvements will not result in additional ground disturbance beyond what has already been disturbed. As a result, the proposed project would have no potential to affect endangered or threatened species. No significant impacts to endangered or threatened species would result. The New York State Department of Environmental Conservation indicated no records of concern for rare or state-listed animals or plants, or significant natural communities at or near the project site. The U.S. Fish and Wildlife Service acknowledged GOSR's No Effect Determination.
Other Factors	2	Beyond those already addressed, no other factors were identified or evaluated for the proposed project.

Additional Studies Performed:

List of Sources Consulted [40 CFR 1508.9(b)]**:**

Rockaway West, NY Rising Community Reconstruction Plan, March 2014.

List of Agencies Consulted [40 CFR 1508.9(b)]**:**

Federal Aviation Administration (FAA)
Federal Emergency Management Agency (FEMA)
United States Environmental Protection Agency (USEPA)
United States Fish and Wildlife Service (USFWS)
National Marine Fisheries Service (NMFS)
United States Department of Agriculture (USDA)
Natural Resources Conservation Service (NRCS)
United States Department of Interior (USDOI)
National Parks Service (NPS)
United States Geological Survey (USGS)
New York State Department of Environmental Conservation (NYSDEC)
Natural Heritage Program (NHP)
New York State Department of State (NYSDOS)
NYC Environmental Protection
New York City Department of City Planning, New York City Waterfront Revitalization Program

List of Permits Obtained or Required or Involved Agencies:

Compliance with New York City Department of Environmental Protection (NYCDEP) Bureau of Sewers
Compliance with New York City Department of Environmental Protection, Bureau of Water Supply Specifications for Fire Hydrants
Compliance with New York City Noise Control Code and USEPA noise emission standards for construction equipment
Compliance with NYSDOT Standard Specification for Construction and Best Management Practices
Storm Water Pollution Prevention Plan (SWPPP)
New York's State Pollutant Discharge Elimination System (SPDES) General Permit for Storm Water Runoff from Construction Activity
Maintenance and Protection of Traffic (MPT) Plan

Public Outreach [24 CFR 50.23 & 58.43]**:** On December 7, 2018, a combined Notice of Finding of No Significant Impact and Intent to Request Release of Funds will be published in The Rockaway Wave. Any individual, group or agency may submit written comments on the Environmental Review Record. Comments should be submitted via email, in the proper format, on or before December 24, 2018 at YSCDBG_DR_ER@nyshcr.org. Written comments may also be submitted at the following address, or by mail, in the proper format, to be received on or before December 24, 2018: Governor's Office of Storm Recovery, 25 Beaver Street, 5th Floor, New York, NY 10004.

All comments must be received on or before 5pm on December 24, 2018, or they will not be considered.

Cumulative Impact Analysis [24 CFR 58.32]**:**

The proposed project is not expected to trigger cumulative impacts that would degrade important natural resources, socioeconomic resources, human health, recreation, quality of life issues, and cultural and historic resources. The proposed project would result in positive cumulative impacts to 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive (the location of the ferry) to Shore Front Parkway.

Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]

The City of New York is requesting $13,323,552 in CDBG-DR funding to construct improvements to the streetscape of Beach 108th Street, a 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive (the location of the ferry) to Shore Front Parkway.

There are no alternatives to the project activities to meet the above objects of the proposed project.

No Action Alternative [24 CFR 58.40(e)]:

Without implementing the project, the Rockaway West would not be resilient and revitalized. Energy, traffic and stormwater resiliency would not be improved, and pedestrian safety and mobility would not be increased. Public transportation would not be improved or increased.

In October 2012, Sandy unleashed destruction at a tremendous scale and complexity, causing devastating damage. Homes and businesses in Rockaway West were destroyed by forceful wave action and storm surge, which ripped the iconic boardwalk from its planks and inundated the entire Community with rising waters from both the ocean and the bay. A tour of the Rockaway West neighborhood today reveals a boardwalk

far from fully repaired, partially rebuilt homes, shuttered businesses, and residents still struggling to adjust to a new normal.

Access to the Community is limited to a few key transportation links, which are both vulnerable and limited. The Rockaway Ferry has expanded and enhanced commuter transit, but its sustainability is unknown and it is not fully utilizing tourist opportunities. Further, small businesses and natural resources offer potential to draw visitors and build economic resiliency, but the Community has struggled to recover and revitalize the economy after Sandy.

The combination of high tide and Superstorm Sandy slamming into New York City created a massive surge of water that devastated many of the exposed coastal communities of the Rockaway West. Wave action from the ocean damaged structures and inundated streets and properties. Offshore buoys recorded wave heights of over 30 feet and while waves would be slightly reduced at the shoreline, these were the highest recorded heights, exceeding record waves during Hurricane Irene.

Rockaway West's low elevation and varied coastal protection leaves the community exposed to high risks associated with future storm events, sea level rise, and frequent flooding. Access to the community is limited to two transportation links, which are both vulnerable and limited. The project area suffered extensive flooding and infrastructure damage as a result of Superstorm Sandy. The community continues to struggle to recover as businesses remain shuttered and the Beach 108 Street corridor remains underutilized. The ongoing struggle to recover from Superstorm Sandy is hampering the full revitalization of the area at large.

Under the No Action Alternative, the retail and storm recovery in the Rockaway West community would not improve. A better quality of street experience in Beach 108th Street, the specific location of these streetscape improvements, will attract new businesses and shoppers, improving the mix and quality of retail in the area and the overall recovery of the area. The project is in line with the primary objective of the NYC Regional Economic Development Council's Strategic Plan to "Create a Pro-Growth, Pro-Jobs environment" and support small businesses. The proposed project's funding of streetscape improvements on primary retail corridors would assist in community recovery by increasing both resiliency and promoting economic revitalization by creating a more inviting atmosphere for both residents and businesses. These elements will increase transportation options, improve drainage after both common and extreme storm events, and provide alternative power sources during an emergency. Non-grid light sources will facilitate a variety of other recovery efforts, as well as support public safety.

Summary of Findings and Conclusions:

The proposed project location serves as a retail corridor, transportation hub, and central business district for neighboring residential communities. Superstorm Sandy inundated several coastal communities in Rockaway West, destroying businesses, housing stock and displacing residents. The goal of these planning and design efforts is to revitalize the economic base of the Rockaway West.

The comprehensive street improvement project will provide resiliency with little permanent impact on the environment. The area of construction will occur at locations that have been previous disturbed, determined to not have historic significance, are outside high hazard areas and wetlands, and do not provide habitat for state and federal threatened and endangered species. The project will not result in a significant impact on the quality of the human environment.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Any change to the approved scope of work will require re-evaluation by the Certifying Officer for compliance with NEPA and other laws and Executive Orders.

This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal state and local laws. Failure to obtain all appropriate federal, state, and local environmental permits and clearances may jeopardize federal funding.

Law, Authority, or Factor	Mitigation Measure
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	During construction, air quality is most affected by the increase in airborne particulates (dust). This increase is sporadic and temporary in nature and would be most noticeable in the area immediately adjacent to construction. The impacts can be minimized by the use of dust control provisions found in the NYSDOT Standard Specification for Construction and due to the implementation of standard best management practices (BMP) that control dust and other emissions during construction. Generally, it is recommended to conduct construction rehabilitation to ensure acceptable air quality during these temporary activities, including through minimization of volatile organic compounds and nitrogen oxides emissions. This includes operation of gas-powered construction equipment to avoid prolonged idling. It involves fugitive dust management in rehabilitation. It is also desirable to source low-VOC materials and inventory and energy star efficient equipment purchase, as practicable.
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	All work will be completed in accordance with the Storm Water Pollution Prevention Plan (SWPPP) that minimizes the pollutants entering the storm sewer system and local waterbodies by complying with New York's State Pollutant Discharge Elimination System (SPDES) General Permit for Storm Water Runoff from Construction Activity. The SWWPP will describe in detail a "Soil and Erosion and Sediment Control: and at a minimum include, but not be limited to, the following: construction-limiting fence, staked straw bales, reinforced silt fence, sediment trap with filter, sediment filter, portable sediment tank, storm drain inlet protection, and sandbags. There may be clearing of street trees associated with the construction of the proposed project. During the final design stage, a tree restoration plan would be prepared with a

	proposed number and locations of replacement trees to be planted, and this tree restoration plan would be included in the project's contract drawings. Street trees would be replaced. With these measures in place, it is not expected that there would be any significant adverse impacts to open space and street trees as a result of project construction.

Determination:

☒ **Finding of No Significant Impact** [24 CFR 58.40(g)(1); 40 CFR 1508.27]
The project will not result in a significant impact on the quality of the human environment.

☐ **Finding of Significant Impact** [24 CFR 58.40(g)(2); 40 CFR 1508.27]
The project may significantly affect the quality of the human environment.

Preparer Signature: _____Date: December 6, 2018

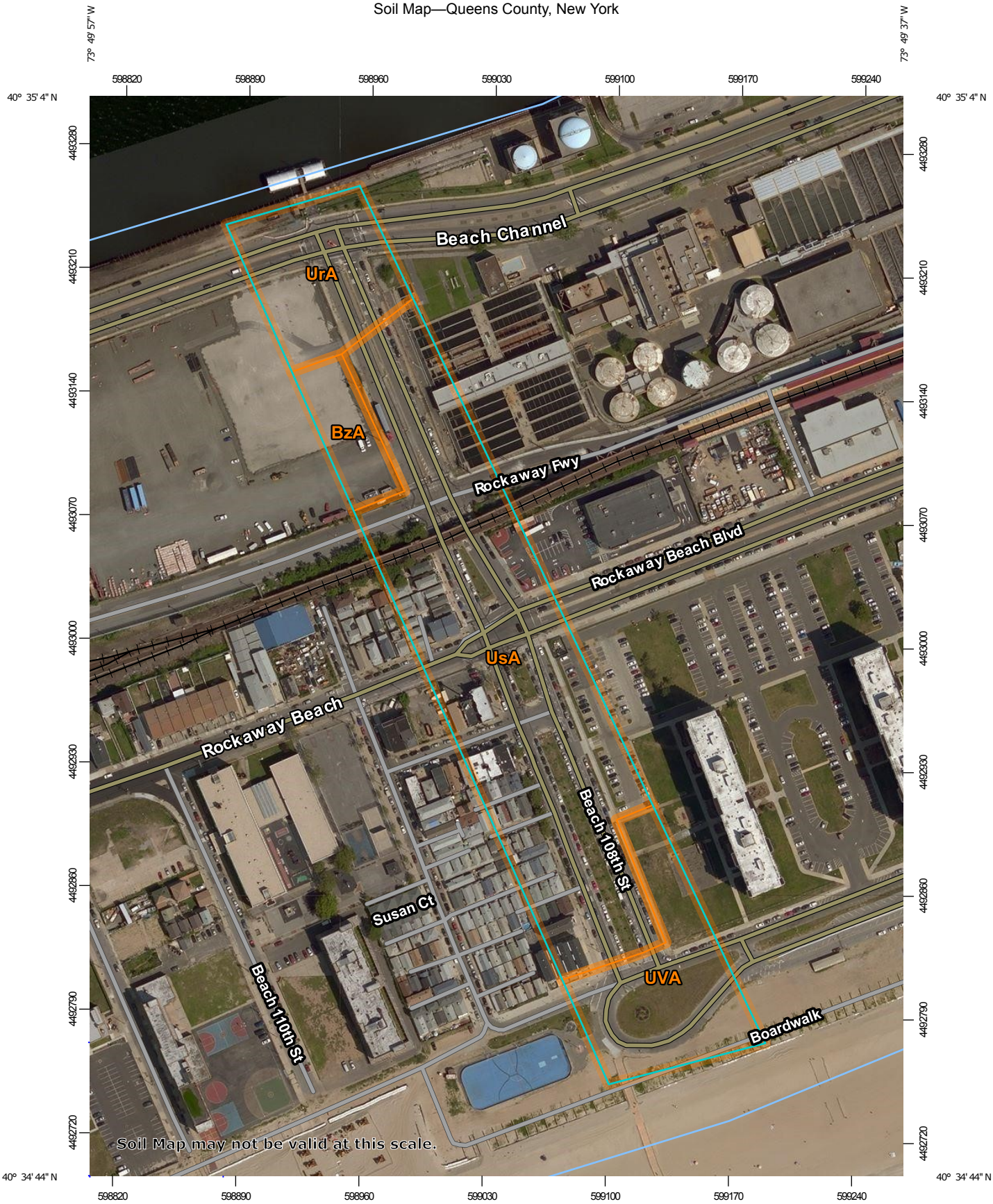
Name/Title/Organization: Alicia Shultz, Senior Environmental Scientist, GOSR

Certifying Officer Signature: _____Date: December 6, 2018

Name/Title: Matt Accardi, Certifying Environmental Officer

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Appendix A



Map Scale: 1:2,980 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 40 80 160 240

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Queens County, New York
Survey Area Data: Version 8, Sep 3, 2018

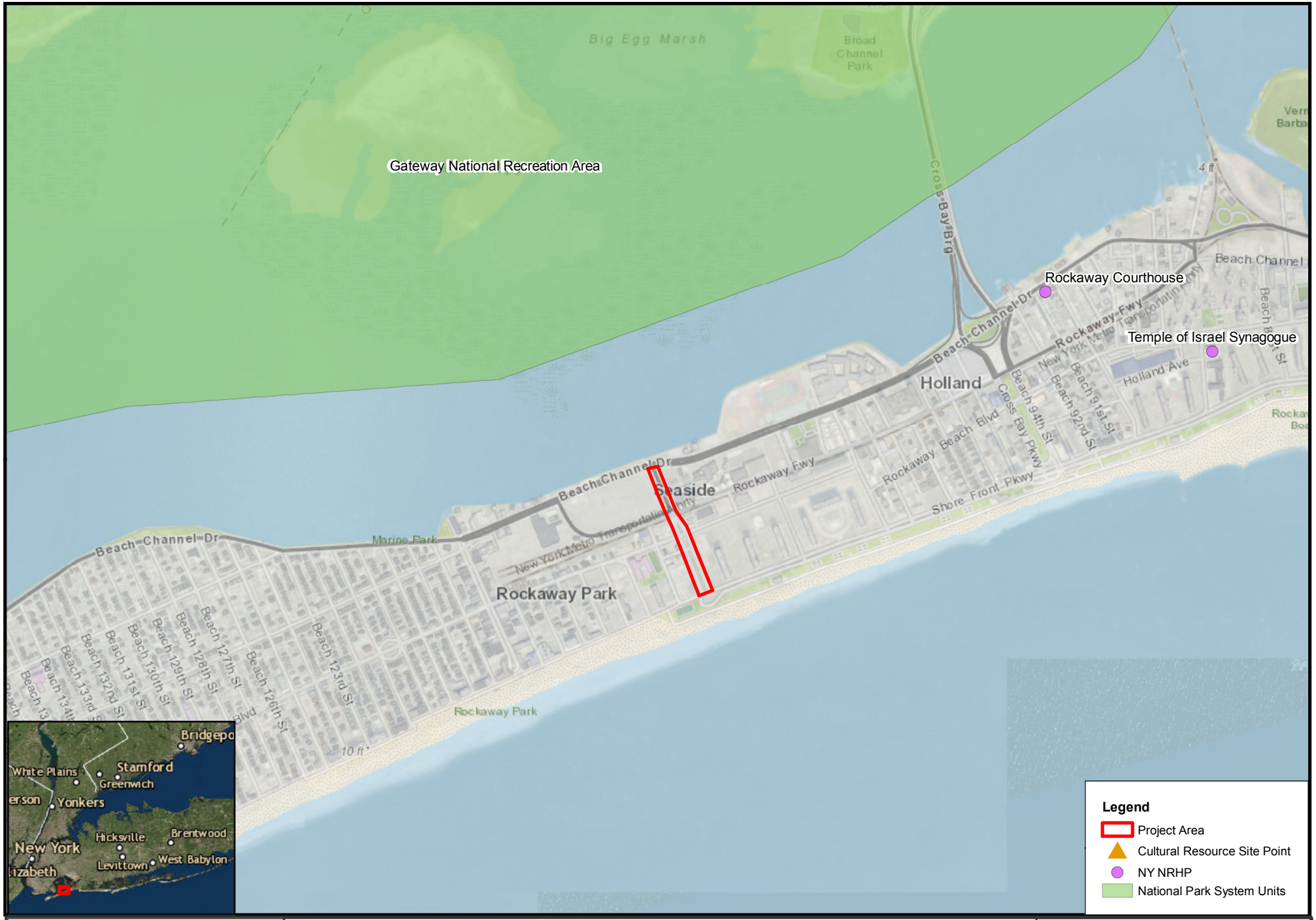
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 26, 2011—Aug 15, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BzA	Breeze loamy sand, 0 to 3 percent slopes	0.6	5.8%
UrA	Urban land, reclaimed substratum, 0 to 3 percent slopes	1.6	14.7%
UsA	Urban land, sandy substratum, 0 to 3 percent slopes	6.9	61.8%
UVA	Urban land-Verrazano complex, 0 to 3 percent slopes	2.0	17.7%
Totals for Area of Interest		**11.2**	**100.0%**



0 0.175 0.35 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

Governor's Office of Storm Recovery

Drawn By: ASL | Version: 1.0 | Date:9/11/2018

FEMA data uses NAVD88*

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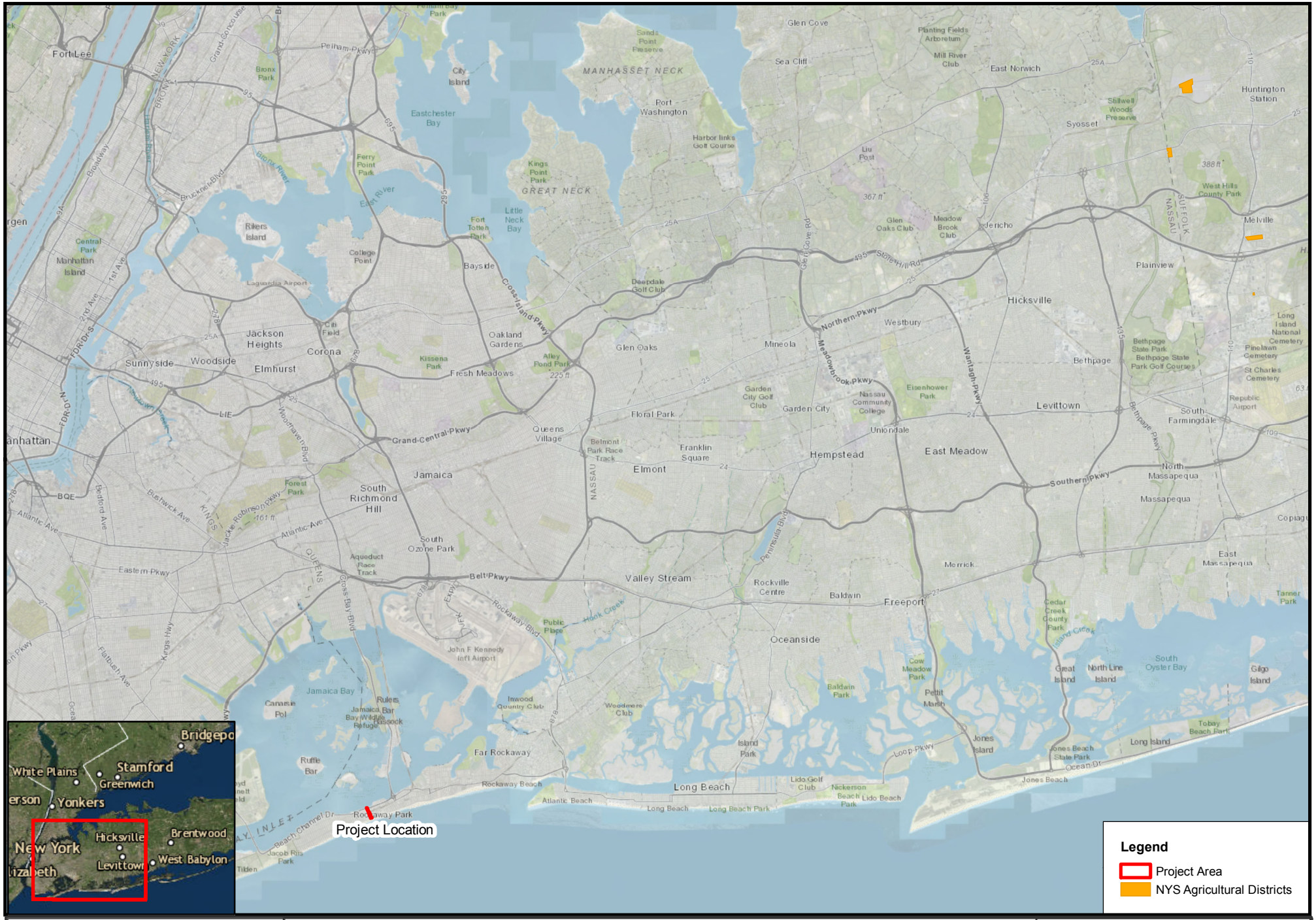

0 2.25 4.5 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

Governor's Office of Storm Recovery

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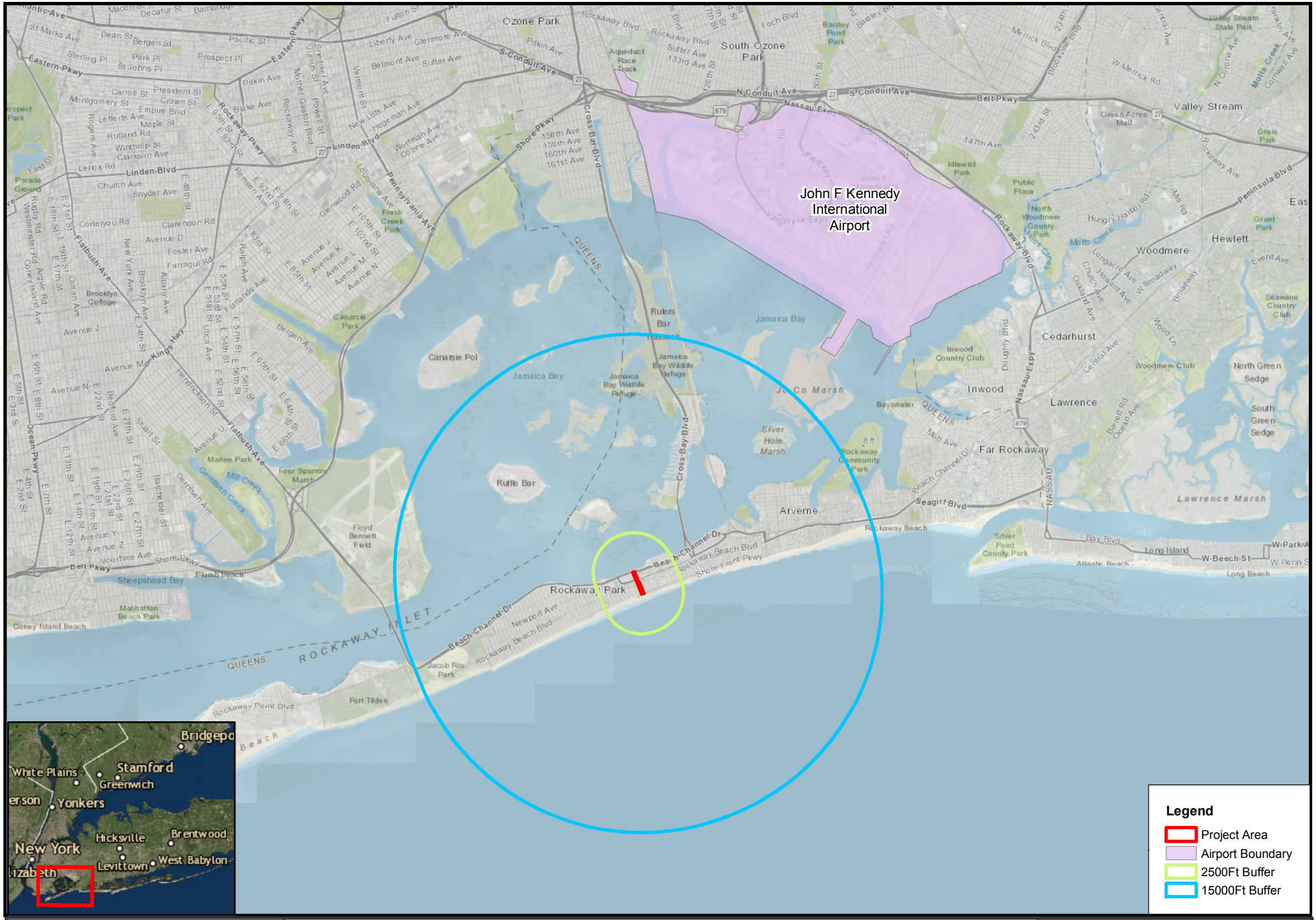

0 1 2 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York
Legend
Project Area
Coastal Barrier Resource System
Seaside
Rockaway Park
Rockaway Beach
Beach 108th St
Beach Channel Dr
Rockaway Fwy
New York Metro Transportation Authority
Rockaway Beach Blvd
Shore Front Pkwy
Beach 109th St
Beach 110th St
Beach 111th St
Beach 112th St
Beach 113th St
Beach 114th St
Beach 115th St
Beach 116th St
Beach 117th St
Beach 118th St
Newport Ave
Beach 105th St
Beach 104th St
Beach 102nd St
Beach 101st St
Seaside Ave
JHS 180 Playground
MTA-Beach 105th St
Waterside Children's Studio School
PS 225 Plgd
Rockaway Beach Boardwalk
MTA-Rockaway Park Beach 116th St
Marine Park
Bridgepo
White Plains
Stamford
Greenwich
Yonkers
New York
Hicksville
Brentwood
Levittown
West Babylon
0 ft.
9 ft
10 ft
0 0.05 0.1 Miles
Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse
Governor's Office of Storm Recovery
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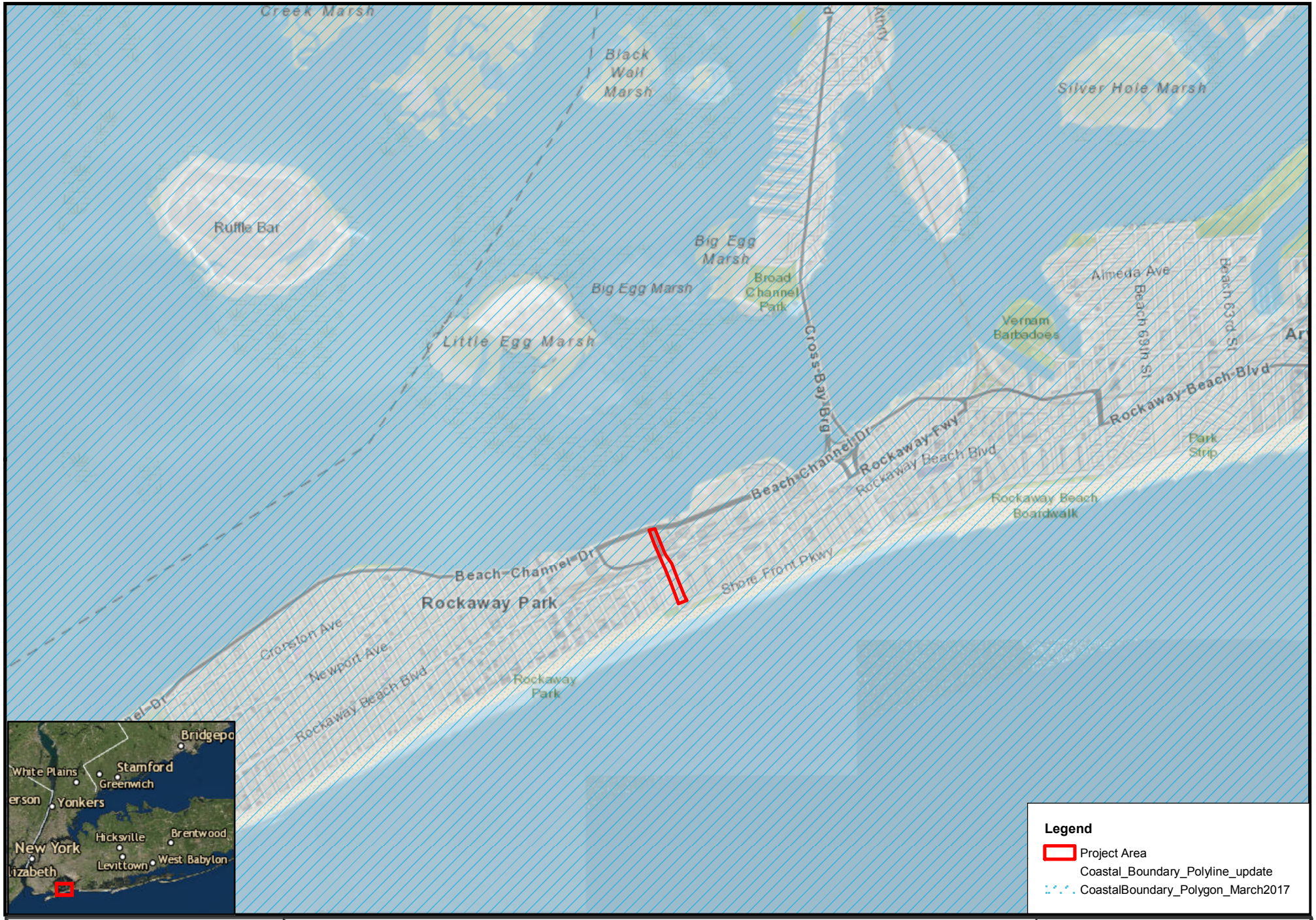

0 0.3 0.6 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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0 0.05 0.1 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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0 0.05 0.1 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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0 0.075 0.15 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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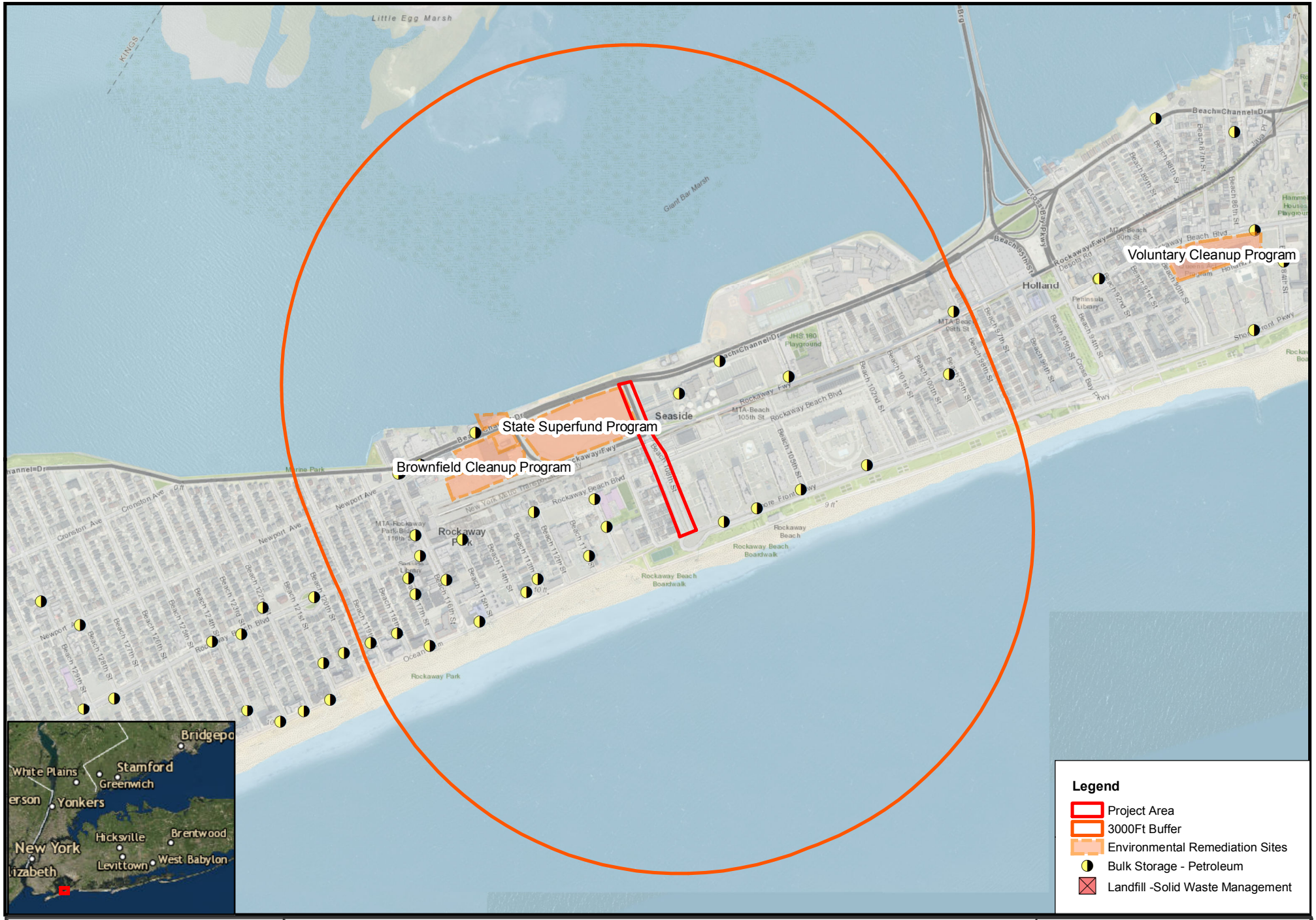

0 0.15 0.3 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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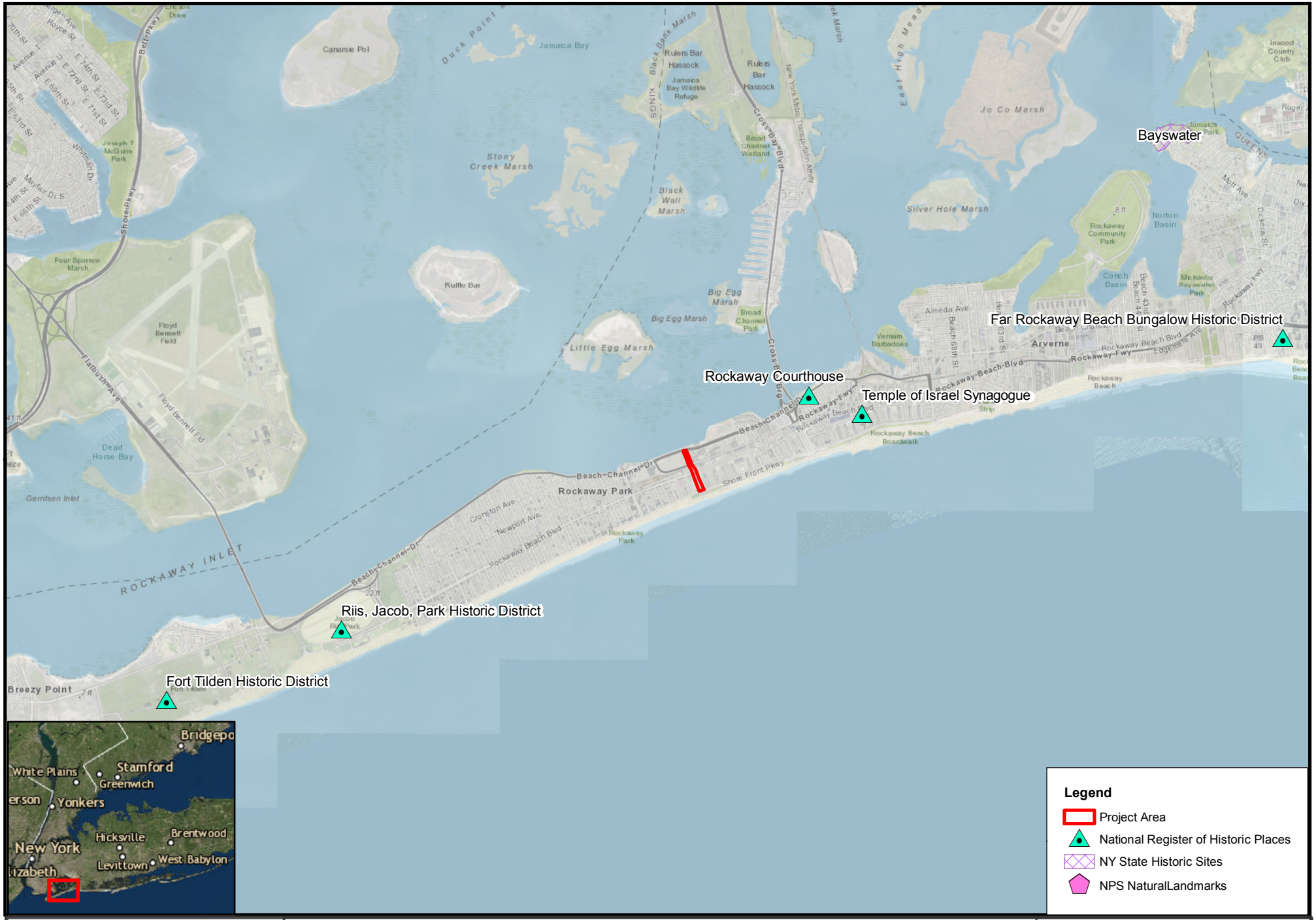

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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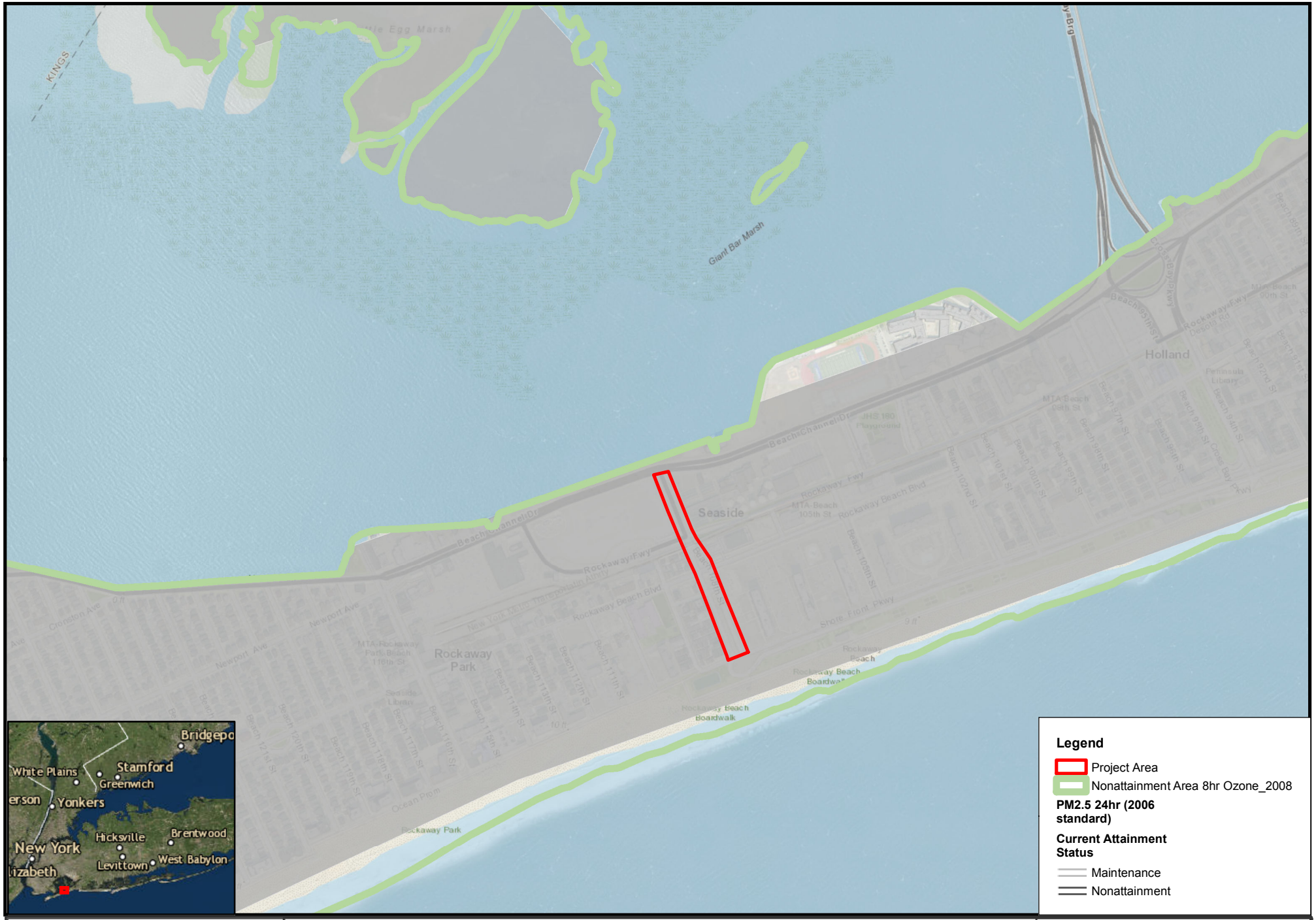

0 0.125 0.25 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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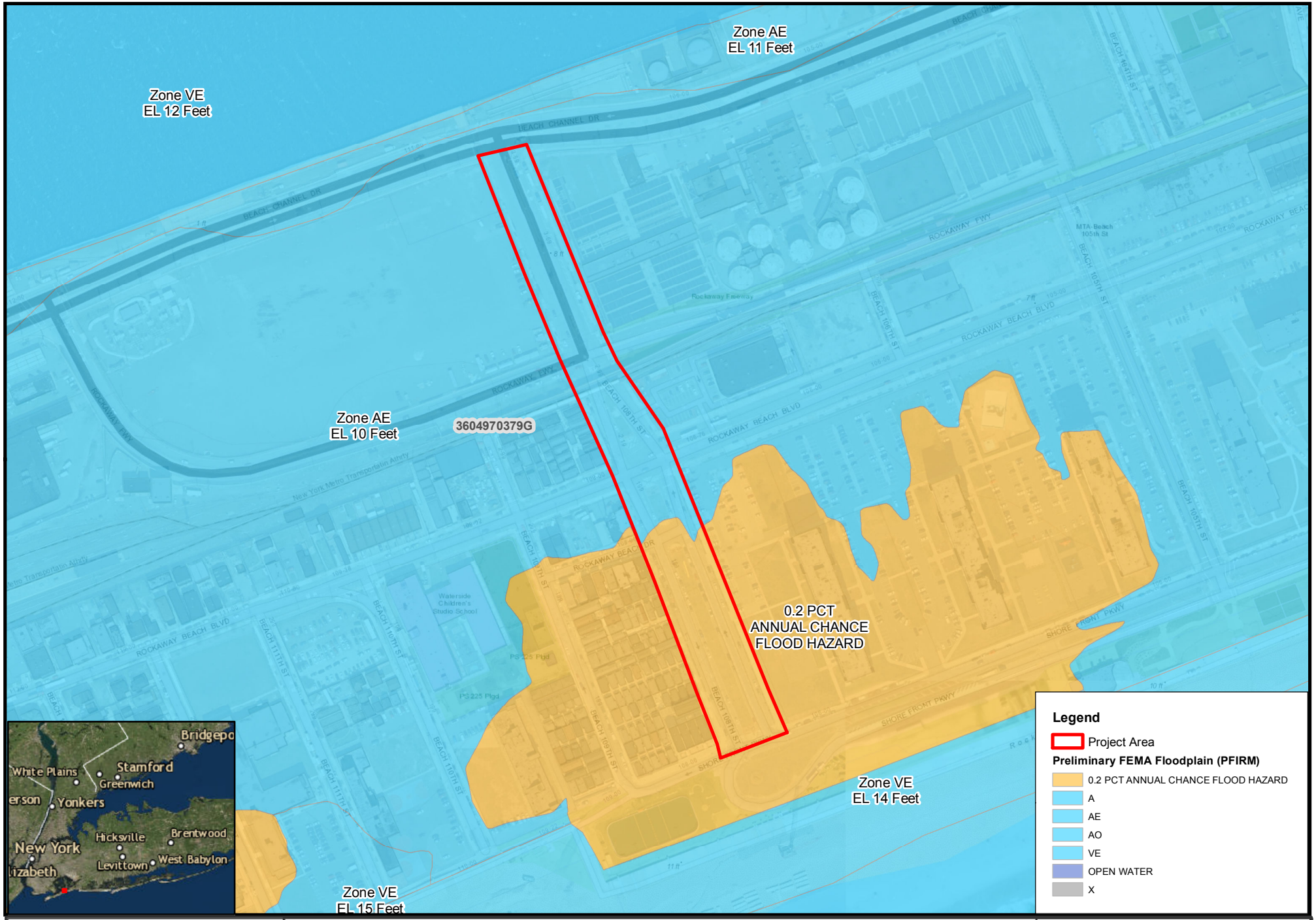

0 0.035 0.07 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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0 3 6 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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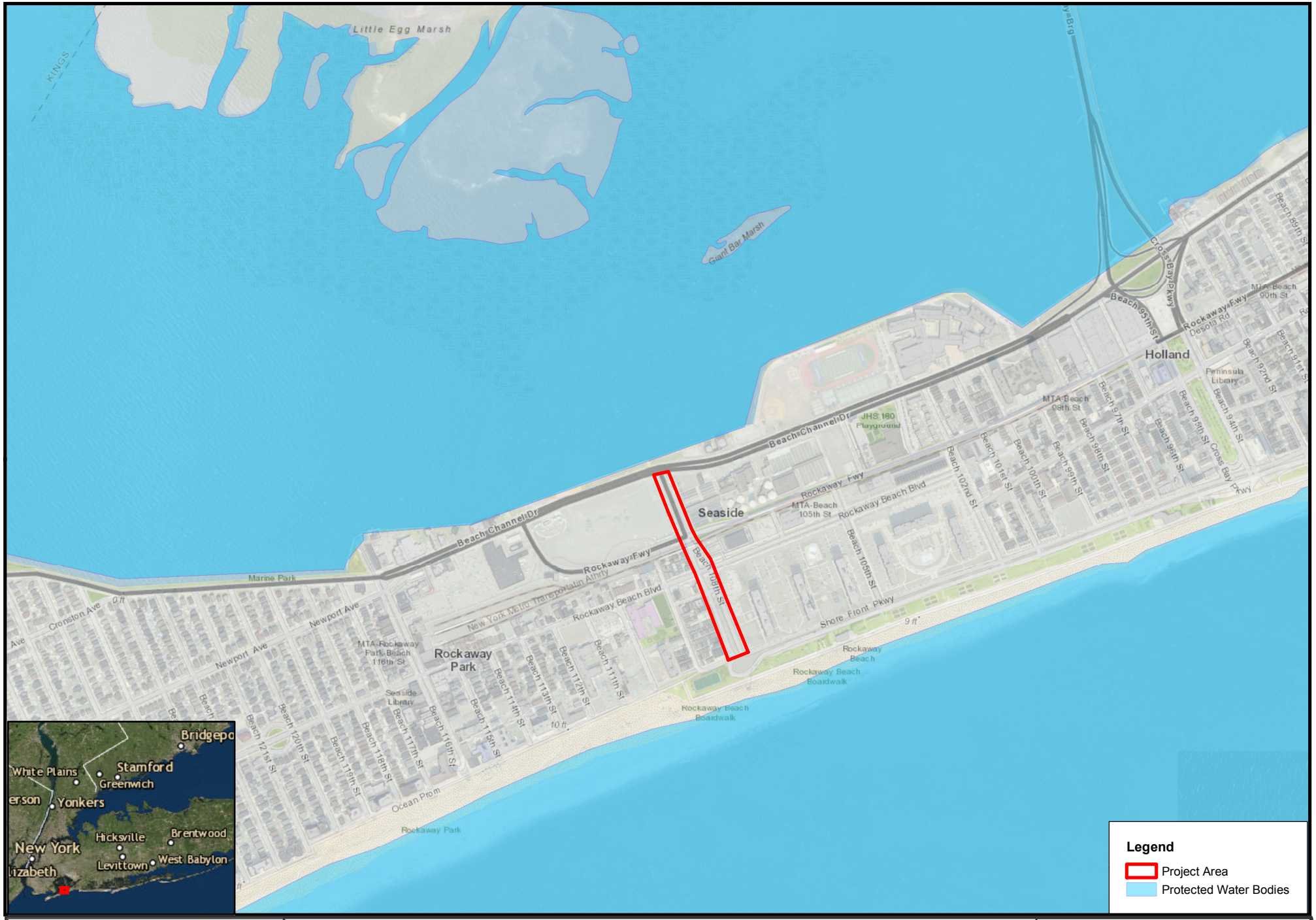

0 0.125 0.25 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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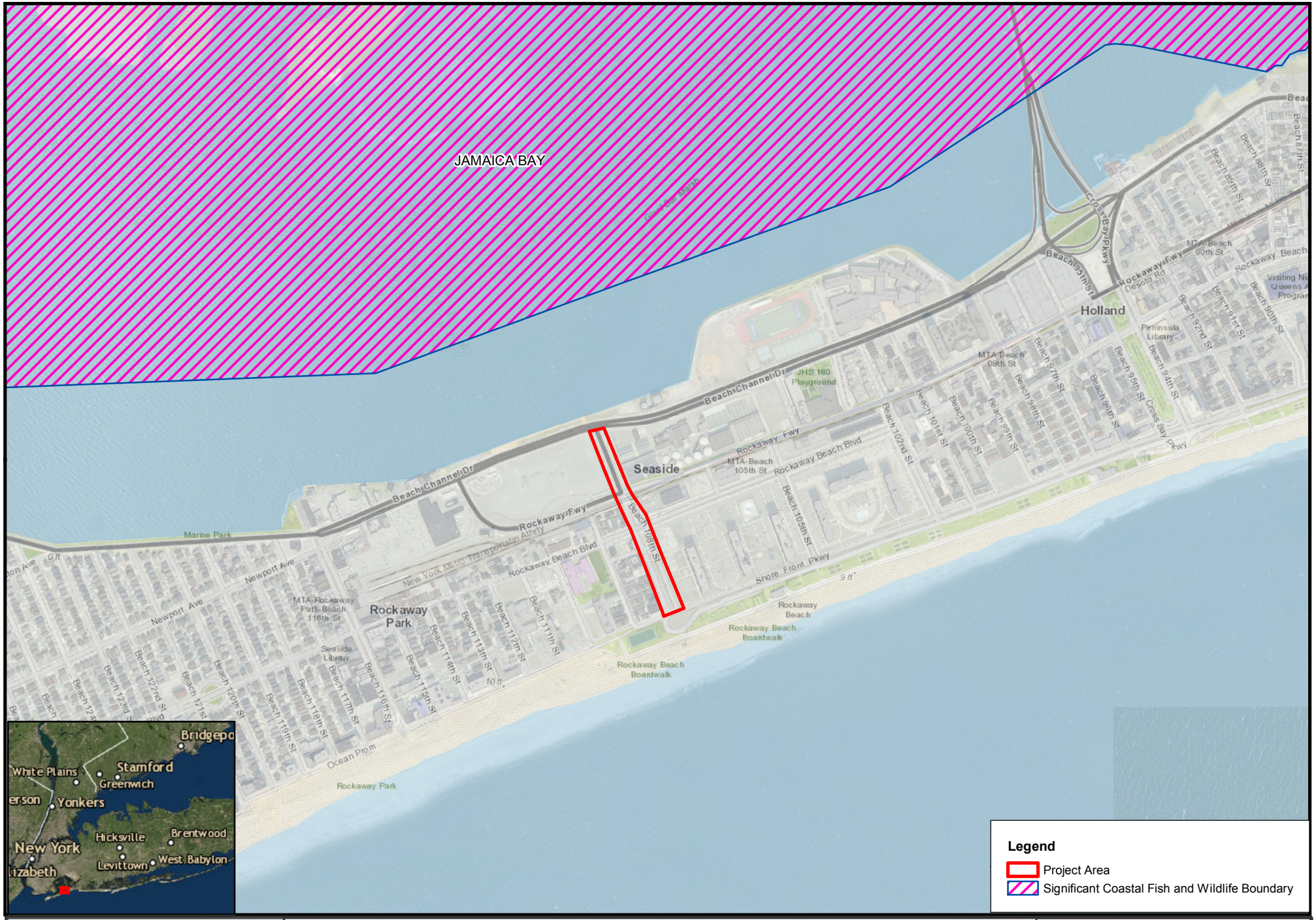

0 0.125 0.25 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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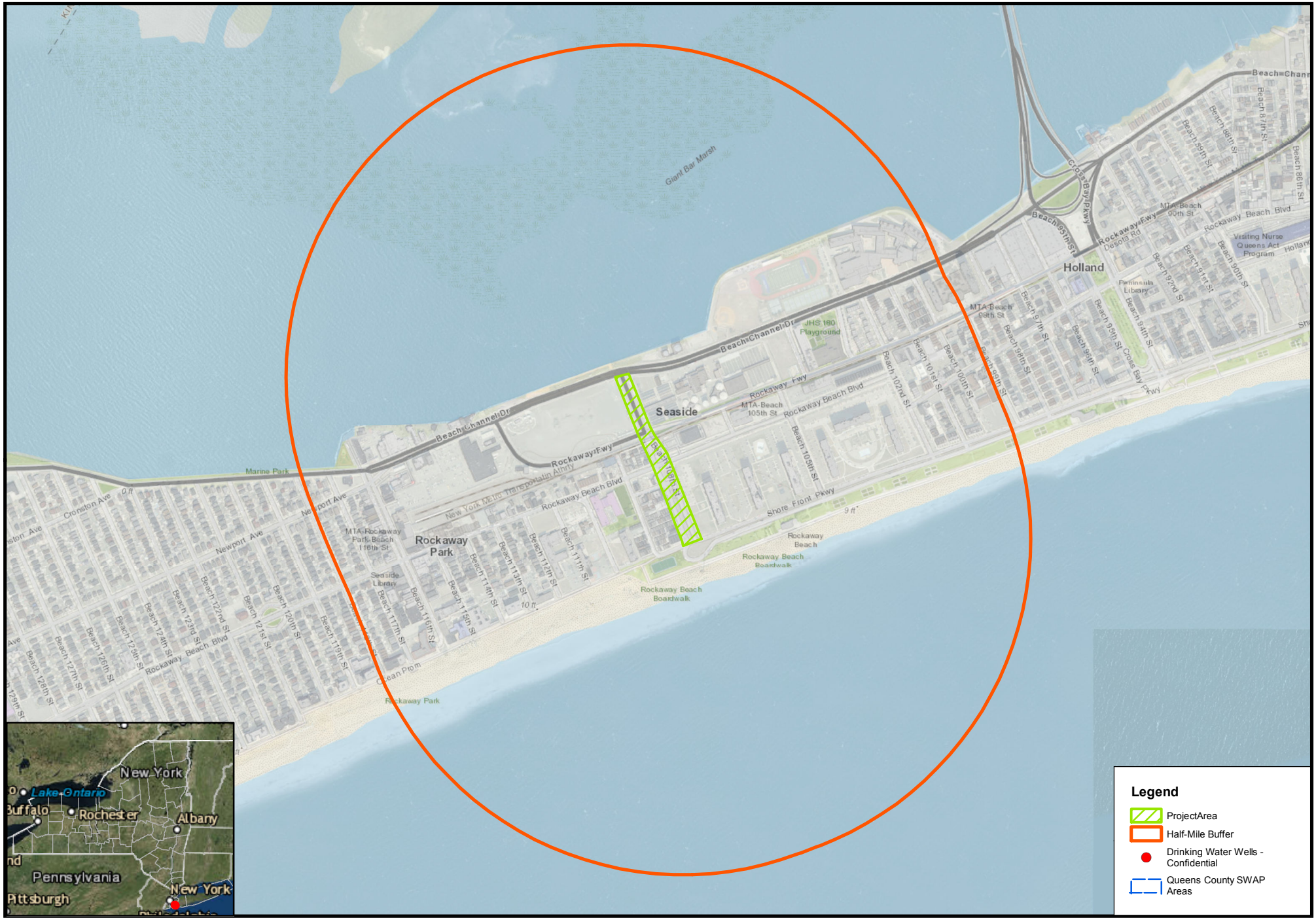

0 800 1,600 Feet

Beach 108th Streetscape Improvements

Rockaway Park, Queens County, New York

Half-Mile Buffer SSA and SWAP Analysis

Governor's Office of Storm Recovery

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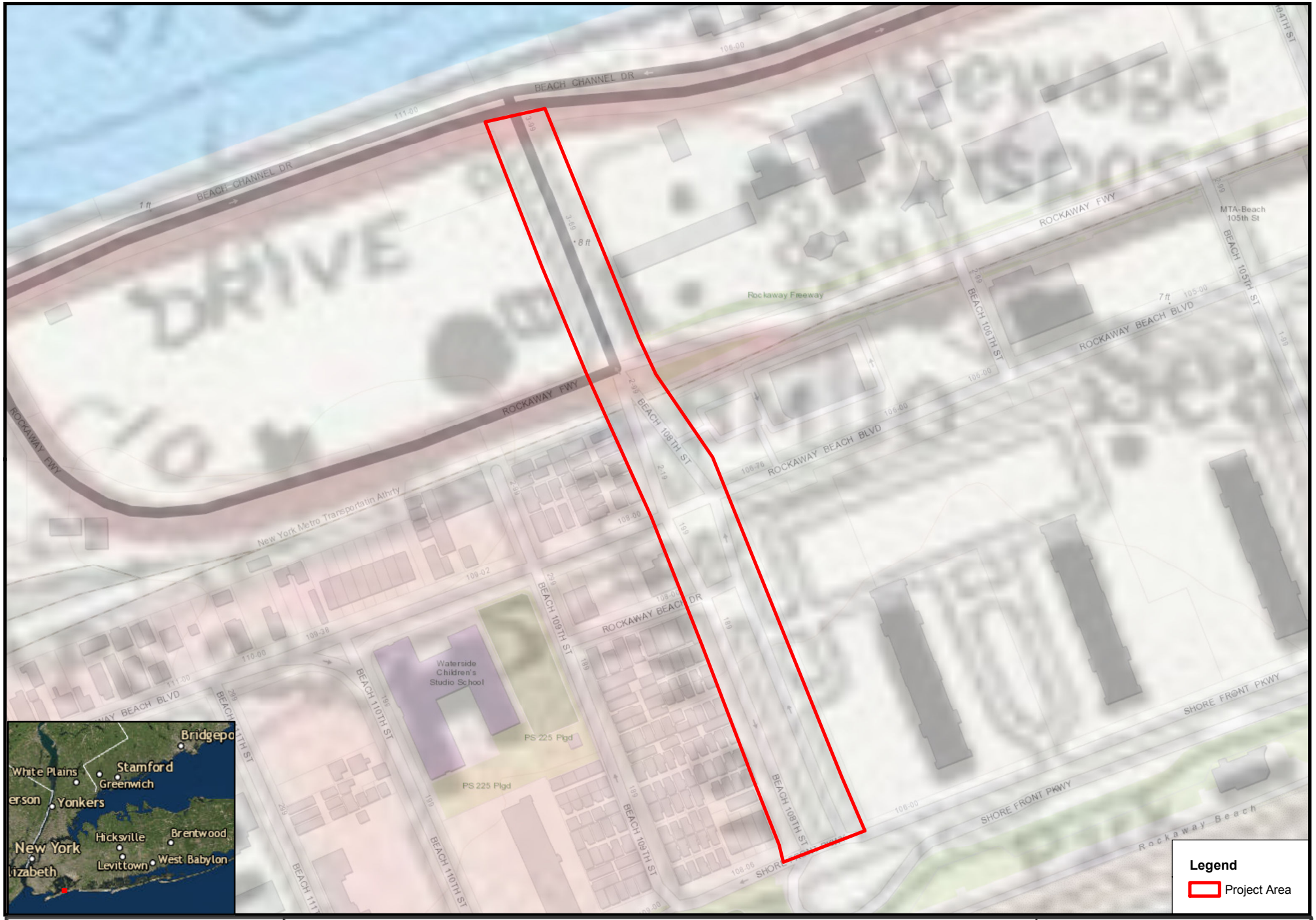

0 0.0325 0.065 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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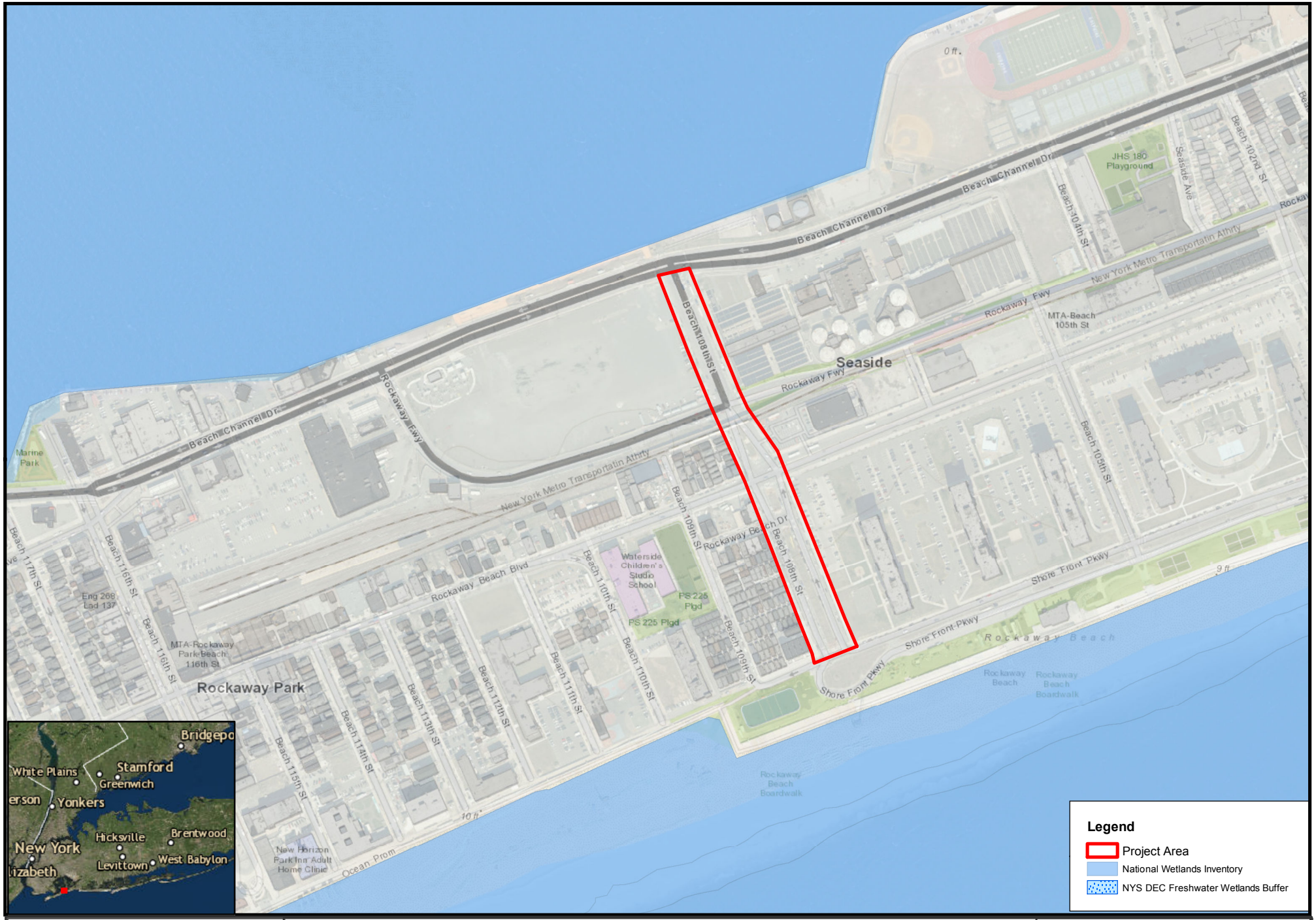

0 0.05 0.1 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

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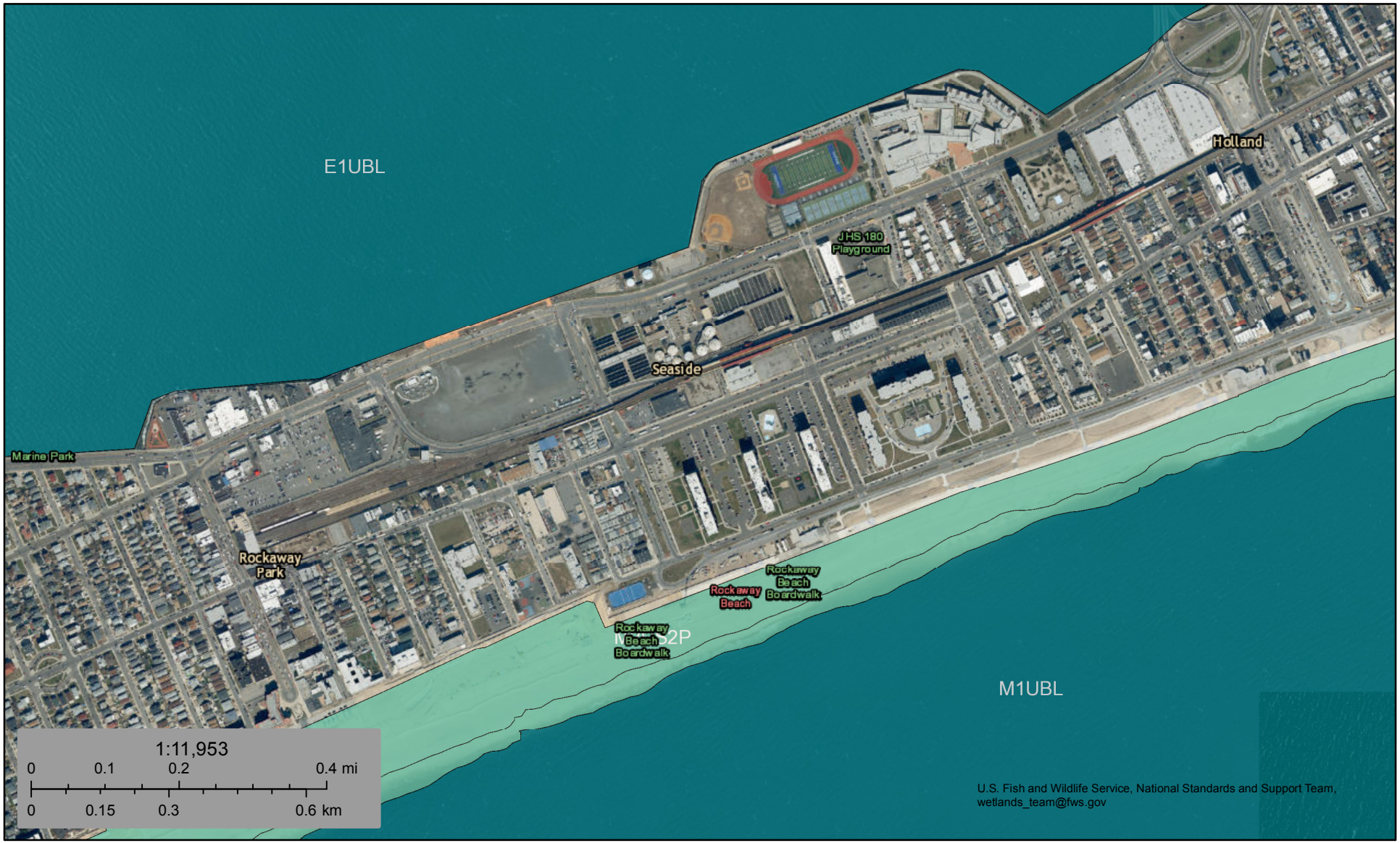
U.S. Fish and Wildlife Service
National Wetlands Inventory

Beach 108th Street



September 5, 2018

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

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National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

CBRS Mapper

Coastal Barrier Resources System Mapper

U.S Fish & Wildlife Service

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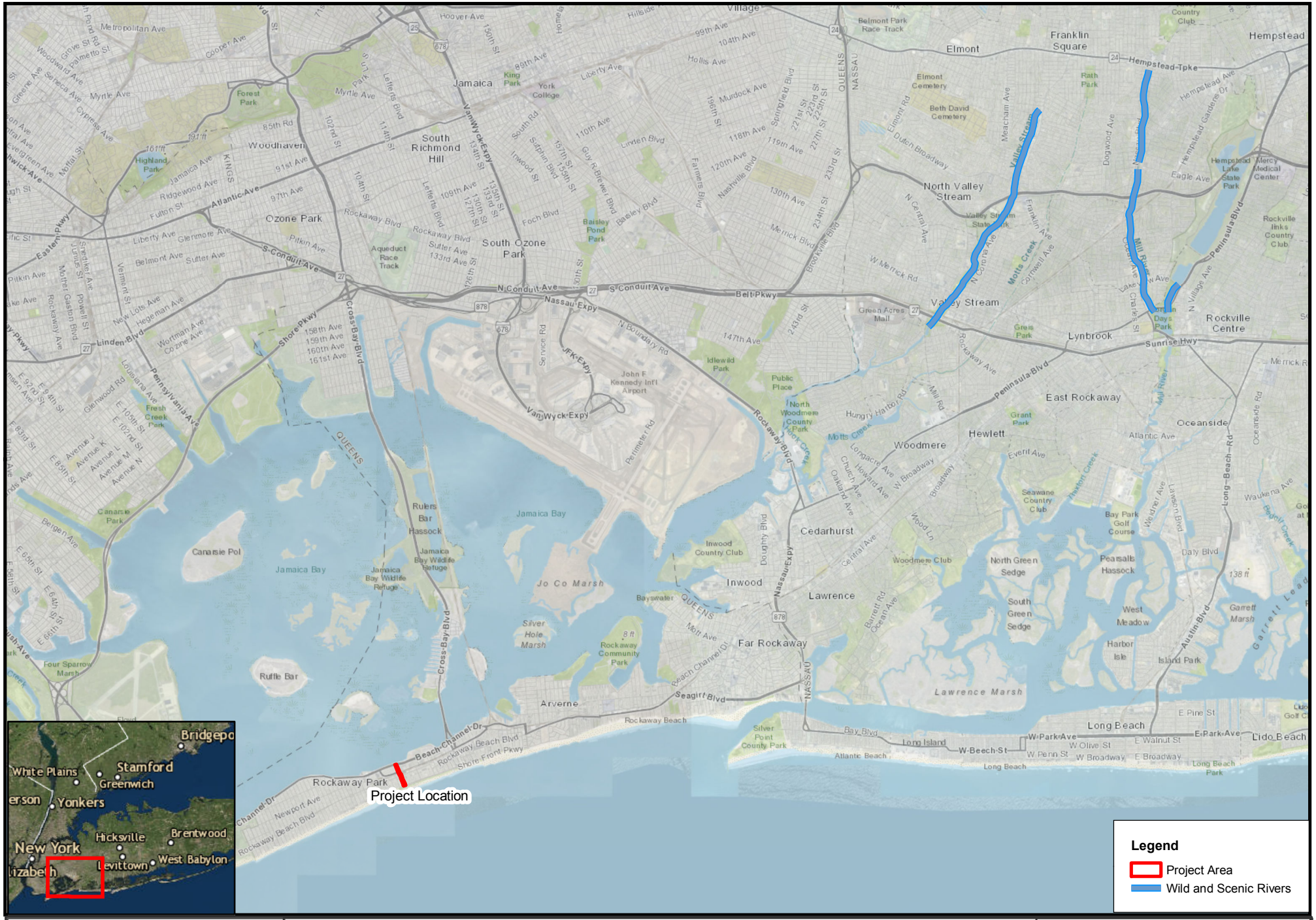

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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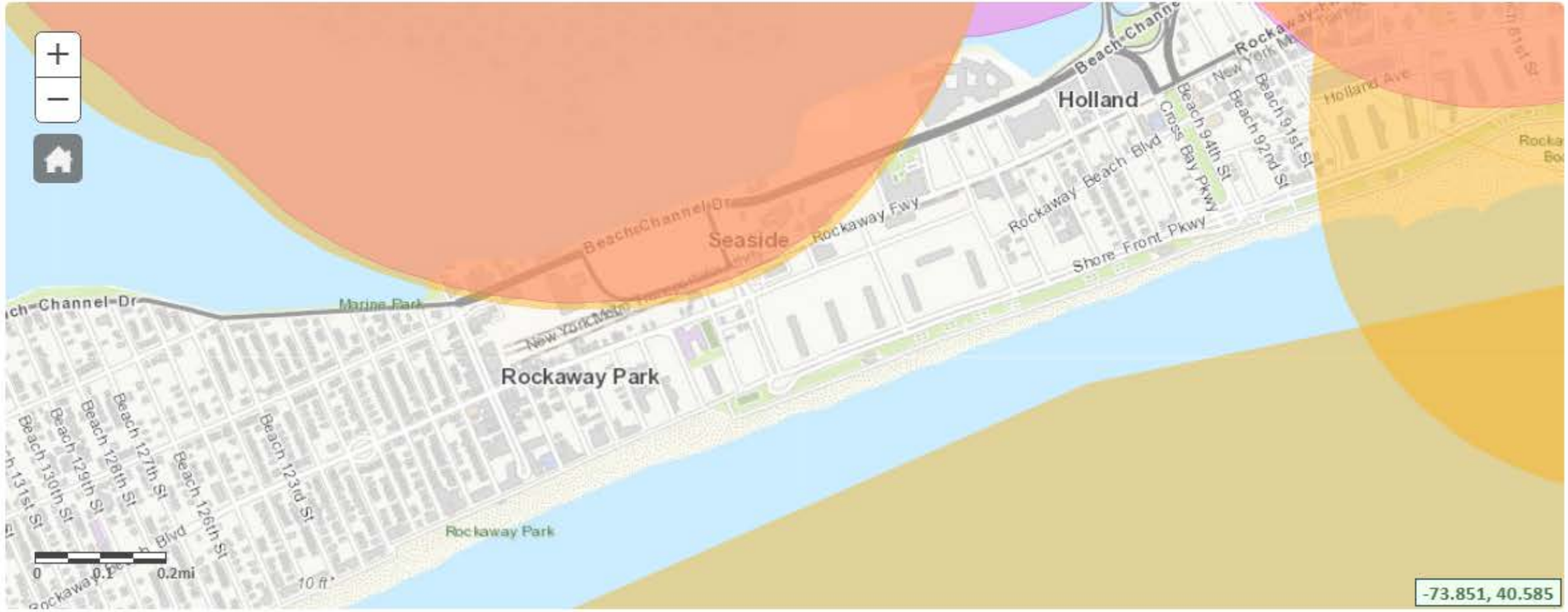


Appendix B

Evaluation of de minimis levels for General Conformity of Construction Projects with New York State Implementation Plans

The conformity requirements of the CAA and regulations promulgated thereunder (conformity requirements) limit the ability of federal agencies to assist, fund, permit, and approve projects in non-attainment areas that do not conform to the applicable SIP. When subject to this regulation, the lead agency is responsible for demonstrating conformity for its proposed action. Conformity determinations for federal actions other than those related to transportation plans, programs, and projects that are developed, funded, or approved under title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 et seq.) must be made according to the requirements of 40 CFR 93, Subpart B (federal general conformity regulations).

The general conformity regulations apply to those federal actions in non-attainment or maintenance areas where the action's direct and indirect emissions have the potential to emit one or more of the six criteria pollutants at rates equal to or exceeding the prescribed rates.

General conformity de minimis threshold levels for the non-attainment and maintenance areas in New York State are presented in **Table 1**.

Table 1: General Conformity Threshold Levels

Non-Attainment Area and Pollutants	**Threshold** (tons/year)
ozone, other non-attainment areas inside an ozone transport region:	
volatile organic compounds (VOC)	50
nitrogen oxides (NO_x)	100
carbon monoxide (CO), maintenance areas:	
direct emissions	100
inhalable particulate matter (PM_{10}), nonattainment areas:	
direct emissions	100
fine particulate matter ($PM_{2.5}$), maintenance areas:	
direct emissions	100
SO_2	100

Source: 40 CFR § 93.153(b)

Notes: NO_x and VOCs also limited at 100 tpy in $PM_{2.5}$ maintenance areas, but ozone requirements are stricter.

The general conformity requirements do not apply to federal actions that:

- Do not satisfy either one of the above conditions (where the action's direct and indirect emissions have the potential to emit one or more of the six criteria pollutants at rates equal to or exceeding the threshold levels above within a non-attainment or maintenance area);
- Occur in an attainment area;
- Are related to transportation plans, programs, and projects developed, funded, or approved under Title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601); or
- Qualify for exemptions established at 40 CFR Part 93.153.

The regulation assumes that a proposed federal action whose criteria pollutant emissions have already been included in the local SIP's attainment or maintenance demonstrations conforms to the SIP.

Most construction work would not require a general conformity evaluation, since construction activity in general is included in the SIP estimates, based on past activity levels and assumptions regarding growth in future years. However, there may be projects which are not considered to be included in the SIP if they were beyond the scope of what was anticipated during SIP preparation. If a project is not included in the SIP or there is uncertainty regarding its inclusion, a preliminary evaluation of emissions may be sufficient to demonstrate that the project's emissions would be de minimis under the above general conformity regulations. If that is the case, a detailed conformity analysis and determination would not be required. The following analysis provides a simplified approach to preliminary evaluation, based on construction expenditure.

As a conservative estimate, the analysis below assumes that the emissions intensity per expenditure (tons per dollar) for the project would be similar to the average intensity of the construction sector in the county. This would not be applicable for projects with higher intensity (emissions per dollar) such as large infrastructure projects or intense development projects including substantial excavation and foundations work. Given this and other limitations of this analysis, it is recommended that this approach not be seen as definitive if the results are not clearly de minimis. In such cases, a more refined approach may be needed.

Construction expenditure data is available from the U.S. Census Bureau's 2007 Survey of Business Owners[1]. Since the expenditure data represent firms by their location and not necessarily the location where construction takes place, applying this data at the county level may skew the results in some cases. As a broader estimate, we have categorized the expenditure as 'upstate' and 'downstate', reflecting the higher cost of construction in the downstate area. Downstate counties include Bronx, Kings, Nassau, New York, Orange, Queens, Richmond, Rockland, Suffolk, and Westchester. Total construction expenditure in 2007 was approximately 23.1 billion dollars in the upstate area, and 71.8 billion in the downstate area.

Construction emissions by county for the year 2007 were obtained from the New York State Department of Environmental Conservation (NYSDEC)[2]. The fraction each de minimis emissions level represents of total regional emissions was calculated for each pollutant and area (upstate and downstate). The fraction of construction expenditure in each area equivalent to those emission fractions were then calculated, representing de minimis project construction expenditures which would be equivalent to de minimis emissions.

For example, the downstate VOC emissions were 2,401.6 tons per year (tpy), and the relevant de minimis VOC emissions are 50 tpy; therefore –

- de minimis as fraction of total emissions: 50 tpy ÷ 2,401.6tpy = 2.08%
- de minimis fraction of total expenditure: 2.08% × $71.8 bn = **$1.5 bn**

The total SIP emissions by pollutant and region and the resulting average project expenditure equivalent to de minimis levels are presented in **Table 2**.

[1] U.S. Census Bureau. 2007 Survey of Business Owners, Statistics for All U.S. Firms by Industry, Gender, Ethnicity, and Race for the U.S., States, Metro Areas, Counties, and Places: 2007; SB0700CSA01.
[2] NYSDEC. 2007 SIP data. (provided by DEC, 2014).

Table 2: Regional SIP Emissions and de minimis Construction Expenditure

Pollutant	Region	2007 SIP Emissions (tpy)	De Minimis (tpy)	Average Construction De Minimis Expenditure (million $)
VOC	Downstate Upstate	2,401.6 1,464.3	50 50	1,496 789
NO_x	Downstate Upstate	16,332.1 9,745.2	100 100	440 237
CO	Downstate Upstate	17,522.1 11,746.2	100 100	410 197
PM_{10}	Downstate	1,489.6	100	4,823
$PM_{2.5}$	Downstate	1,442.3	100	4,981
SO_2	Downstate	1,251.9	100	5,738
Notes: Only relevant pollutants by area are presented; see **Table 3** for details.				

Based on the above analysis, projects with projected construction expenditure substantially lower than the average construction de minimis expenditure would clearly not exceed de minimis emissions levels for general conformity purposes. **Table 3** identifies the minimum de minimis expenditure threshold in each county, based on the lowest level for all nonattainment or attainment maintenance areas within which the county is located. For example, New York County is in 4 nonattainment/maintenance areas; of all the pollutants relevant to those areas, the CO de minimis emissions have the lowest corresponding construction expenditure of 410 million dollars. Standard construction projects in Manhattan with construction expenditure substantially lower than 410 million dollars in New York County would not exceed the de minimis level for any of the relevant pollutants and would not require any further analysis or conformity determination. For projects with components in more than one county, use the lowest threshold for all counties (if that exceeds de minimis levels, this can be refined by reviewing all appropriate pollutants based on the nonattainment/maintenance areas identified in **Table 3**, the appropriate pollutant for the area type from **Table 1**, and the de minimis expenditure for each pollutant from **Table 2)**.

Table 3: De Minimis Construction Expenditure Threshold by County

County	Nonattainment / Maintenance Area				Critical Pollutant	De Minimis Expenditure Threshold (million $)
	Ozone	CO	$PM_{2.5}$	PM_{10}		
Upstate:						
Albany	X				NO_x	237
Erie	X				NO_x	237
Genesee	X				NO_x	237
Greene	X				NO_x	237
Livingston	X				NO_x	237
Monroe	X				NO_x	237
Montgomery	X				NO_x	237
Niagara	X				NO_x	237
Onondaga		X			CO	197
Ontario	X				NO_x	237
Orleans	X				NO_x	237
Rensselaer	X				NO_x	237
Saratoga	X				NO_x	237
Schenectady	X				NO_x	237
Schoharie	X				NO_x	237
Wayne	X				NO_x	237
Downstate:						
Bronx	X	X	X		CO	410
Dutchess	X				NO_x	440
Kings	X	X	X		CO	410
Nassau	X	X	X		CO	410
New York	X	X	X	X	CO	410
Orange	X		X		NO_x	440
Putnam	X				NO_x	440
Queens	X	X	X		CO	410
Richmond	X	X	X		CO	410
Rockland	X		X		NO_x	440
Suffolk	X		X		NO_x	440
Westchester	X	X	X		CO	410

GENERAL CONFORMITY WORKSHEET

Air Emissions Information

PROJECT NAME _____

LOCATION (COUNTY, STATE)_____

FOR CALENDAR YEAR _____

Estimated Construction Start Date: _____ End Date: _____

A. ON-ROAD VEHICLES

ACTIVITY	VEHICLE TYPE	# OPERATING	ON / OFF SITE	GVWR PER VEHICLE	TOTAL MILES PER VEHICLE	TOTAL MILES ALL VEHICLES
Example: Demolition	Truck	2	ON	33,000	36	72

B. OFF-ROAD VEHICLES

ACTIVITY	EQUIPMENT TYPE	# OPERATING	HORSE-POWER	GAS/ DIESEL	TOTALHRS PER VEHICLE	TOTAL HRS ALL VEHICLES
Example: Site Clearing	Backhoe	3	90	Diesel	80	240

Notes:

1. If construction occurs over more than one calendar year, provide a separate table for each calendar year.
2. For ACTIVITY, include a short description of the type of activity
   - On-Road examples: workers commuting to/from job site, materials deliveries, material movement to site, etc.
   - Off-Road examples: site clearing, demolition, excavation, construction, material placement, etc.
3. For EQUIPMENT
   - On-Road examples: auto, pickup truck (gas or diesel), heavy trucks (gas or diesel), etc.
   - Off-road examples: crane, backhoe, dozer, mixer, chain saw, forklift, etc.
4. Specify whether the on-road vehicles listed are being used for transportation to/from site, or are used exclusively on the site, as this will affect the emission estimates.
5. Specify the Gross Vehicle Weight Ratings for any on-road heavy-dity diesel vehicles, as tehse are necessary to determine the correct emissions factors.
6. For worker commutation, the number of vehicles and miles traveled can be estimated by using any available data to estimate commuting distance, carpool rates, etc., (e.g., Census Journey-to-Work data).

Appendix C

STATE OF NEW YORK
DEPARTMENT OF STATE
ONE COMMERCE PLAZA
99 WASHINGTON AVENUE
ALBANY, NY 12231-0001
WWW.DOS.NY.GOV

ANDREW M. CUOMO
GOVERNOR

ROSSANA ROSADO
ACTING SECRETARY OF STATE

October 26, 2018

Ms. Alicia Shultz
NYS Homes and Community Renewal
25 Beaver Street
New York, NY 10004

Re: **F-2018-1015 (FA)**
Governor's Office of Storm Recovery (GOSR)
Beach 108th Streetscape Improvements Project
Rockaway West, Rockaway Peninsula, Queens, NY

Federal financial assistance

General Concurrence - No Objection to Funding

Dear Ms. Shultz:

The Department of State received the information you submitted regarding the above matter on September 20, 2018 and has completed its review. The Department of State has no objection to the use of U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant – Disaster Recovery (CDBG-DR) funds for this financial assistance activity to the Town of Babylon for the above-listed activities.

This concurrence pertains to the federal financial assistance for this project only. If a federal permit or other form of federal agency authorization is required for the above activities, the Department of State will conduct a separate review for those permit activities. In such a case, applicants must forward a copy of the federal/ state joint application for authorization, a completed Federal Consistency Assessment Form (FCAF), project drawings and details and all other supporting information to the Department at the same time application is submitted to the federal agency from which the necessary authorization is requested.

Sincerely,

Matthew P. Maraglio
Supervisor, Consistency Review Unit
Office of Planning, Development, and Community Infrastructure

MM/ TS

NEW YORK STATE OF OPPORTUNITY. | Department of State

Governor's Office of
Storm Recovery

ANDREW M. CUOMO
Governor

September 18, 2018

Mr. Matthew Maraglio
Supervisor, Consistency Review Unit
Division of Coastal Resources
New York State Department of State
One Commerce Plaza
99 Washington Avenue
Albany, New York 12231-0001

CC: Denise Caldwell

RE: Coastal Zone Consistency Review – HUD CDBG-DR Program
Beach 108th Streetscape Improvements Project
Rockaway West, Rockaway Peninsula in Queens, New York

Dear Mr. Maraglio:

The Governor's Office of Storm Recovery (GOSR), operating under the auspices of the New York State Homes and Community Renewal's Housing Trust Fund Corporation, was established to aid the statewide recovery of disaster-affected communities in New York State. GOSR is administering a U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant for Disaster Recovery (CDBG-DR), including the NY Rising Community Reconstruction Grant Program. On behalf of GOSR, please find the enclosed Coastal Zone Consistency Materials for the Beach 108th Streetscape Improvements Project (Proposed Project).

Project Description

The City of New York is requesting CDBG-DR funding to construct improvements to the streetscape of Beach 108th Street, a 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive (the location of the ferry) to Shore Front Parkway, Rockaway West, Rockaway Peninsula in Queens, New York. The NYC Department of Transportation (DOT) will function as the implementing agency on behalf of the City of New York. The proposed project includes:

- Excavation and removal of existing roadway and sidewalk;

- Creation of new roadway and sidewalk (including typical asphalt for travel lanes and permeable materials for bike lanes, parking lanes, and sidewalks);
- Expand sidewalks in certain areas to provide safe pedestrian access and waiting space for potential shuttle stop;
- Provide continuous dedicated bicycle facility, connecting the new ferry landing to the existing bike lane along Shore Front Parkway and the planned Rockaway Beach Blvd route.
- Upgrade all crosswalks and pedestrian ramps at the intersection of Shore Front Parkway to current ADA standards and reconfigure to allow for safe bicycle crossing and access to exiting bicycle pathway along the beach;
- Install bike racks;
- Installation of a dedicated left-turn bay, and move signal infrastructure to improve the safety of the high crash intersection at Beach 108th Street and Rockaway Beach Blvd.;
- Landscaping and street furniture such as trees, benches, and bike racks;
- Storm water drainage improvements including catch basins and constructing new catch basis, old catch basins will be filled in;
- Replace water main lines and abandon existing water main line; and
- Install high efficiency LED streetlights with resilient means of backup power, such as small solar panels, that remain functional in a power outage.

Construction will include excavation and removal of existing roadway and sidewalk and creation of new roadway and sidewalk, full reconstruction of Beach 108 Street. Streetscape elements will also include storm water drainage improvements. All proposed drainage work shall be done in conformance with the latest standards of the New York City Department of Environmental Protection (N.Y.C.D.E.P.) Bureau of Sewers. All new catch basin connections shall be made to existing sewers at Manholes, with 12" diameter ductile iron pipe, class 56, with internally locked "push-on" joints laid on 6" of broken stone for the entire width of the trench and for one-half the pipe diameter. The broken stone shall be hard, un-weathered stone, uniformly graded from 1/4" to 3/4" in diameter and conform to commercially available 1/4" to 3/4" stone. All new catch basins will have a hood on the outlet pipe. As a result of curb relocation, existing Street appurtenances, such as Hydrants, lampposts and traffic signal poles, bus shelters, etc., will have to be relocated. Water hydrants will be relocated in accordance with the specifications of the Department of Environmental Protection, Bureau of Water Supply. (See attached design plans).

To make way for the improvements, 23 trees will be removed. Grading will be required and would remove existing shrubbery and fences, as necessary. Tree removals will be avoided to the greatest extend possible by considering the curb detail at existing trees, by slight modifications in curb alignments, or by other methods so ordered by the engineer, in accordance with acceptable engineering practices.

The proposed project is intended to mitigate the economic challenges faced by the community in its continued recovery effort from Superstorm Sandy. In addition, the resiliency measures such as drainage improvements, off-grid light sources, and the installation of street tress and new plants will support the creation of a more resilient community and mitigate the impacts of future storm damage. During Superstorm Sandy, homes and businesses were destroyed by forceful wave action and storm surge. A safe, high quality corridor connecting the community to the ferry landing at

Beach Channel Drive (the location of the ferry) and Shore Front Parkway is expected to improve the physical and economical resiliency of the Rockaway West community. The proposed project is fundamental to the overall recovery of Rockaway West.

The project area is located within the boundary of the New York State Coastal Zone. GOSR is acting as the Responsible Entity in accordance with 24 CFR Part 58 – Environmental Review Procedures for Entities Assuming HUD Environmental Responsibilities. Pursuant to the Coastal Zone Management Act, GOSR has prepared the attached Federal Consistency Assessment Form and Policy Compliance Summary (**Attachment 2**) to certify that the proposed project is consistent with New York State's Coastal Management Program.

The Proposed Project is located in the **New York City Waterfront Revitalization Program** (WRP) which supplements the State's Coastal Management Program (CMP) and provides a framework within which critical waterfront issues can be addressed, and waterfront improvement projects implemented. GOSR will complete a WRP consultation.

GOSR is requesting a response letter from your office that can be included as an attachment to our environmental documentation to confirm that coordination with the New York Department of State, Division of Coastal Resources has been completed, and general consistency concurrence criteria will be met. If we have not received a response within 30 days, GOSR will assume your concurrence.

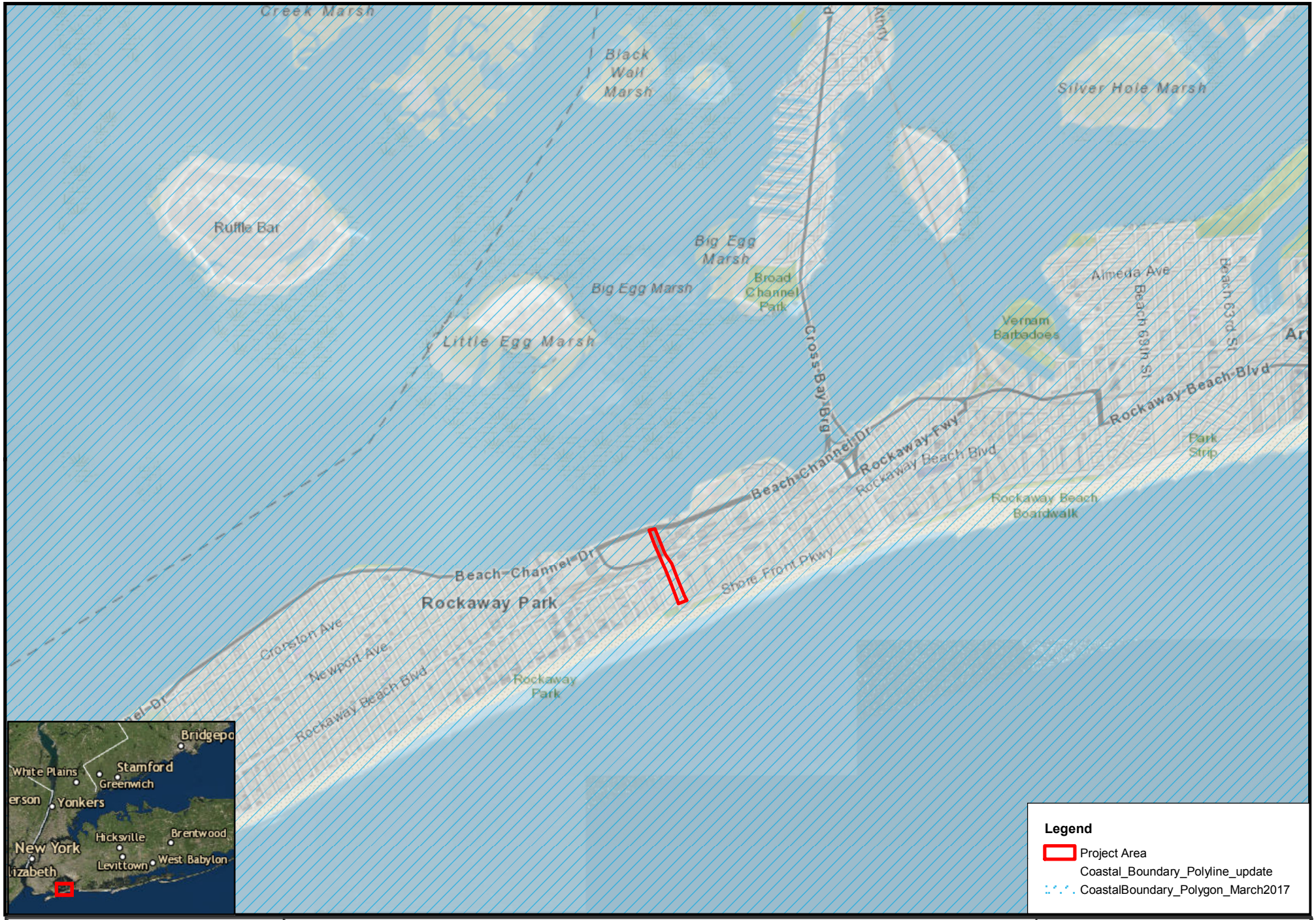
If you have any questions, please feel free to contact me via telephone number (518) 474-0647 or email: alicia.shultz@nyshcr.org. Thank you for your consideration and cooperation.

Sincerely,

Alicia Shultz
Senior Environmental Scientist
New York State Homes & Community Renewal

Attachments:
Attachment 1 - Project Location Maps
Attachment 2 - Consistency Assessment Form/Summary of Compliance with Applicable Policies
Attachment 3 – Design Plans

ATTACHMENT 1



0 0.3 0.6 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

Governor's Office of Storm Recovery

N

Drawn By: ASL | Version: 1.0 | Date:9/11/2018

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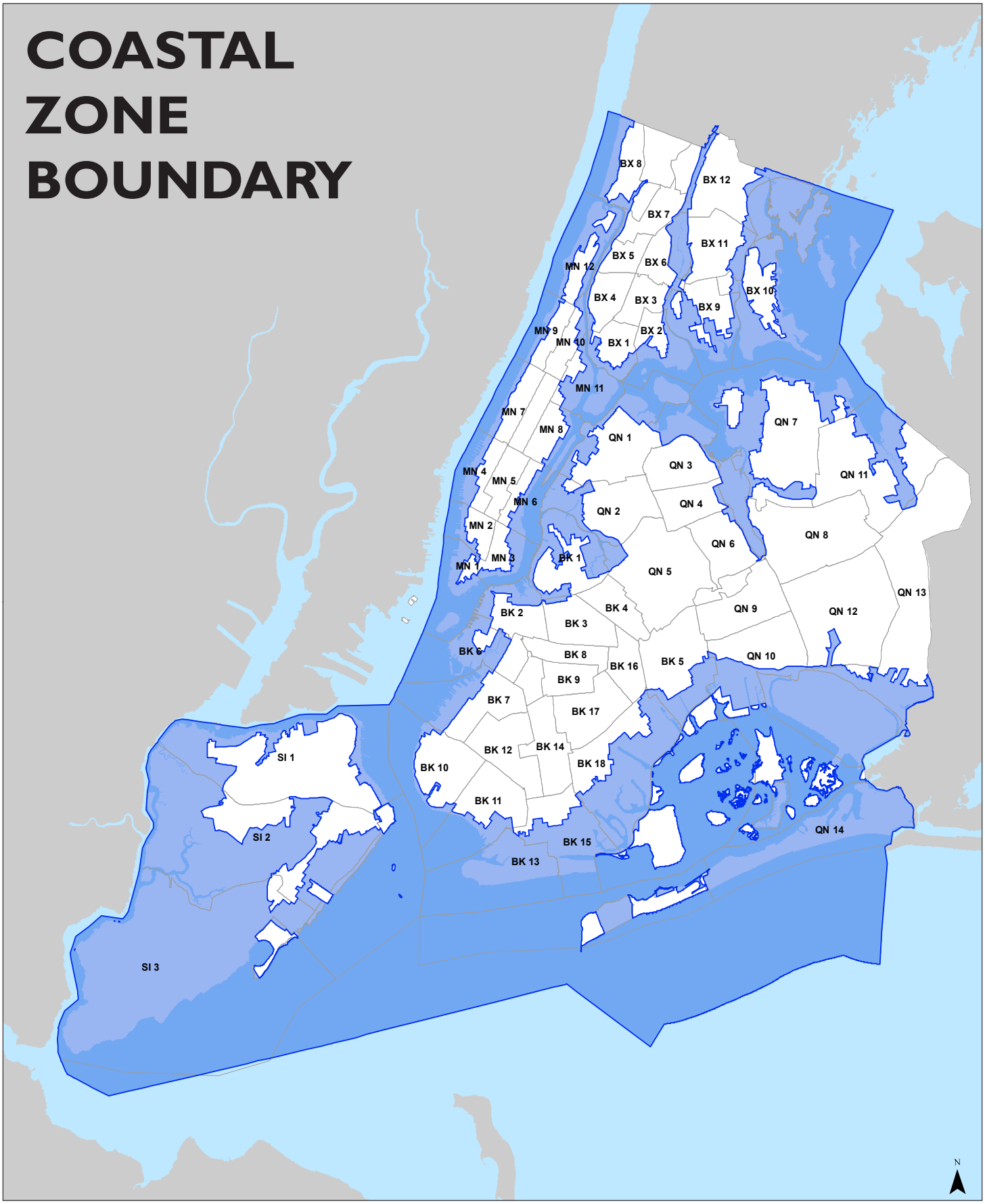
FEMA data uses NAVD88*

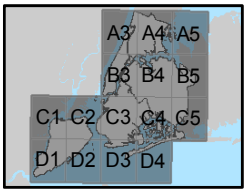
COASTAL ZONE BOUNDARY



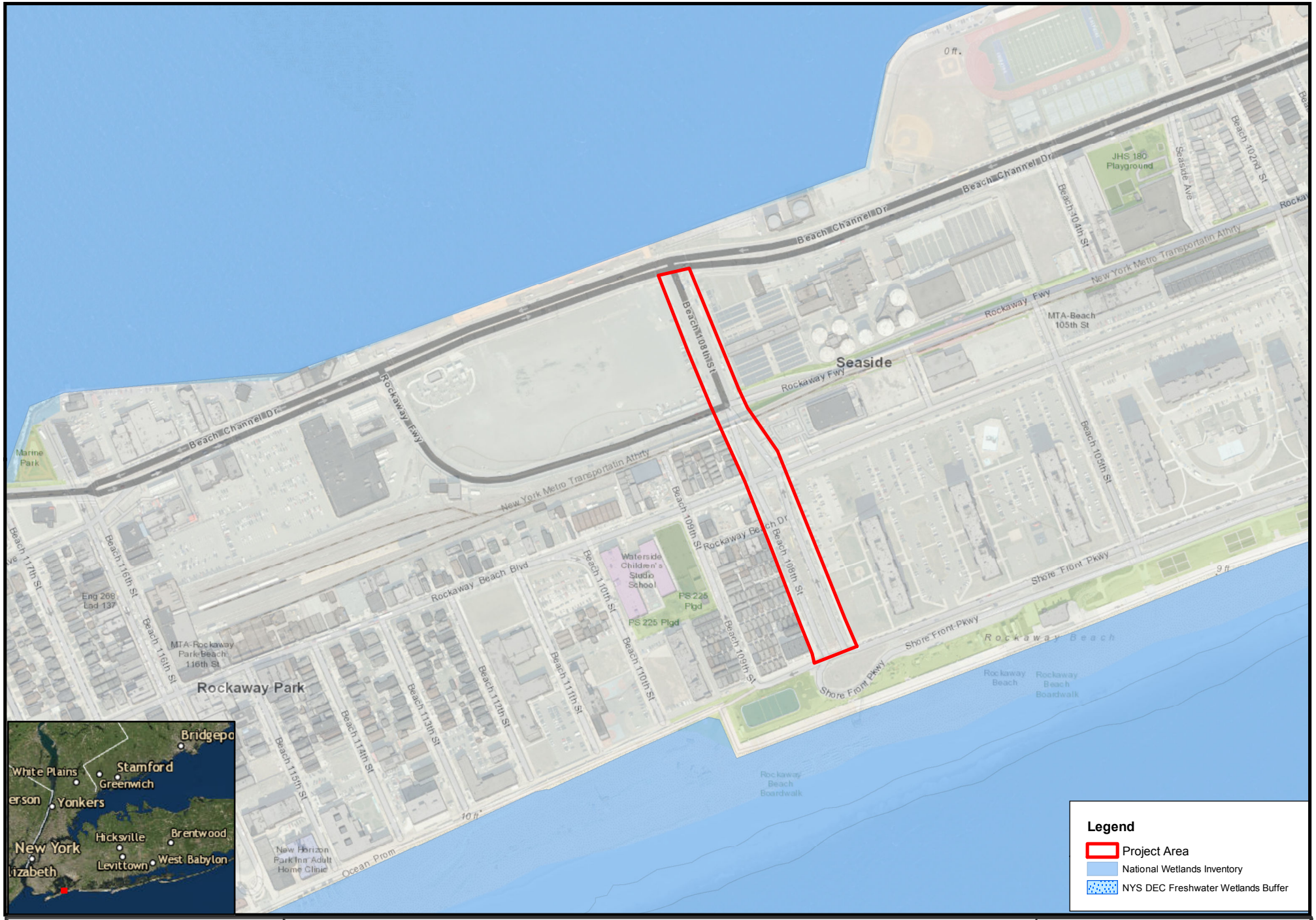
Coastal Zone Boundary

Coastal Zone Boundary

Community District Boundary



Miles
0 1.25 2.5 5



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Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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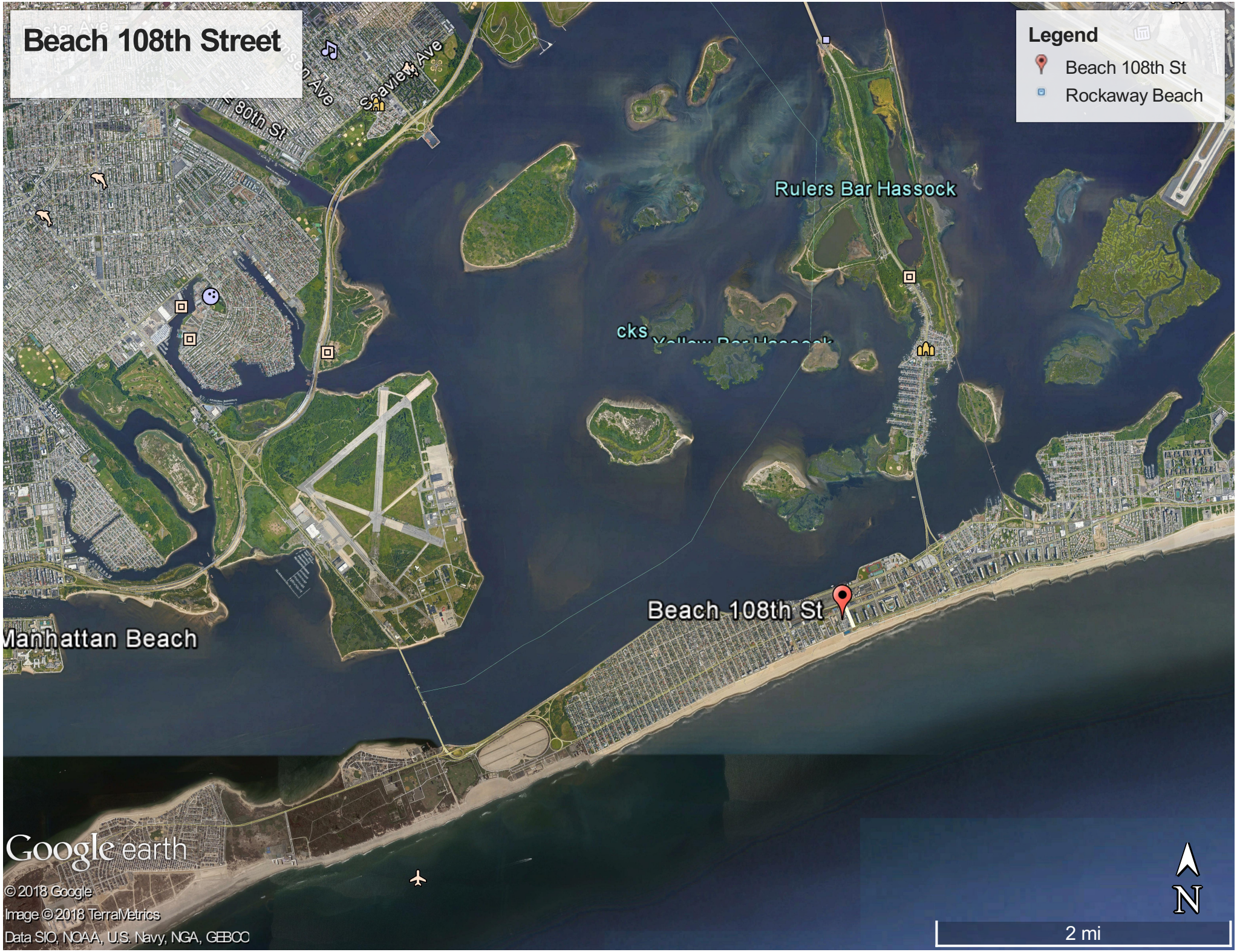
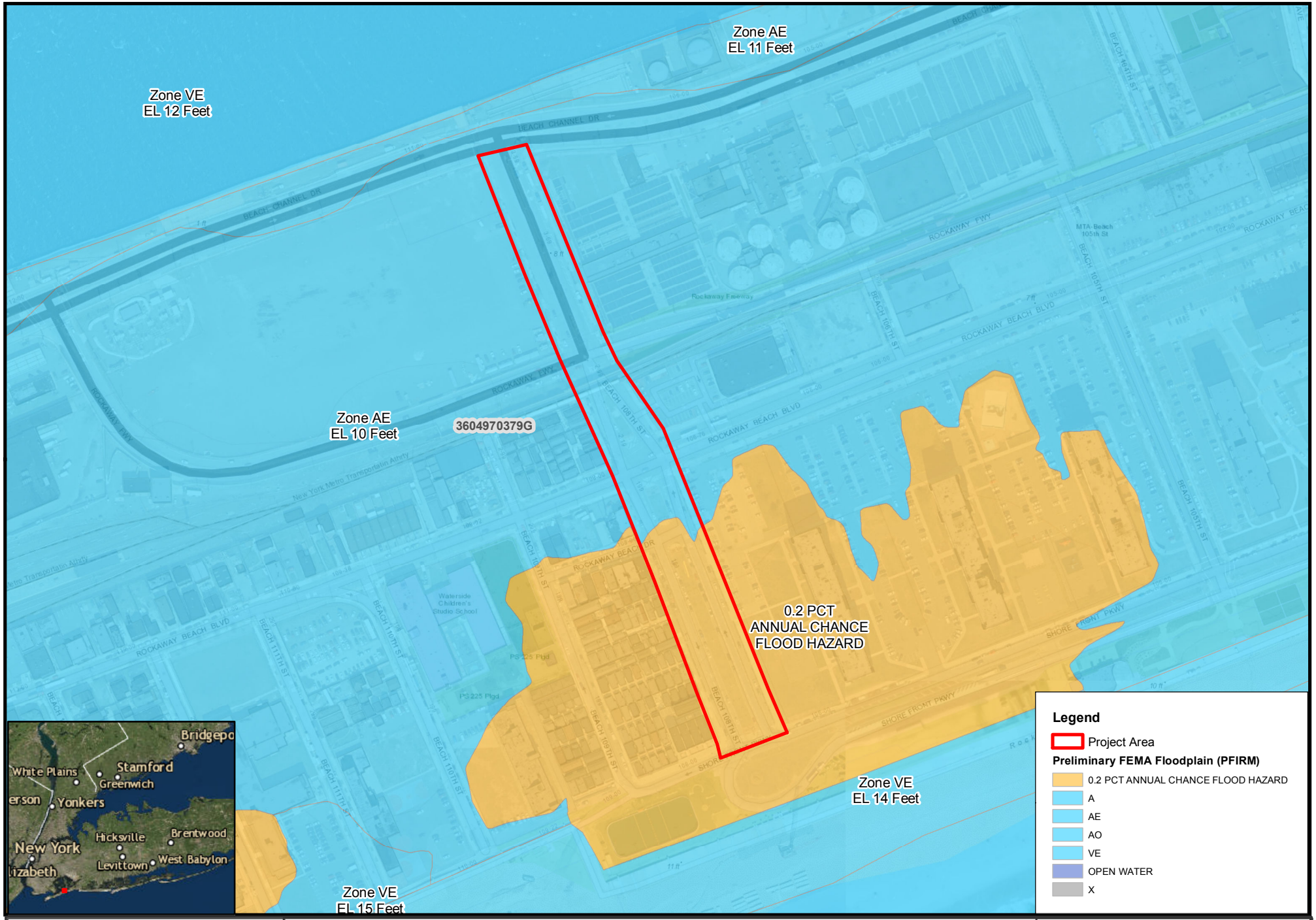
Beach 108th Street
Legend
211
Beach 105 St
Beach 108th St
Feature 2
Mobil
Rockaway Beach
YANA Community Center
Beach Channel Dr
Beach 108th St
Beach 108th St
Beach 106th St
Rockaway Beach Blvd
Beach 105th St
Irene Ct
Curtis Ct
Albany Ct
Breeney Ct
Betty Ct
Susan Ct
Mae Ct
Glynns Ct
Beach 110th St
Beach 111th St
Shore Front Pkwy
908L
N
800 ft
Google earth
© 2018 Google


Beach 108th Street
Legend
Beach 108th St
Rockaway Beach
Rulers Bar Hassock
Beach 108th St
Manhattan Beach
80th St
Seaview Ave
Google earth
© 2018 Google
Image © 2018 TerraMetrics
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
N
2 mi



0 0.035 0.07 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

Governor's Office of Storm Recovery

N

Drawn By: ASL | Version: 1.0 | Date:9/11/2018

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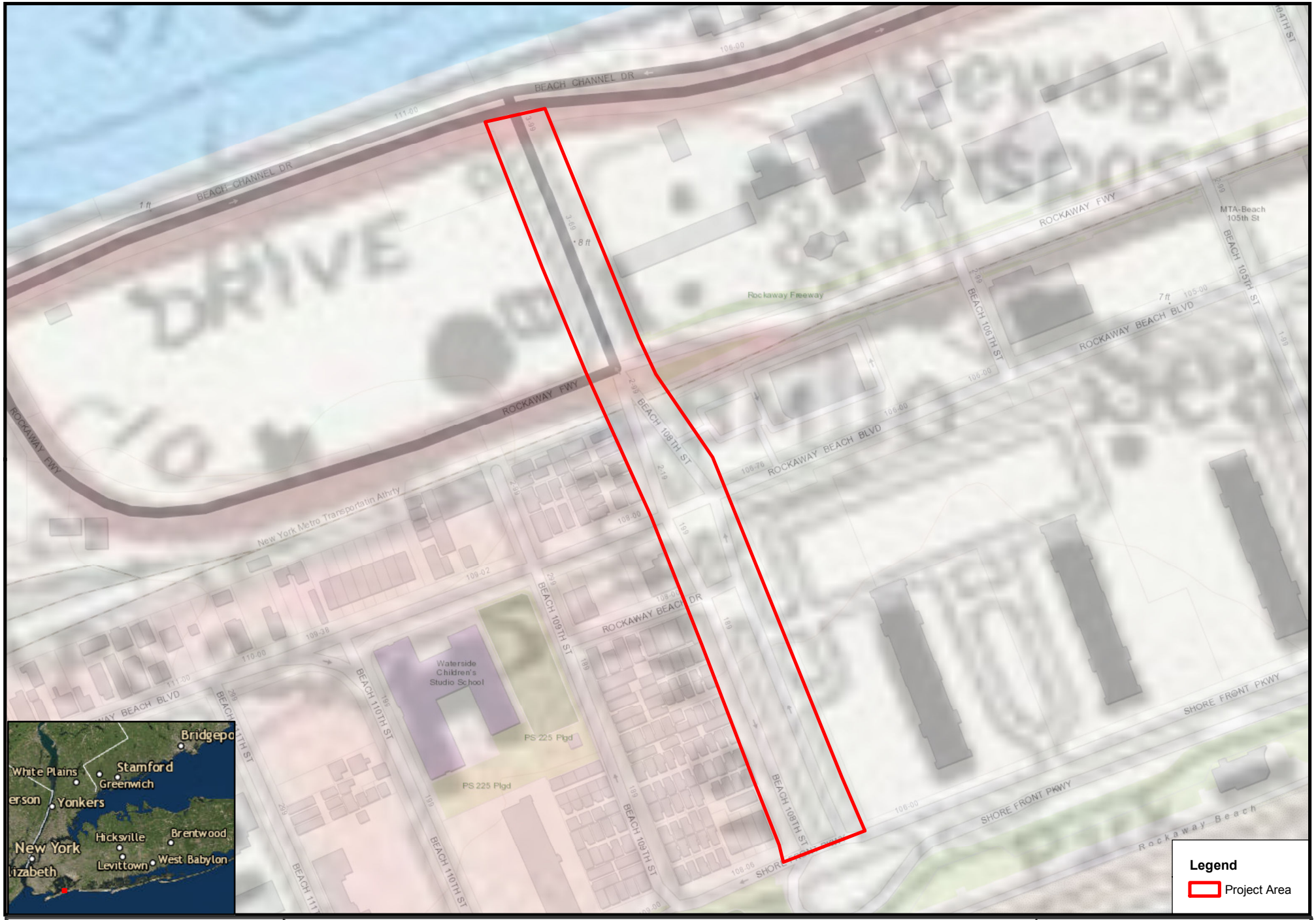

0 0.0325 0.065 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

Governor's Office of Storm Recovery

N

Drawn By: ASL | Version: 1.0 | Date:9/11/2018

FEMA data uses NAVD88*

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ATTACHMENT 2

FCAF Addendum: Beach 108th Streetscape Improvements Project

This document is the addendum to the Federal Consistency Assessment Form (FCAF) for the Beach 108th Streetscape Improvements Project (Proposed Project). After describing the Proposed Project in more detail, this document analyzes the consistency of the Proposed Project with the State's Costal Management Plan (CMP), specifically those policies that were identified as potentially applicable to this Project in the FCAF.

PROJECT DESCRIPTION

The City of New York is requesting CDBG-DR funding to construct improvements to the streetscape of Beach 108th Street, a 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive (the location of the ferry) to Shore Front Parkway, Rockaway West, Rockaway Peninsula in Queens, New York. The NYC Department of Transportation (DOT) will function as the implementing agency on behalf of the City of New York. The proposed project includes:

- Excavation and removal of existing roadway and sidewalk;
- Creation of new roadway and sidewalk (including typical asphalt for travel lanes and permeable materials for bike lanes, parking lanes, and sidewalks);
- Expand sidewalks in certain areas to provide safe pedestrian access and waiting space for potential shuttle stop;
- Provide continuous dedicated bicycle facility, connecting the new ferry landing to the existing bike lane along Shore Front Parkway and the planned Rockaway Beach Blvd route.
- Upgrade all crosswalks and pedestrian ramps at the intersection of Shore Front Parkway to current ADA standards and reconfigure to allow for safe bicycle crossing and access to exiting bicycle pathway along the beach;
- Install bike racks;
- Installation of a dedicated left-turn bay, and move signal infrastructure to improve the safety of the high crash intersection at Beach 108th Street and Rockaway Beach Blvd.;
- Landscaping and street furniture such as trees, benches, and bike racks;
- Storm water drainage improvements including catch basins and constructing new catch basis, old catch basins will be filled in;
- Replace water main lines and abandon existing water main line; and
- Install high efficiency LED streetlights with resilient means of backup power, such as small solar panels, that remain functional in a power outage.

Construction will include excavation and removal of existing roadway and sidewalk and creation of new roadway and sidewalk, full reconstruction of Beach 108 Street. Streetscape elements will

also include storm water drainage improvements. All proposed drainage work shall be done in conformance with the latest standards of the New York City Department of Environmental Protection (N.Y.C.D.E.P.) Bureau of Sewers. All new catch basin connections shall be made to existing sewers at Manholes, with 12" diameter ductile iron pipe, class 56, with internally locked "push-on" joints laid on 6" of broken stone for the entire width of the trench and for one-half the pipe diameter. The broken stone shall be hard, un-weathered stone, uniformly graded from 1/4" to 3/4" in diameter and conform to commercially available 1/4" to 3/4" stone. All new catch basins will have a hood on the outlet pipe. As a result of curb relocation, existing Street appurtenances, such as Hydrants, lampposts and traffic signal poles, bus shelters, etc., will have to be relocated. Water hydrants will be relocated in accordance with the specifications of the Department of Environmental Protection, Bureau of Water Supply. (See attached design plans)

To make way for the improvements, 23 trees will be removed. Grading will be required and would remove existing shrubbery and fences, as necessary. Tree removals will be avoided to the greatest extend possible by considering the curb detail at existing trees, by slight modifications in curb alignments, or by other methods so ordered by the engineer, in accordance with acceptable engineering practices.

The proposed project is intended to mitigate the economic challenges faced by the community in its continued recovery effort from Superstorm Sandy. In addition, the resiliency measures such as drainage improvements, off-grid light sources, and the installation of street trees and new plants will support the creation of a more resilient community and mitigate the impacts of future storm damage. During Superstorm Sandy, homes and businesses were destroyed by forceful wave action and storm surge. A safe, high quality corridor connecting the community to the ferry landing at Beach Channel Drive (the location of the ferry) and Shore Front Parkway is expected to improve the physical and economical resiliency of the Rockaway West community. The proposed project is fundamental to the overall recovery of Rockaway West.

The project site is within the bounds of the Brooklyn-Queens Sole Source Aquifer.

The existing sanitary sewer connections and collection system along these roads would not be changed.

Pursuant to the Disaster Relief Appropriations Act, 2013 (Public Law 113-2) and the Housing and Community Development Act (42 U.S.C. § 5301 et seq.), the Governor's Office of Storm Recovery (GOSR) is acting under the auspices of New York State Homes and Community Renewal's Housing Trust Fund Corporation as a recipient of Community Development Block Grant – Disaster Recovery ("CDBG-DR") funds from the United States Department of Housing and Urban Development ("HUD"). GOSR is the entity responsible for compliance with the HUD environmental review procedures set forth in 24 CFR Part 58. GOSR processes environmental reviews for projects funded with HUD CDBG-DR on a case-by-case basis.

CONSISTENCY WITH THE NYS COASTAL MANAGEMENT PLAN

Policy 1: Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial,

A. The project activities include construction improvements to the streetscape of Beach 108th Street, a 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive (the location of the ferry) to Shore Front Parkway, Rockaway West, Rockaway Peninsula in Queens, New York. The project activities will revitalize the Rockaway waterfront area and encourage economic growth, without consuming valuable open space outside of the waterfront areas. Construction will include excavation and removal of existing roadway and sidewalk and creation of new roadway and sidewalk, full reconstruction of Beach 108 Street. Streetscape elements will also include storm water drainage improvements.

The proposed project is intended to mitigate the economic challenges faced by the community in its continued recovery effort from Superstorm Sandy. In addition, the resiliency measures such as drainage improvements, off-grid light sources, and the installation of street trees and new plants will support the creation of a more resilient community and mitigate the impacts of future storm damage.

B. During Superstorm Sandy, homes and businesses were destroyed by forceful wave action and storm surge. A safe, high quality corridor connecting the community to the ferry landing at Beach Channel Drive (the location of the ferry) and Shore Front Parkway is expected to improve the physical and economical resiliency of the Rockaway West community. The proposed project is fundamental to the overall recovery of Rockaway West.

Rockaway West's low elevation and varied coastal protection leaves the community exposed to high risks associated with future storm events, sea level rise, and frequent flooding. Access to the community is limited to two transportation links, which are both vulnerable and limited. The project area suffered extensive flooding and infrastructure damage as a result of Superstorm Sandy. The community continues to struggle to recover as businesses remain shuttered and the Beach 108 Street corridor remains underutilized. The ongoing struggle to recover from Superstorm Sandy is hampering the full revitalization of the area at large.

The existing condition of Beach 108th Street is unsafe for pedestrians and an uninviting site for community members, local businesses and tourists to utilize. The street is flanked by vacant lots and runs under the elevated A train. The community sees this corridor as a gateway to their beach, which is a major driver for the local economy.

Because of its natural resources, the Rockaway West Community has long served as an escape and summertime destination for New Yorkers. Rockaway West is predominantly residential, but includes commercial pockets and numerous natural amenities. The population of Rockaway West is diverse among many demographics and relies heavily on vehicular travel as well as public transit. Rockaway West infrastructure is aging and vulnerable.

B. GOSR is completing the State Environmental Quality Review Act and the National Environmental Policy Act (NEPA) environmental reviews which include consultations with interested and involved agencies such as the NY State Historic Preservation Office (SHPO), US Environmental Protection Agency, US Fish and Wildlife Service and NYS Department of Environmental Conservation (DEC) to name a few. Additionally, GOSR will complete the State Smart Growth Public Infrastructure Policy Act review.

No seagrass has been identified within the project area.

The project designs include mitigation and resiliency measures to ensure the protection of the community and instruction against flooding, storms and sea rise.

Policy 36: Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.

Response: The Proposed Project does not include the storage of petroleum and other hazardous materials. However, during construction the construction equipment will be fueled by petroleum and other hazardous materials may be required for construction activities. All equipment requiring refueling and petroleum storage and storage of any hazardous materials will comply with best management practices to prevent any spillage or releases to the environmental. The project location is within an area located over a sole source aquifer.

Policy 39: The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural lands and scenic resources.

Response: All construction debris will be disposed of in a manner that is protective of the environment and disposed of at a permitted location.

ATTACHMENT 3

See Attachment 1 of the environmental review

Appendix D

Shultz, Alicia (NYSHCR)

From: Christopher Wassif (DCP) <CWassif@planning.nyc.gov>
Sent: Friday, October 26, 2018 10:09 AM
To: Shultz, Alicia (NYSHCR); Accardi, Matt (STORMRECOVERY)
Cc: MMarrel@planning.nyc.gov; Sturn, Terra (DOS)
Subject: WRP Consistency Determination: Beach 108th Street Streetscape Improvements (WRP#18-148)

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hello Alicia,

We have completed the review of the project as described below for consistency with the policies and intent of the New York City Waterfront Revitalization Program (WRP).

Beach 108th Street Streetscape Improvements: Requesting CDBG-DR funding to construct improvements to the streetscape of Beach 108th Street; a 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive, to Shore Front Parkway, Rockaway West, in Queens, New York.

Based on the information submitted, the Waterfront Open Space Division, on behalf of the New York City Coastal Commission, having reviewed the waterfront aspect of this action , finds that the actions will not substantially hinder the achievement of any Waterfront Revitalization Program (WRP) policy and provides its finding to the New York State Department of State (DOS). Please note that the proposed action(s) are subject to consistency review and approval by the New York State Department of State (DOS) in accordance with the New York State Coastal Management Program.

This determination is only applicable to the information received and the current proposal. Any additional information or project modifications would require an independent consistency review.

For your records, this project has been assigned **WRP # 18-148**. If there are any questions regarding this review, please contact me.

Best,

CHRISTOPHER WASSIF
FLOOD RESILIENCY PLANNER • WATERFRONT AND OPEN SPACE DIVISION

NYC DEPT. OF CITY PLANNING
120 BROADWAY, 31st FLOOR • NEW YORK, NY 10271
212-720-3445 I cwassif@planning.nyc.gov

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Governor's Office of
Storm Recovery

ANDREW M. CUOMO
Governor

September 20, 2018

Michael Marrella, Director of Waterfront and Open Space
New York Department of City Planning
22 Reade Street 6E
New York, NY 10007
Phone: 212-720-3626
Email: wrp@planning.nyc.gov

Re: Local Waterfront Revitalization Program Consistency Review
CDBG-DR Funding Application
Beach 108th Streetscape Improvements Project
Rockaway West, Rockaway Peninsula in Queens, New York

Dear Mr. Marrella:

The New York State Governor's Office of Storm Recovery (GOSR), operating under the auspices of the New York State Homes and Community Renewal's Housing Trust Fund Corporation, was established to aid the statewide recovery of disaster-affected communities in New York State. GOSR is administering a U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant for Disaster Recovery (CDBG-DR), including the Economic Development-New York Rising Community Reconstruction Program. The City of New York is requesting CDBG-DR funding to construct improvements to the streetscape of Beach 108th Street, a 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive (the location of the ferry) to Shore Front Parkway, Rockaway West, Rockaway Peninsula in Queens, New York. On behalf of GOSR, please find the enclosed local waterfront revitalization program consistency review materials for your review.

Project Description

The proposed project includes:

- Excavation and removal of existing roadway and sidewalk;
- Creation of new roadway and sidewalk (including typical asphalt for travel lanes and permeable materials for bike lanes, parking lanes, and sidewalks);
- Expand sidewalks in certain areas to provide safe pedestrian access and waiting space for potential shuttle stop;
- Provide continuous dedicated bicycle facility, connecting the new ferry landing to the existing bike lane along Shore Front Parkway and the planned Rockaway Beach Blvd route.

- Upgrade all crosswalks and pedestrian ramps at the intersection of Shore Front Parkway to current ADA standards and reconfigure to allow for safe bicycle crossing and access to exiting bicycle pathway along the beach;
- Install bike racks;
- Installation of a dedicated left-turn bay, and move signal infrastructure to improve the safety of the high crash intersection at Beach 108th Street and Rockaway Beach Blvd.;
- Landscaping and street furniture such as trees, benches, and bike racks;
- Storm water drainage improvements including catch basins and constructing new catch basis, old catch basins will be filled in;
- Replace water main lines and abandon existing water main line; and
- Install high efficiency LED streetlights with resilient means of backup power, such as small solar panels, that remain functional in a power outage.

Construction will include excavation and removal of existing roadway and sidewalk and creation of new roadway and sidewalk, full reconstruction of Beach 108 Street. Streetscape elements will also include storm water drainage improvements. All proposed drainage work shall be done in conformance with the latest standards of the New York City Department of Environmental Protection (N.Y.C.D.E.P.) Bureau of Sewers. All new catch basin connections shall be made to existing sewers at Manholes, with 12" diameter ductile iron pipe, class 56, with internally locked "push-on" joints laid on 6" of broken stone for the entire width of the trench and for one-half the pipe diameter. The broken stone shall be hard, un-weathered stone, uniformly graded from 1/4" to 3/4" in diameter and conform to commercially available 1/4" to 3/4" stone. All new catch basins will have a hood on the outlet pipe. As a result of curb relocation, existing Street appurtenances, such as Hydrants, lampposts and traffic signal poles, bus shelters, etc., will have to be relocated. Water hydrants will be relocated in accordance with the specifications of the Department of Environmental Protection, Bureau of Water Supply. (See attached design plans in Appendix A).

To make way for the improvements, 23 trees will be removed. Grading will be required and would remove existing shrubbery and fences, as necessary. Tree removals will be avoided to the greatest extend possible by considering the curb detail at existing trees, by slight modifications in curb alignments, or by other methods so ordered by the engineer, in accordance with acceptable engineering practices.

Purposed and Need

The proposed project is intended to mitigate the economic challenges faced by the community in its continued recovery effort from Superstorm Sandy. In addition, the resiliency measures such as drainage improvements, off-grid light sources, and the installation of street trees and new plants will support the creation of a more resilient community and mitigate the impacts of future storm damage. During Superstorm Sandy, homes and businesses were destroyed by forceful wave action and storm surge. A safe, high quality corridor connecting the community to the ferry landing at Beach Channel Drive (the location of the ferry) and Shore Front Parkway is expected to improve the physical and economical resiliency of the Rockaway West community. The proposed project is fundamental to the overall recovery of Rockaway West.

New York City WRP Consistency Review

GOSR is acting as the Responsible Entity in accordance with 24 CFR Part 58 – Environmental Review Procedures for Entities Assuming HUD Environmental Responsibilities. The project area is located

within the New York City Coastal Zone Boundary and is therefore subject to New York City WRP consistency review. A WRP Consistency Assessment Form and supporting documentation (Appendix B and C) are attached for your review. The project area is also located within the boundary of the New York State Coastal Zone. Pursuant to the Coastal Zone Management Act, GOSR will submit the Federal Consistency Assessment Form and an analysis of the applicable policies to the New York State Department of State, Consistency Review Unit, for their review and comment.

GOSR is requesting a response letter from your office that can be included as an attachment to our environmental documentation to confirm that coordination with the New York Department of City Planning has been completed, and general consistency concurrence criteria will be met.

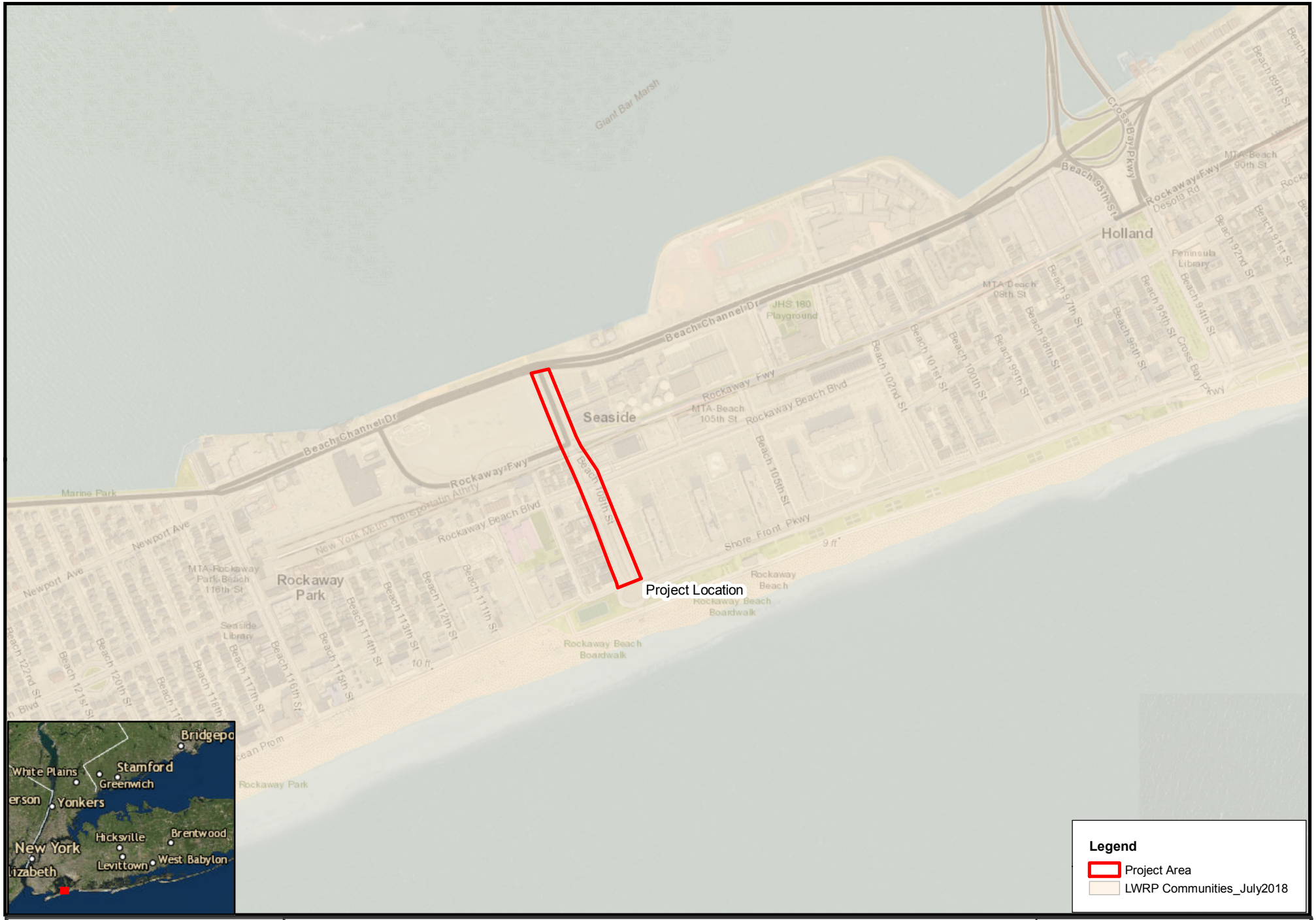
Thank you for taking the time to review the enclosed materials. If you have any questions or require additional information, please feel free to contact me via telephone at (518) 474-0647 or by email at Alicia.Shultz@nyshcr.org.

Sincerely,

Alicia Shultz
New York State Governor's Office of Storm Recovery
Bureau of Environmental Review and Assessment

Enclosures:
Appendix A - Project Location Maps
Appendix B - NYC WRP Consistency Assessment Form
Appendix C - Summary of Compliance with Applicable Policies
Appendix D - Policy 6.2 Analysis

Appendix A - Project Location Maps and Design Plans



Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

Governor's Office of Storm Recovery

Drawn By: ASL | Version: 1.0 | Date:9/14/2018

FEMA data uses NAVD88*

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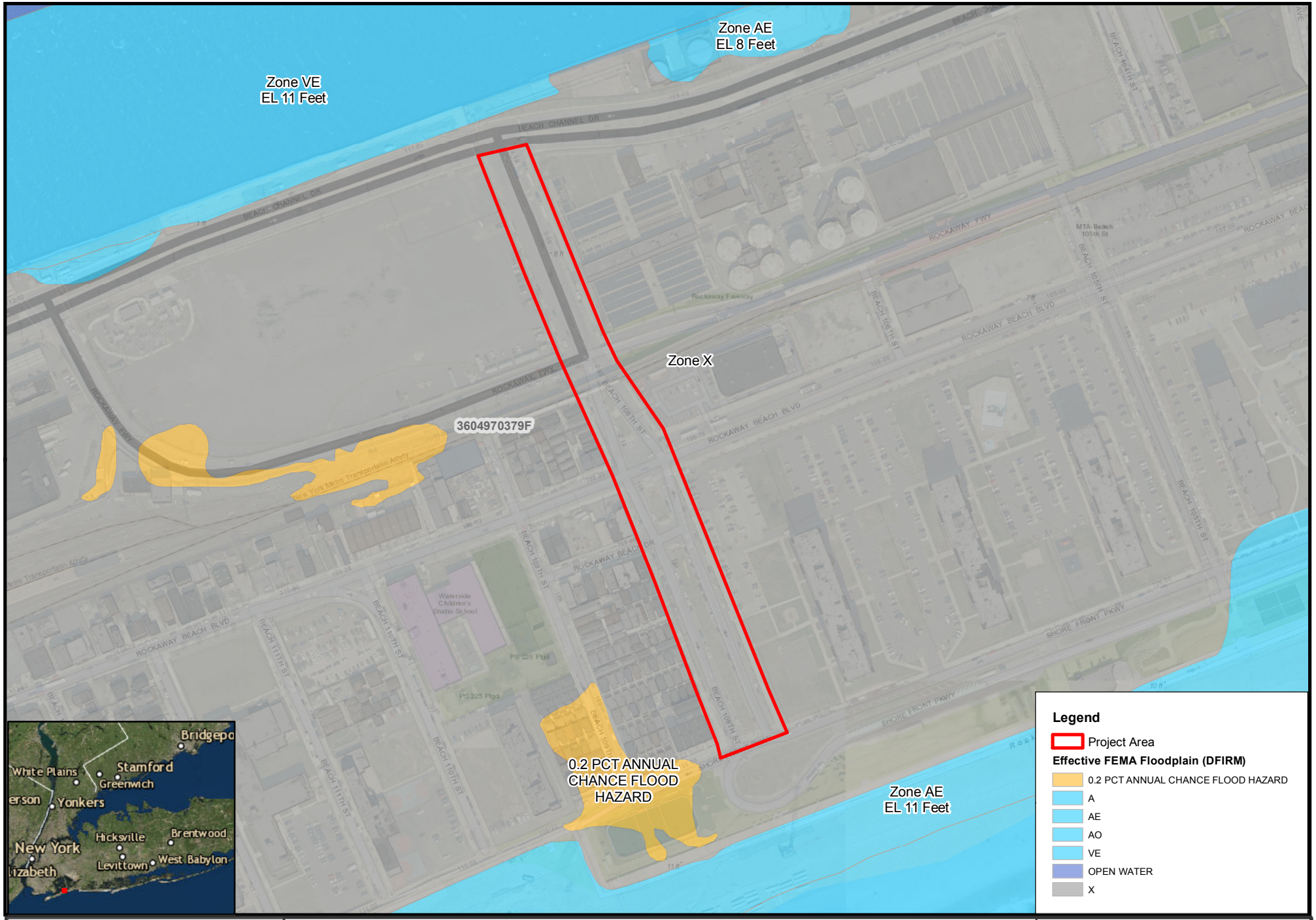

0 0.035 0.07 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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N

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0 0.05 0.1 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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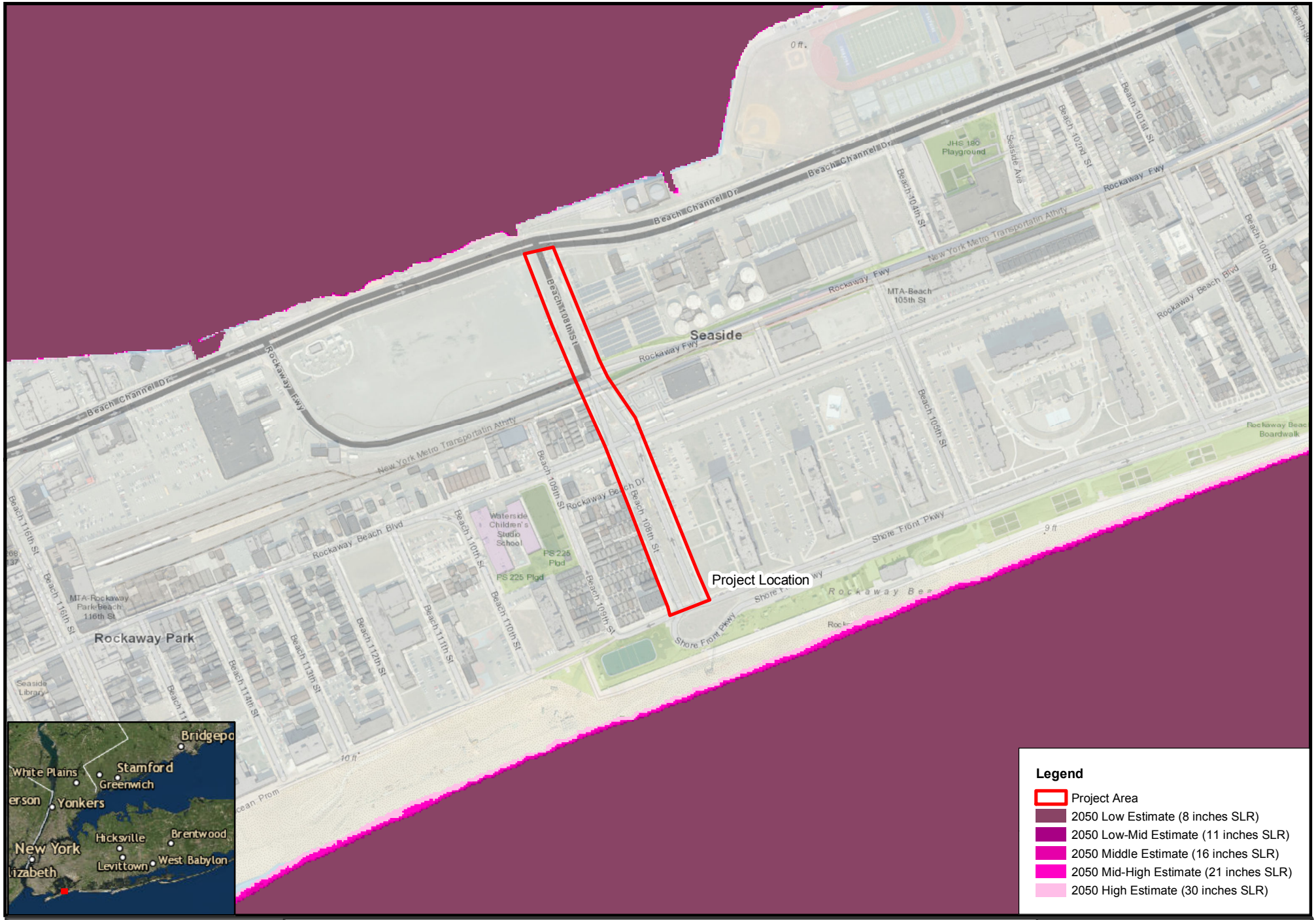

0 0.05 0.1 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

Governor's Office of Storm Recovery

N

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FEMA data uses NAVD88*

See Attachment 1
of
Environmental
Review
for the plan set.

Department of Design and Construction

DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PROJECT ID: SANDR04

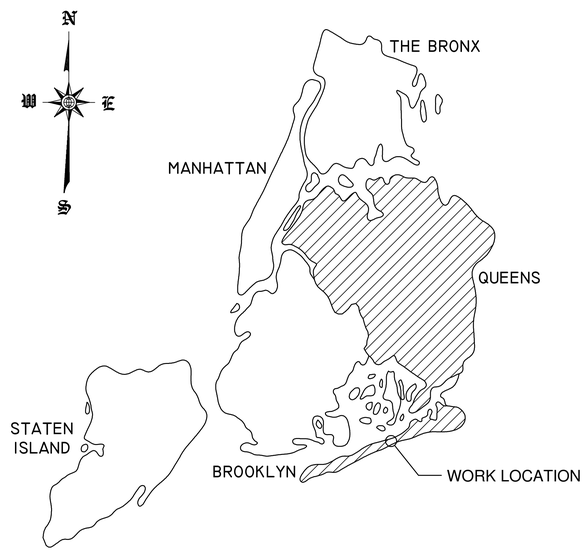
MASS MAILING NO. 1

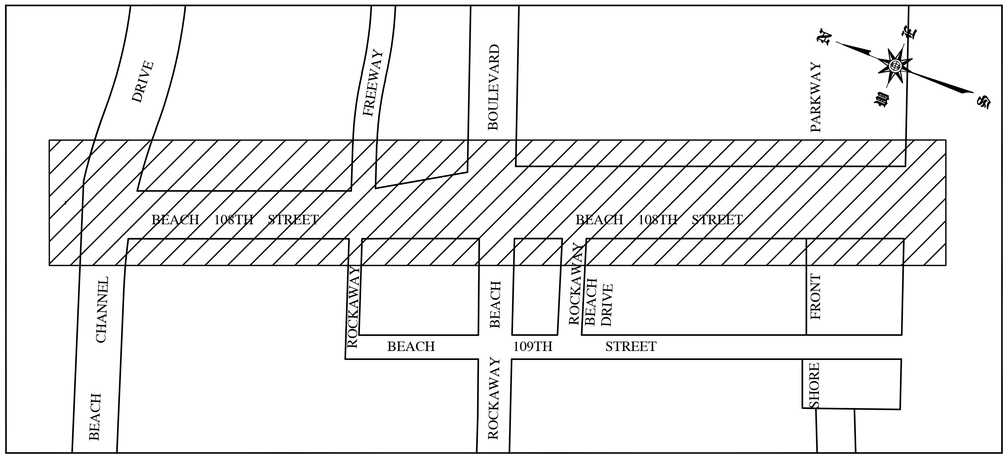
DATE: 08/17/2018

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE

INCLUDING UNDER QED-1044: CONSTRUCTION OF DISTRIBUTION WATER MAINS AND APPURTENANCES TOGETHER WITH STREET LIGHTING, TRAFFIC WORK AND ALL WORK INCIDENTAL THERETO

BOROUGH OF QUEENS





LOCATION PLAN
N.T.S.

PROJECT SITE

COMMUNITY BOARD NO. 14

ERIC MACFARLANE, P.E.
DEPUTY COMMISSIONER — DATE

MOHSEN ZARGARELAHI, P.E.
ASSOCIATE COMMISSIONER — DATE

HOW SHEEN PAU, P.E.
ASSISTANT COMMISSIONER — DATE

REVIEWED AND APPROVED BY:

HERVE MATHELIER
DIRECTOR — DATE

NAYEEM AMEEN, P.E.
ENGINEER-IN-CHARGE — DATE

FINAL DESIGN PREPARED BY:

P.E. NO. — DATE

0 1 2 3 4
ORIGINAL SIZE IN INCHES

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

PROJECT ID: SANDR04 | DATE: 8/17/2018 | SHEET 1 OF ---- | T1/T1

PROJECT ID SANDR04

CONSULTANT DESIGN

Appendix B - NYC WRP Consistency Assessment Form

FOR INTERNAL USE ONLY	WRP No. _____
Date Received: _____	DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program* *(WRP)* which has been approved as part of the State's Coastal Management Program.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

A. APPLICANT INFORMATION

Name of Applicant: NYC Mayor's Ofice of Recovery and Resiliency

Name of Applicant Representative: Alicia Shultz

Address: 38-40 State Street, Albany, NY

Telephone: 5184740647 Email: alicia.shultz@nyshcr.org

Project site owner (if different than above): _____

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

The City of New York is requesting CDBG-DR funding to construct improvements to the streetscape of Beach 108th Street, a 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive (the location of the ferry) to Shore Front Parkway, Rockaway West, Rockaway Peninsula in Queens, New York.

2. Purpose of activity

The proposed project is intended to mitigate the economic challenges faced by the community in its continued recovery effort from Superstorm Sandy. In addition, the resiliency measures such as drainage improvements, off-grid light sources, and the installation of street trees and new plants will support the creation of a more resilient community and mitigate the impacts of future storm damage. During Superstorm Sandy, homes and businesses were destroyed by forceful wave action and storm surge. A safe, high quality corridor connecting the community to the ferry landing at Beach Channel Drive (the location of the ferry) and Shore Front Parkway is expected to improve the physical and economical resiliency of the Rockaway West community. The proposed project is fundamental to the overall recovery of Rockaway West.

C. PROJECT LOCATION

Borough: Queens Tax Block/Lot(s): N.A.

Street Address: Beach 108th Street.

Name of water body (if located on the waterfront): Jamacia Bay; Atlantic Ocean

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☐ Yes ☑ No

- ☐ City Map Amendment
- ☐ Zoning Map Amendment
- ☐ Zoning Text Amendment
- ☐ Site Selection – Public Facility
- ☐ Housing Plan & Project
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____
- ☐ Zoning Certification
- ☐ Zoning Authorizations
- ☐ Acquisition – Real Property
- ☐ Disposition – Real Property
- ☐ Other, explain: _____
- ☐ Concession
- ☐ UDAAP
- ☐ Revocable Consent
- ☐ Franchise

Board of Standards and Appeals ☐ Yes ☑ No

- ☐ Variance (use)
- ☐ Variance (bulk)
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Other City Approvals

- ☐ Legislation
- ☐ Rulemaking
- ☐ Construction of Public Facilities
- ☐ 384 (b) (4) Approval
- ☑ Other, explain: Coastal Zone Consistency determination
- ☐ Funding for Construction, specify: Capital Project SANR04
- ☐ Policy or Plan, specify: _____
- ☐ Funding of Program, specify: _____
- ☐ Permits, specify: _____

State Actions/Approvals/Funding

- ☐ State permit or license, specify Agency: _____ Permit type and number: _____
- ☑ Funding for Construction, specify: Capital Project SANR04
- ☐ Funding of a Program, specify: _____
- ☑ Other, explain: Coastal Zone Consistency determination

Federal Actions/Approvals/Funding

- ☐ Federal permit or license, specify Agency: _____ Permit type and number: _____
- ☑ Funding for Construction, specify: Capital Project SANR04; CDBG-DR
- ☐ Funding of a Program, specify: _____
- ☑ Other, explain: Coastal Zone Consistency determination

Is this being reviewed in conjunction with a Joint Application for Permits? ☐ Yes ☑ No

E. LOCATION QUESTIONS

1. Does the project require a waterfront site? ☐ Yes ☑ No
2. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters? ☐ Yes ☑ No
3. Is the project located on publicly owned land or receiving public assistance? ☑ Yes ☐ No
4. Is the project located within a FEMA 1% annual chance floodplain? *(6.2)* ☐ Yes ☑ No
5. Is the project located within a FEMA 0.2% annual chance floodplain? *(6.2)* ☐ Yes ☑ No
6. Is the project located adjacent to or within a special area designation? *See Maps – Part III of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F).* ☐ Yes ☑ No

   ☐ Significant Maritime and Industrial Area (SMIA) (*2.1*)

   ☑ Special Natural Waterfront Area (SNWA) (*4.1*)

   ☑ Priority Maritime Activity Zone (PMAZ) (*3.5*)

   ☐ Recognized Ecological Complex (REC) (*4.4*)

   ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (*2.2, 4.2*)

F. WRP POLICY ASSESSMENT

Review the project or action for consistency with the WRP policies. For each policy, check Promote, Hinder *or* Not Applicable (N/A). *For more information about consistency review process and determination, see* ***Part I*** *of the NYC Waterfront Revitalization Program. When assessing each policy, review the full policy language, including all sub-policies, contained within* ***Part II*** *of the WRP. The relevance of each applicable policy may vary depending upon the project type and where it is located (i.e. if it is located within one of the special area designations).*

For those policies checked Promote *or* Hinder, *provide a written statement on a separate page that assesses the effects of the proposed activity on the relevant policies or standards. If the project or action promotes a policy, explain how the action would be consistent with the goals of the policy. If it hinders a policy, consideration should be given toward any practical means of altering or modifying the project to eliminate the hindrance. Policies that would be advanced by the project should be balanced against those that would be hindered by the project. If reasonable modifications to eliminate the hindrance are not possible, consideration should be given as to whether the hindrance is of such a degree as to be substantial, and if so, those adverse effects should be mitigated to the extent practicable.*

		Promote	Hinder	N/A
1	**Support and facilitate commercial and residential redevelopment in areas well-suited to such development.**	☑	☐	☐
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	☑	☐	☐
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	☑	☐	☐
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	☑	☐	☐
1.4	In areas adjacent to SMIAs, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	☐	☐	☑
1.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	☑	☐	☐

		Promote	Hinder	N/A
2	**Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.**	☑	☐	☐
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	☐	☐	☑
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	☐	☐	☑
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	☑	☐	☐
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.	☑	☐	☐
3	**Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.**	☑	☐	☐
3.1.	Support and encourage in-water recreational activities in suitable locations.	☑	☐	☐
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	☐	☐	☑
3.3	Minimize conflicts between recreational boating and commercial ship operations.	☐	☐	☑
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	☐	☐	☑
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	☑	☐	☐
4	**Protect and restore the quality and function of ecological systems within the New York City coastal area.**	☐	☐	☑
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	☐	☐	☑
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	☐	☐	☑
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	☐	☐	☑
4.5	Protect and restore tidal and freshwater wetlands.	☐	☐	☑
4.6	In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.	☐	☐	☑
4.7	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.	☐	☐	☑
4.8	Maintain and protect living aquatic resources.	☐	☐	☑

		Promote	Hinder	N/A
5	**Protect and improve water quality in the New York City coastal area.**	☐	☐	☑
5.1	Manage direct or indirect discharges to waterbodies.	☐	☐	☑
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	☐	☐	☑
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	☐	☐	☑
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	☐	☐	☑
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	☐	☐	☑
6	**Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.**	☑	☐	☐
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	☑	☐	☐
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in *New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms*) into the planning and design of projects in the city's Coastal Zone.	☑	☐	☐
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	☑	☐	☐
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	☐	☐	☑
7	**Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.**	☐	☐	☑
7.1	Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.	☐	☐	☑
7.2	Prevent and remediate discharge of petroleum products.	☐	☐	☑
7.3	Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.	☐	☐	☑
8	**Provide public access to, from, and along New York City's coastal waters.**	☑	☐	☐
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	☑	☐	☐
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	☐	☐	☑
8.3	Provide visual access to the waterfront where physically practical.	☐	☐	☑
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	☑	☐	☐

		Promote	Hinder	N/A
8.5	Preserve the public interest in and use of lands and waters held in public trust by the State and City.	☑	☐	☐
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	☑	☐	☐
9	**Protect scenic resources that contribute to the visual quality of the New York City coastal area.**	☐	☐	☑
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	☐	☐	☑
9.2	Protect and enhance scenic values associated with natural resources.	☐	☐	☑
10	**Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.**	☐	☐	☑
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	☐	☐	☑
10.2	Protect and preserve archaeological resources and artifacts.	☐	☐	☑

G. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: Alicia Shultz

Address: 38 State Street, Albany, NY 12107

Telephone: 5188172873 Email: alicia.shultz@nyshcr.org

Applicant/Agent's Signature: Alicia Shultz

Date: 9/20/19

Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the NYS Department of State Office of Planning and Development and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

New York City Department of City Planning
Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3696
wrp@planning.nyc.gov
www.nyc.gov/wrp

New York State Department of State
Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
518-474-6000
www.dos.ny.gov/opd/programs/consistency

Applicant Checklist

- ☑ Copy of original signed NYC Consistency Assessment Form
- ☑ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☐ Environmental Review documents
- ☑ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.
- ☑ Policy 6.2 Flood Elevation worksheet, if applicable. For guidance on applicability, refer to the WRP Policy 6.2 Guidance document available at www.nyc.gov/wrp

Appendix C - Summary of Compliance with Applicable Policies

WRP POLICY ASSESSMENT SUPPLEMENT

Project: Beach 108th Streetscape Improvements Project
Rockaway West, Rockaway Peninsula in Queens, New York

For those policies checked Promote on the New York City Waterfront Revitalization Program Consistency Assessment Form, a written statement assessing the effects of the proposed activity on the relevant policies or standards is provided below.

Policy	WRP Policy	Proposed Project Consistency with WRP
1	Support and facilitate commercial and residential redevelopment in areas well-suited to such development.	While it is at the disembarkation point for the Rockaway Ferry, Beach 108th Street is an uninviting and bleak passageway. Flanked by vacant lots and running underneath the elevated A train, it does not provide a welcoming experience to ferry passengers. Nevertheless, because of the Rockaway Ferry, Beach 108th Street is seeing increased foot traffic. Given the short distance from the ferry to the beach, the unique experience of both a bay and ocean within walking distance of each other, and the potential for redevelopment of the adjacent National Grid site, Beach 108th Street may have redevelopment potential as a new hub of community and visitor activity. A more attractive streetscape could provide a more beautiful landscape for residents. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	Improving the Beach 108th Street streetscape will have intrinsic benefits by upgrading the pedestrian experience of the corridor and contributing a unique sense of place to the beach-going experience. It is also one part of a larger strategy to build on the opportunity provided by the Rockaway Ferry to strengthen and promote a more resilient Rockaway West economy. The project had the potential for strengthening upland residential and commercial areas and for opening up the waterfront to the public by creating better access to waterfront areas.

		Based on the above, GOSR concluded that the proposed project is consistent with this policy.
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	The streetscape improvements will create a more pleasant pedestrian experience and increase transportation options encouraging development and attract the public. A higher quality gateway streetscape experience would help to solidify the identity of Beach 108th Street, and improve the quality of retail that is attracted to the area, bringing revenue to local businesses. This Proposed Project is in line with the primary objective of the NYC Regional Economic Development Council's Strategic Plan (2013) to "Create a Pro-Growth, Pro-Jobs environment" and support small businesses. A bus circulator service in Rockaway West would improve access to the transformed new Rockaway Ferry stop, providing improved transportation options while supporting ferry ridership and revenues. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	Beach 108th Street is the disembarkation point for the Rockaway Ferry and currently supported by transportation and public water and sewer. A bus circulator service in Rockaway West will improve access to the transformed new Rockaway Ferry stop, providing improved transportation options while supporting ferry ridership and revenues. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
1.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	Streetscape elements will be anchored by resiliency measures. Natural elements, known as bioswales, will both green the streets and address ongoing ponding that occurs at several intersections by capturing stormwater runoff. Similarly, permeable materials on the sidewalks and roadway will allow stormwater to infiltrate directly into the ground, and highly efficient LED streetlights with resilient means of backup power, such as small solar panels or wind turbines, would be installed.

		Stormwater drainage will be moderately improved through the installation of permeable roadway and sidewalk materials (as well as bioswales, funded under a separate Proposed Project), which would reduce the negative health and aesthetic impacts of standing water. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
2	Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.	Beach 108th Street is the disembarkation point for the Rockaway Ferry. Given the short distance from the ferry to the beach, the unique experience of both a bay and ocean within walking distance of each other, and the potential for redevelopment of the adjacent National Grid site, Beach 108th Street may have redevelopment potential as a new hub of community and visitor activity. By improving the public realm of Beach 108th Street, this project would build on proposed efforts to support permanent Rockaway Ferry service and development of the National Grid site to support and revitalize the area. A bus circulator service in Rockaway West would improve access to the transformed new Rockaway Ferry stop, providing improved transportation options while supporting ferry ridership and revenues. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	Stormwater drainage will be moderately improved through the installation of permeable roadway and sidewalk materials (as well as bioswales, funded under a separate Proposed Project), which would reduce the negative health and aesthetic impacts of standing water. Promotion of mass-transit, pedestrian improvement and bike sharing will increase public access to the waterfront. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront	Streetscape elements will be anchored by resiliency measures. Natural elements, known as bioswales, will both green the streets and address

	industrial development and infrastructure, pursuant to WRP Policy 6.2.	ongoing ponding that occurs at several intersections by capturing stormwater runoff. Similarly, permeable materials on the sidewalks and roadway will allow stormwater to infiltrate directly into the ground, and highly efficient LED streetlights with resilient means of backup power, such as small solar panels or wind turbines, would be installed. Stormwater drainage will be moderately improved through the installation of permeable roadway and sidewalk materials (as well as bioswales, funded under a separate Proposed Project), which would reduce the negative health and aesthetic impacts of standing water. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
3	Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.	Beach 108th Street is the disembarkation point for the Rockaway Ferry. Streetscape improvements will encourage the use of the ferry and may have redevelopment potential as a new hub of community and visitor activity. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
3.1	Support and encourage in-water recreational activities in suitable locations.	The streetscape improvements including transportation and pedestrian corridors will provide better access to the nearby beaches. This project would create a bike share system on the Rockaway Peninsula to facilitate flexible transportation across the peninsula for visitors and residents. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	Beach 108th Street is the disembarkation point for the Rockaway Ferry. Streetscape improvements will encourage the use of the ferry. By improving the public realm of Beach 108th Street, this project would build on proposed efforts to support permanent Rockaway Ferry service and development of the National Grid site to support and revitalize the area.

		A bus circulator service in Rockaway West would improve access to the transformed new Rockaway Ferry stop, providing improved transportation options while supporting ferry ridership and revenues. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
6	Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.	This coastal protection along Beach 108th Street at one of the most vulnerable locations on the bayside of Rockaway West would provide flood protection benefits in the short term for this portion of the Community. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	To protect the Community from flooding, surge, and sea level rise bioswales will be installed to improve drainage. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms) into the planning and design of projects in the city's Coastal Zone.	Streetscape elements will be anchored by resiliency measures. Natural elements, known as bioswales, will both green the streets and address ongoing ponding that occurs at several intersections by capturing stormwater runoff. Similarly, permeable materials on the sidewalks and roadway will allow stormwater to infiltrate directly into the ground, and highly efficient LED streetlights with resilient means of backup power, such as small solar panels or wind turbines, would be installed. Stormwater drainage will be moderately improved through the installation of permeable roadway and sidewalk materials (as well as bioswales, funded under a separate Proposed Project), which would reduce the negative health and aesthetic impacts of standing water. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the	To protect the Community from flooding, surge, and sea level rise bioswales will be installed to improve drainage.

	investment will yield significant public benefit.	Based on the above, GOSR concluded that the proposed project is consistent with this policy.
8	Provide public access to, from, and along New York City's coastal waters.	Beach 108th Street is the disembarkation point for the Rockaway Ferry. Promotion of mass-transit, pedestrian improvement and bike sharing will encourage public access to, from and along NYC coastal waters. This project would provide support for ongoing ferry service to Rockaway West, a significant transportation amenity valued widely across the Community. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	While it is at the disembarkation point for the Rockaway Ferry, Beach 108th Street is an uninviting and bleak passageway. Flanked by vacant lots and running underneath the elevated A train, it does not provide a welcoming experience to ferry passengers. Given the short distance from the ferry to the beach, the unique experience of both a bay and ocean within walking distance of each other, and the potential for redevelopment of the adjacent National Grid site, Beach 108th Street may have redevelopment potential as a new hub of community and visitor activity. A more attractive streetscape could draw visitors further into the neighborhood and provide a more beautiful landscape for residents. By improving the public realm of Beach 108th Street, this project would build on proposed efforts to support permanent Rockaway Ferry service and development of the National Grid site to support and revitalize the area. A bus circulator service in Rockaway West would improve access to the transformed new Rockaway Ferry stop, providing improved transportation options while supporting ferry ridership and revenues. This project would create a bike share system on

		the Rockaway Peninsula to facilitate flexible transportation across the peninsula for visitors and residents. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	The Proposed Project will overhaul the streetscape of Beach 108th Street, from the ferry landing at Beach Channel Drive to the beach at Shore Front Parkway. The land is currently owned by NYC. Based on the above, GOSR concluded that the proposed project is consistent with this 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 overhaul the streetscape of Beach 108th Street, from the ferry landing at Beach Channel Drive to the beach at Shore Front Parkway. The land is currently owned by NYC. Based on the above, GOSR concluded that the proposed project is consistent with this policy.
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	A higher quality gateway streetscape experience will help to solidify the identity of Beach 108th Street, and improve the quality of retail that is attracted to the area, bringing revenue to local businesses. Based on the above, GOSR concluded that the proposed project is consistent with this policy.

Appendix D - Policy 6.2 Analysis

PROJECT ACTION'S CONSISTENCY WITH POLICY 6.2 OF THE WATERFRONT REVITALIZATION PROGRAM

Project: Beach 108th Streetscape Improvements, Rockaway West, Queens County, NY

Introduction: The project design includes climate change and flood mitigation features described in Section 1.0 below to ensure consistency with Policy 6.2. The General Methodology used to assess the project actions consistency with Policy 6.2 is provided in Section 2.0 and follow the description of the project. A summary of the results of the General Methodology is provided in Section 3.0. Figures are provided in Appendix A of the cover letter to this assessment.

Section 1.0: Project Description - Climate Change and Flood Mitigation Features of the Project

To assess the project action's consistency with Policy 6.2 of the Waterfront Revitalization Program, GOSR followed the guidance presented in the *New York Waterfront Revitalization Program Climate Adaptation Guidance.* This policy requires all projects, except for maintenance and in-kind replacement of existing facilities, to identify potential vulnerabilities to and consequences of sea level rise and coastal flooding over their lifespan and to identify and incorporate design techniques to address these risks.

No critical facilities are associated with project activities. During construction, any hazardous materials and equipment will be stored outside of the 0.1 and 0.2 percent flood area to prevent flooding of hazardous materials and equipment.

Current Floodplain

The project area is NOT within the 0.1 and 0.2 percent annual chance flood hazard according the attached Effective FEMA Floodplain map (FIRM) map.

2050 Floodplain and High Tides

Based on the **Effects of Sea Level Rise on the 1% Annual Change Floodplain** and the **Areas Affected by Future High Tides** figures in the *NYC Waterfront Revitalization Program Climate Change Adaptation Guidance*, the project area is within the 1% chance floodplain in 2050 and is NOT within an area affected by future high tides (see Appendix A, figures).

Section 2.0: General Methodology to Assess the Project Action's Consistency with Policy 6.2 of the Waterfront Revitalization Program

Because the project is an outside area, GOSR used the General Methodology to assess the project action's consistency with Policy 6.2 of the Waterfront Revitalization Program. This method is applicable to site-specific actions that are considered lower risk since they do not include new vulnerable, critical, or potentially hazardous features as described in the *NYC Waterfront Revitalization Program Climate Change Adaptation Guidance*. This project does not have a specified construction timeline at this time or defined project lifespan at the time. Therefore, the

method is based on the 2050s 90th percentile sea level rise projections. The General Method includes the following steps:

1. Identify Vulnerabilities and Consequences:

   a. Assess the project area's exposure to current and future flood risk.

      - The project area is within the 1% annual chance floodplain according the 2050 90th percentile sea level rise projections provided in the *NYC Waterfront Revitalization Program Climate Change Adaptation Guidance*.
      - The floodplain maps for the project area are attached. The project area is NOT within and does not touch the 0.1 and 0.2 percent annual chance flood hazard according the attached Effective FEMA Floodplain map (FIRM) map.
      - Using the attached Effective FIRM for the project area the, the project area within Flood Zone X, no base flood elevation (BFE) provided. The project boundary to the north is close to the boundary of the Jamaica Bay with a BFE of 11 feet above mean sea level (AMSL), which is within a coastal flood zone with velocity hazard (wave action). The project area to the south is close to the Atlantic Ocean with a BFE of 1 feet AMSL. The project area to the east and west is not within a flood hazard area.
      - The range of ground elevations relative to NAVD88 across the project area, based on the attached design plans, sheet survey controls, range from 6.20 feet AMSL to 12.20 feet AMSL.
      - The project area is not within the 1% annual chance floodplain, but is within the 1% annual chance floodplain according the 2050 90th percentile sea level rise projections provided in the NYC Waterfront Revitalization Program Climate Change Adaptation Guidance. A map of the 2050s 1% Annual Chance Floodplain is provideD in Appendix A, figures.
      - The project area would NOT be flooded by the 2050s Mean Higher High Water (see Appendix A, figures).

   b. Identify if the project or action would facilitate the development of any vulnerable, critical, or potentially hazardous features, as defined under "Key Terms" above, within areas exposed to flooding from Mean Higher High Water or 1% Annual Chance Flood by the 2050s under the 90th percentile of sea level rise projections.

      The project would not facilitate the development of any vulnerable, critical, or potentially hazardous features. The project area is within the 1% annual chance flood by the 2050s under the 90th percentile of sea level rise projections, see Appendix A figure.

      No critical facilities are associated with project activities. During construction, any hazardous materials and equipment will be stored outside of the 0.1 and 0.2 percent flood area to prevent flooding of hazardous materials and equipment.

Section 3.0: Summary of General Method:

The Beach 108th Streetscape Improvements do not include any new shoreline infrastructure or enclosed structures.

1(a): The project is NOT located within the current % annual chance floodplain and within the 2050s 1% annual chance floodplain. The site will not be flooded by 2050s Mean Higher High Water.

1(b): The project does not include any vulnerable, critical, or potentially hazardous features. The project would advance Policy 6.2, and **no further analysis is needed**.

Appendix E

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Environmental Site Remediation Database Search Details

Site Record

Administrative Information

Site Name: Gas Drive Station, 112-01 Beach Channel
Site Code: V00123
Program: Voluntary Cleanup Program
Classification: C
EPA ID Number:

Location

DEC Region: 2
Address: 112-01 Beach Channel Drive
City: Rockaway Park Zip: 11694-
County: Queens
Latitude: 40.58249668
Longitude: -73.83477907
Site Type:
Estimated Size: 0 Acres

Site Owner(s) and Operator(s)

Site Description

The Mobil site, approximately 150 feet by 60 feet in area is located at 112-01 Beach Channel Drive in Queens, New York. The Volunteer, Mobil Oil Corporation, leases the Site and had previously operated a gasoline service station. During reconstruction activities at the Mobil Site in May 1995, several construction workers were overcome with fumes and were hospitalized. Subsequently, air monitoring and soil sampling were conducted by Mobil, NYS Department of Environmental Conserervation, NYS Department of Health, NYC Department of Environmental Protection and the US Environmental Protection Agency. The surficial waste primarily appears to be coal purification waste. The chemicals found in the waste include sulfur, lead, cyanides and naphthalene. The site has two distinct waste layers separated by one foot to two feet of sandy material. The top layer consists of purification waste and is approximately two feet in thickness. The lower layer contains coal ash/ coal tar like materials and varies from six inches to one foot in thickness. Analysis of this material showed the presence of Polycyclic Aromatic Hydrocarbons, and that this waste is a non-hazardous waste. Mobil excavated the

top two feet layer of visually contaminated wastes and all underlying stained soils from the site to the depth of groundwater. The excavated soils were shipped off-site for disposal and the excavated areas were backfilled by two to three feet of clean soil and covered by cement concrete and/or asphalt layer. Groundwater is five feet below grade and is shown to be saline. After soil removal, a groundwater monitoring program was undertaken and indicated no contamination. Following Site remediation, Mobil built a new gas station which is in operation. Department's involvement is not required.

Contaminants of Concern (Including Materials Disposed)

Contaminant Name/Type

lead

sulfur

Site Environmental Assessment

Site has been cleaned up. No environmental concerns remain.

Site Health Assessment

NYSDOH has insufficient information to fully evaluate the potential for human exposures.

For more Information: E-mail Us

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Refine This Search

NYSDEC Spills Data 2016 to 2017

Far Rockaway Park

	Spill Number	Date Spill Reported	Spill Name	County	City/Town	Address
114	1608586	12/7/2016	IN THE SOIL	Queens	FAR ROCKAWAY	111 EAST 6TH ROAD
206	1610508	2/22/2017	COMMERCIAL	Queens	FAR ROCKAWAY	1629 REDFERN AVE
390	1702628	6/16/2017	SORRENTINO REC CENTER	Queens	FAR ROCKAWAY	18-48 CORNAGA AVENUE
345	1701664	5/20/2017	POLE 6	Queens	ROCK A WAY BEACH	205 PEACH 98TH ST
64	1607768	11/9/2016	FAR ROCKAWAY BUS DEPOT	Queens	ROCKAWAY	49-19 ROCKAWAY BEACH BLVD
184	1610220	2/10/2017	JAMAICA BAY	Queens	ROCKAWAY PARK	BEACH CHANNEL DRIVE
1	1606036	9/16/2016	JAMACA BAY	Queens	ROCK-A-WAY PARK	EAST 108 & BEACH CHANNEL DR

"Date Spill Closed" means the date the spill case was closed by the case manager in the Department of Environmental Conservation (the Department). The spill case was closed because either; a) the records and data submitted indicate that the necessary cleanup and removal actions have been completed and no further remedial activities are necessary, or b) the case was closed for administrative reasons (e.g., multiple reports of a single spill consolidated into a single spill number). The Department however reserves the right to require additional remedial work in relation to the spill, if in the future it determines that further action is necessary.

NYSDEC Spills 2017 - 2018 Far Rockaway Park

	Spill Number	Date Spill Reported	Spill Name	County
127	1708686	12/15/2017	GROUND WATER	Queens
135	1708784	12/19/2017	DRUM RUN	Queens
137	1708793	12/19/2017	REGIS FORD	Queens
326	1801504	5/9/2018	TRANSFORMER POLE # 6	Queens
338	1801699	5/14/2018	DRUM RUN	Queens
442	1804217	7/19/2018	CONSTRUCTION SITE- RESIDENTIAL	Queens
395	1803062	6/19/2018	EXCAVATION SITE	Queens

"Date Spill Closed" means the date the spill case was closed by the case manager i
Department). The spill case was closed because either; a) the records and data sub
have been completed and no further remedial activities are necessary, or b) the cas
a single spill consolidated into a single spill number). The Department however rese
the spill, if in the future it determines that further action is necessary.

City/Town	Address
FAR ROCK AWAY	357 BEACH 79TH STREET
FAR ROCKAWAY	ACROSS FROM 1540 POINT BREEZE PLACE
FAR ROCKAWAY	2273 NAMEOKE AVE
FAR ROCKAWAY	319 BEACH 12TH ST
FAR ROCKAWAY	BROOKHAVEN AVE B/W BEACH 30TH ST AND DEAD END
FAR ROCKAWAY	11-38 FOAM PLACE
FAR ROCK-A-WAY	BEACH 54 ST/ARVERNA

n the Department of Environmental Conservation (the
mitted indicate that the necessary cleanup and removal actions
e was closed for administrative reasons (e.g., multiple reports of
rves the right to require additional remedial work in relation to

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Environmental Site Remediation Database Search Details

Site Record

Administrative Information

Site Name: K - Rockaway Park MGP
Site Code: 241029
Program: State Superfund Program
Classification: 02
EPA ID Number:

Location

DEC Region: 2
Address: Beach Channel Drive & Beach 108th Street
City: Rockaway Park Zip: 11694
County: Queens
Latitude: 40.58270147
Longitude: -73.83120715
Site Type: STRUCTURE
Estimated Size: 8.8 Acres

Site Owner(s) and Operator(s)

Current Owner Name: National Grid
Current Owner(s) Address: Environmental Assessment Management
Hicksville,NY, 11801
Owner(s) during disposal: LONG ISLAND LIGHTING COMPANY (LILCO)
Current On-Site Operator: Long Island Lighting Company (LILCO)
Stated Operator(s) Address: 445 Broadhollow Road
Melville,NY 11747

Hazardous Waste Disposal Period

From: 1894 **To:** 1959

Site Description

Location: The Rockaway Park MGP site is a 9 acre parcel located in the Rockaway Park Section of the Borough of Queens, New York City, an urban area. The site is bounded by Beach Channel Drive to the north, Beach 108th Street to the east, and Rockaway Freeway to the west and south. Jamaica Bay is located 200 feet north of the site, and the Atlantic Ocean is one-quarter mile to the south. Site Features: The site is currently vacant with no buildings. Roughly one quarter of the site is paved, the

rest is unpaved. Current Zoning/Use: The site is zoned commercial and is currently not in use. The surrounding parcels are commercial and industrial. The nearest residential property is 200 yards to the south on the far side of an elevated subway line. Past Use of the Site: The parcel was the site of a large manufactured gas plant (MGP) from the late 1800¿s through the 1950's. That historic use led to coal tar contamination escaping from the gas holders, tar separator, and various independent disposal areas in the north and west portions of the site, including the bulkhead area north of Beach Channel Drive. After closure of the MGP, the site used by the the untility as a service center which included a gas regulator station, electric substation, and storage areas. A Record of Decision was issued for the site in October, 2004. The remedy includes a large-volume soil removal and two subsurface barrier walls to prevent further off site migration of coal tar. Remedial construction began on the site in October of 2008 and is ongoing. Site Geology and Hydrogeology: The site is underlain by relatively uniform sand. The northern half to 2/3rds of the site was created by filling in portions of Jamaica Bay. The water table at the site is roughly 8 feet below grade. Overall groundwater flow is to the north; however the northern half of the site experiences tidal reversals. The remedial action on the main site is complete, but the FER has not yet been approved.

Contaminants of Concern (Including Materials Disposed)

Contaminant Name/Type

BENZENE (D018 WASTE)

coal tar

Site Environmental Assessment

Nature and Extent of Contamination: The primary contaminants of concern known at this time are benzene, toluene, ethylbenzene, xylene (BTEX) and polycyclic aromatic hydrocarbons (PAHs). Investigations indicate a plume of dense non-aqueous phase liquid (DNAPL) proceeds vertically underneath the site roughly 110 feet and to the north of the site. This layer of DNAPL has created a groundwater plume that extends to the north and east just beyond the site and contamination in the soils under the site. Exceedances of standards, criteria, and guidance include BTEX and PAHs in groundwater and subsurface soil. Special Resources Threatened: Jamaica Bay is just to the north of the site. It is not currently impacted by the site, but may be in the future if MGP tar is allowed to freely migrate into the bay. Siginificant Threat: The site represents a significant environmental threat because of ongoing releases from source areas of contaminants into the groundwater and its potential to release contaminants into Jamaica Bay. The on-site remedial work has been completed. This work removed contaminated soils across the site to a depth of 8 feet. A clean soil cover was placed at the surface of the site. Also a barrier wall was placed at the northern edge of the site and DNAPL collection wells were installed at several points across the site.

Site Health Assessment

Since the site is fenced and covered by two feet of clean sand and gravel, people will not come into contact with site related soil and groundwater contamination unless they dig below the surface. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site related contaminants due to soil vapor intrusion does not represent a current concern. Furthermore, environmental sampling indicates soil vapor intrusion is not a concern for off-site buildings.

For more Information: E-mail Us

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Refine This Search

Appendix F

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program
625 Broadway, Fifth Floor, Albany, NY 12233-4757
P: (518) 402-8935 | F: (518) 402-8925
www.dec.ny.gov

September 17, 2018

Alicia Shultz
Governor's Office of Storm Recovery
38-40 State Street
Albany, NY 12207

Re: Beach 108th Streetscape Improvements Project, Rockaway West
County: Queens Town/City: City Of New York

Dear Ms. Shultz:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

We have no records of rare or state-listed animals or plants, or significant natural communities at the project site. Given the location and nature of the proposed work, we have no concerns regarding any impacts to rare or state-listed animals or significant natural communities in the general vicinity of the project site.

The absence of data does not necessarily mean that rare or state-listed species, significant natural communities, or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information that indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other resources may be required to fully assess impacts on biological resources.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities, and other significant habitats maintained in the Natural Heritage database. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 2 Office, Division of Environmental Permits, at dep.r2@dec.ny.gov.

Sincerely,

Nick Conrad

Nicholas Conrad
Information Resources Coordinator
New York Natural Heritage Program

1052

Governor's Office of
Storm Recovery

ANDREW M. CUOMO
Governor

September 5, 2018

Re: Natural Heritage Compliance Process Request for the Beach 108th Streetscape Improvements Project, Rockaway West, Rockaway Peninsula in Queens, New York

The Governor's Office of Storm Recovery (GOSR), acting under the auspices of New York State Homes and Community Renewal's (HCR) Housing Trust Fund Corporation (HTFC), on behalf of the Department of Housing & Urban Development (HUD), are currently preparing an Environmental Review for the Beach 108th Streetscape Improvements Project, Rockaway West, Rockaway Peninsula in Queens, New York (see attached figures). GOSR is acting as HUD's non-federal representative for the purposes of conducting consultation pursuant to Section 7 of the Endangered Species Act.

GOSR is contacting your office for assistance in identifying the potential presence of any rare or Federal and/or State threatened, endangered, proposed or candidate species in the vicinity of the proposed projects. In addition, information regarding the presence of any other species or habitats of special concern in the vicinity of the proposed projects is also requested. The purpose of this letter is to provide the New York State Department of Environmental Conservation (NYSDEC) Natural Heritage Program (NYNHP) notice of the proposed project and determine the presence of any State or Federal endangered, threatened, or rare species or significant natural communities.

Project Description

The City of New York is requesting CDBG-DR funding to construct improvements to the streetscape of Beach 108th Street, a 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive (the location of the ferry) to Shore Front Parkway, Rockaway West, Rockaway Peninsula in Queens, New York. The NYC Department of Transportation (DOT) will function as the implementing agency on behalf of the City of New York. The proposed project includes:

- Excavation and removal of existing roadway and sidewalk;
- Creation of new roadway and sidewalk (including typical asphalt for travel lanes and permeable materials for bike lanes, parking lanes, and sidewalks);
- Expand sidewalks in certain areas to provide safe pedestrian access and waiting space for potential shuttle stop;
- Provide continuous dedicated bicycle facility, connecting the new ferry landing to the existing bike lane along Shore Front Parkway and the planned Rockaway Beach Blvd route.
- Upgrade all crosswalks and pedestrian ramps at the intersection of Shore Front Parkway to current ADA standards and reconfigure to allow for safe bicycle crossing and access to exiting bicycle pathway along the beach;
- Install bike racks;

- Installation of a dedicated left-turn bay, and move signal infrastructure to improve the safety of the high crash intersection at Beach 108th Street and Rockaway Beach Blvd.;
- Landscaping and street furniture such as trees, benches, and bike racks;
- Storm water drainage improvements including catch basins and constructing new catch basis, old catch basins will be filled in;
- Replace water main lines and abandon existing water main line; and
- Install high efficiency LED streetlights with resilient means of backup power, such as small solar panels, that remain functional in a power outage.

Construction will include excavation and removal of existing roadway and sidewalk and creation of new roadway and sidewalk, full reconstruction of Beach 108 Street. Streetscape elements will also include storm water drainage improvements. All proposed drainage work shall be done in conformance with the latest standards of the New York City Department of Environmental Protection (N.Y.C.D.E.P.) Bureau of Sewers. All new catch basin connections shall be made to existing sewers at Manholes, with 12" diameter ductile iron pipe, class 56, with internally locked "push-on" joints laid on 6" of broken stone for the entire width of the trench and for one-half the pipe diameter. The broken stone shall be hard, un-weathered stone, uniformly graded from 1/4" to 3/4" in diameter and conform to commercially available 1/4" to 3/4" stone. All new catch basins will have a hood on the outlet pipe. As a result of curb relocation, existing Street appurtenances, such as Hydrants, lampposts and traffic signal poles, bus shelters, etc., will have to be relocated. Water hydrants will be relocated in accordance with the specifications of the Department of Environmental Protection, Bureau of Water Supply.

To make way for the improvements, **23 trees will be removed**. Grading will be required and would remove existing shrubbery and fences, as necessary. Tree removals will be avoided to the greatest extend possible by considering the curb detail at existing trees, by slight modifications in curb alignments, or by other methods so ordered by the engineer, in accordance with acceptable engineering practices.

Project Purpose and Need

The proposed project is intended to mitigate the economic challenges faced by the community in its continued recovery effort from Superstorm Sandy. In addition, the resiliency measures such as drainage improvements, off-grid light sources, and the installation of street tress and new plants will support the creation of a more resilient community and mitigate the impacts of future storm damage. The Beach 108th Streetscape project was identified in the Rockaway West – NY Rising Community Reconstruction Plan.

During Superstorm Sandy, homes and businesses were destroyed by forceful wave action and storm surge. A safe, high quality corridor connecting the community to the ferry landing at Beach Channel Drive (the location of the ferry) and Shore Front Parkway is expected to improve the physical and economical residency of the Rockaway West community. The proposed project is fundamental to the overall recovery of Rockaway West.

Compliance

According to information reviewed from the New York State Environmental Resource Mapper, significant natural communities and rare plants or animals are shown to be at or near the site. These layers are generalized areas and no detailed information is provided by the NYS Environmental Resource Mapper database on what and how these determinations were made. The purpose of this letter is to confirm that there are no significant communities or rare plants and animals in the project area. Considering the nature of the proposed construction and the limits of the construction to existing developed areas, the potential impact to any existing natural communities and rare plants or animals should be minimal.

Your assistance with this matter is greatly appreciated. We respectfully request your cooperation and are seeking a response within 30 days of receipt of this letter. If you have questions or require additional information regarding this request, please contact me at (518) 474-0647 or Alicia.Shultz@nyshcr.org. Thank you for your time and consideration.

Sincerely,

Alicia Shultz
Senior Environmental Scientist
Bureau of Environmental Review and Assessment

Attachments: Site Maps
NYS Environmental Resource Mapper

Environmental Resource Mapper

Base Map: Topographical Using this map

Search

Tools

Layers and Legend

- State Regulated Freshwater Wetlands
  - State Regulated Wetland Checkzone
- Significant Natural Communities
  - Natural Communities Near This Location
- Rare Plants or Animals

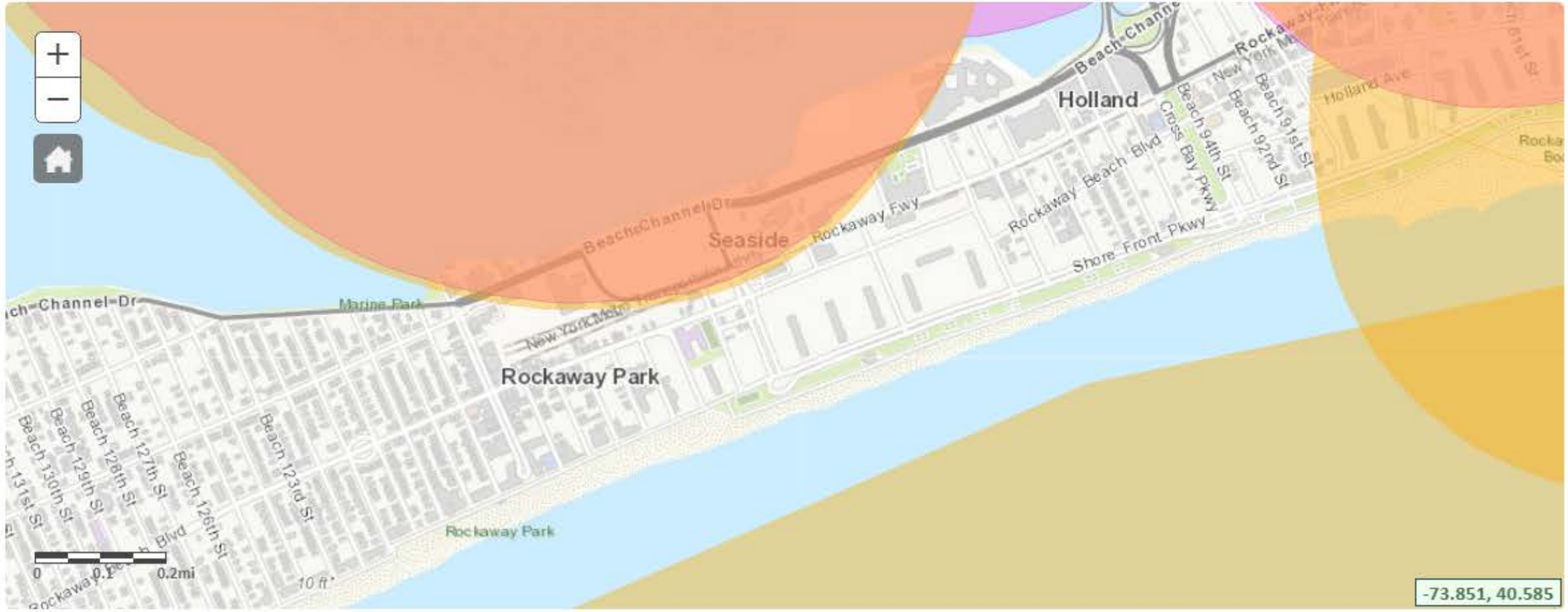
Other Wetland Layers

Reference Layers

Tell Me More...

Need A Permit?

Contacts



Beach 108th Street
Legend
211
Beach 105 St
Beach 108th St
Feature 2
Mobil
Rockaway Beach
YANA Community Center
Beach Channel Dr
Beach 108th St
Beach 108th St
Beach 106th St
Rockaway Beach Blvd
Beach 105th St
Irene Ct
Curtis Ct
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Susan Ct
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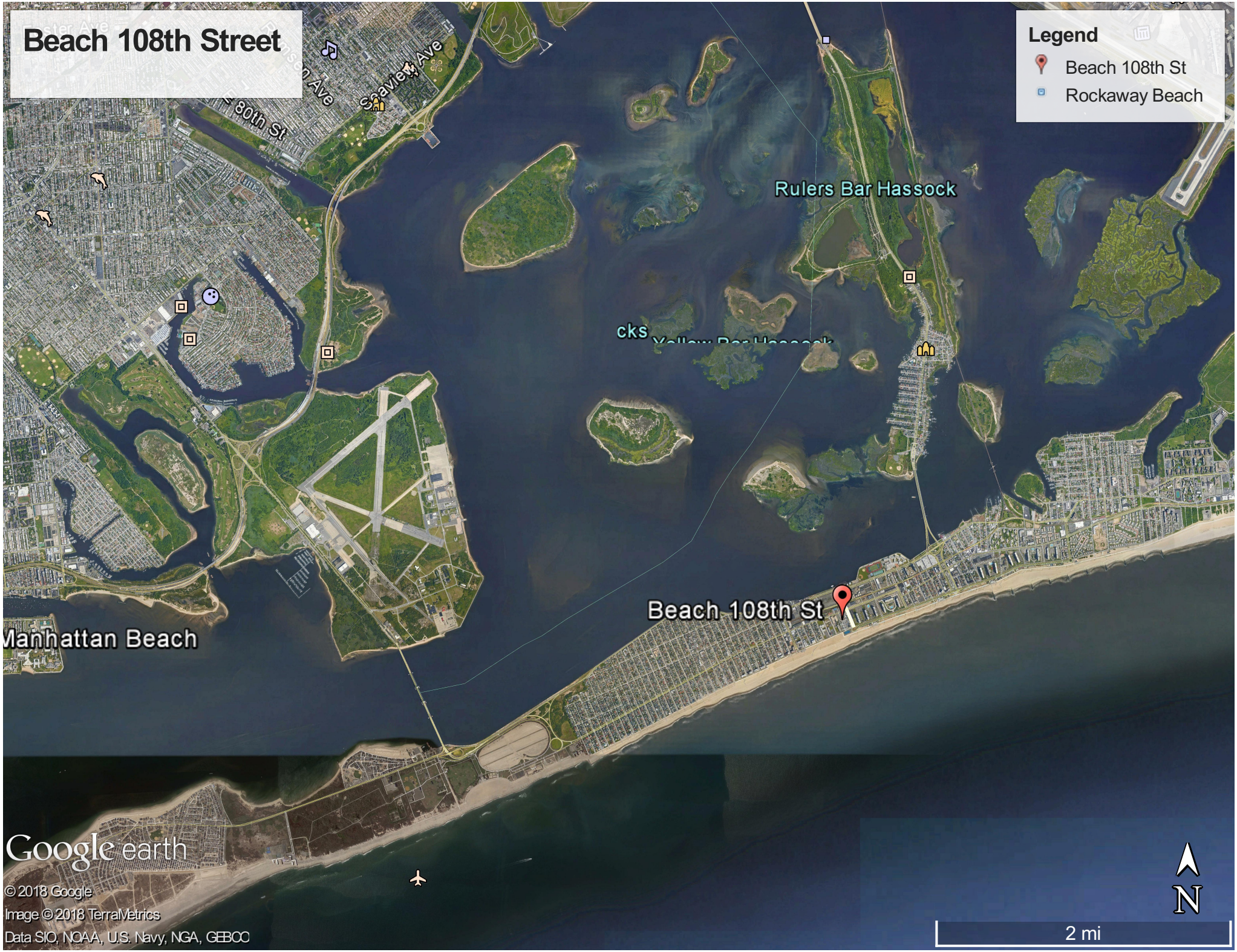
© 2018 Google


Beach 108th Street
Legend
Beach 108th St
Rockaway Beach
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Google earth
© 2018 Google
Image © 2018 TerraMetrics
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
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Appendix G

Governor's Office of
Storm Recovery

ANDREW M. CUOMO
Governor

September 18, 2018

Mr. Steve Papa
U.S. Fish and Wildlife Service
Long Island Field office
340 Smith Rd
Shirley, NY 11967

RE: ESA/MBTA/BGEPA consultation for the Beach 108th Streetscape Improvements, Between Beach Channel Drive and Shore Front Parkway, Rockaway West, Queens, NY (Latitude: 40.583287; Longitude: -73.830605)

Dear Mr. Papa:

The Governor's Office of Storm Recovery (GOSR), acting under the auspices of New York State Homes and Community Renewal's (HCR) Housing Trust Fund Corporation (HTFC), on behalf of the Department of Housing & Urban Development (HUD), is preparing an environmental review in accordance with the National Environmental Policy Act (NEPA) process for the Beach 108th Streetscape Improvements, Between Beach Channel Drive and Shore Front Parkway, Rockaway West, Queens, NY. GOSR proposes to use HUD Community Development Block Grant Disaster Recovery (CDBG-DR) program funding to complete this project.

GOSR is initiating informal consultation with your office concerning the proposed change in the action in accordance with the following laws: Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), Migratory Bird Treaty Act of 1918 (MBTA) (40 Stat. 755, as amended; 16 U.S.C. 703-712) and the Bald and Golden Eagle Protection Act of 1940 (BGEPA) (54 Stat. 240, as amended; 16 U.S.C. 668-668c).

Proposed Action – Project Activities

The City of New York is requesting CDBG-DR funding to construct improvements to the streetscape of Beach 108th Street, a 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive (the location of the ferry) to Shore Front Parkway. The NYC Department of Transportation (DOT) will function as the implementing agency on behalf of the City of New York. The proposed project includes:

- Excavation and removal of existing roadway and sidewalk;
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- Upgrade all crosswalks and pedestrian ramps at the intersection of Shore Front Parkway to current ADA standards and reconfigure to allow for safe bicycle crossing and access to exiting bicycle pathway along the beach;

- Install bike racks;
- Installation of a dedicated left-turn bay, and move signal infrastructure to improve the safety of the high crash intersection at Beach 108th Street and Rockaway Beach Blvd.;
- Landscaping and street furniture such as trees, benches, and bike racks;
- Storm water drainage improvements including catch basins and constructing new catch basis, old catch basins will be filled in;
- Replace water main lines and abandon existing water main line; and
- Install high efficiency LED streetlights with resilient means of backup power, such as small solar panels, that remain functional in a power outage.

Construction will include excavation and removal of existing roadway and sidewalk and creation of new roadway and sidewalk, full reconstruction of Beach 108 Street. Streetscape elements will also include storm water drainage improvements. All proposed drainage work shall be done in conformance with the latest standards of the New York City Department of Environmental Protection (N.Y.C.D.E.P.) Bureau of Sewers. All new catch basin connections shall be made to existing sewers at Manholes, with 12" diameter ductile iron pipe, class 56, with internally locked "push-on" joints laid on 6" of broken stone for the entire width of the trench and for one-half the pipe diameter. The broken stone shall be hard, un-weathered stone, uniformly graded from 1/4" to 3/4" in diameter and conform to commercially available 1/4" to 3/4" stone. All new catch basins will have a hood on the outlet pipe. As a result of curb relocation, existing Street appurtenances, such as Hydrants, lampposts and traffic signal poles, bus shelters, etc., will have to be relocated. Water hydrants will be relocated in accordance with the specifications of the Department of Environmental Protection, Bureau of Water Supply.

To make way for the improvements, 23 trees will be removed. Grading will be required and would remove existing shrubbery and fences, as necessary. Tree removals will be avoided to the greatest extend possible by considering the curb detail at existing trees, by slight modifications in curb alignments, or by other methods so ordered by the engineer, in accordance with acceptable engineering practices.

Need:

Rockaway West's low elevation and varied coastal protection leaves the community exposed to high risks associated with future storm events, sea level rise, and frequent flooding. Access to the community is limited to two transportation links, which are both vulnerable and limited. The project area suffered extensive flooding and infrastructure damage as a result of Superstorm Sandy. The community continues to struggle to recover as businesses remain shuttered and the Beach 108 Street corridor remains underutilized. The ongoing struggle to recover from Superstorm Sandy is hampering the full revitalization of the area at large.

The existing condition of Beach 108th Street is unsafe for pedestrians and an uninviting site for community members, local businesses and tourists to utilize. The street is flanked by vacant lots and runs under the elevated A train. The community sees this corridor as a gateway to their beach, which is a major driver for the local economy.

Endangered Species Act

According to the New York Department of Environmental Conservation, Natural Heritage Program data, there "no records of rare or state-listed animals or plants, or significant natural communities at the project site. Given the location and nature of the proposed work, we have no concerns regarding any impacts to rare or state-listed animals or significant natural communities in the general vicinity of the project site." The USFWS Information, Planning and Conservation (IPaC) online planning tool Official Species List was generated for the Proposed Action (attached) notes "[t]here are no critical habitat within this project area" and lists the following federally-listed species as having the potential to occur within the vicinity of the Proposed Action:

- Piping plover (*Charadrius melodus*) - threatened,
- Roseate tern (*Sterna dougalli*) - endangered,
- Rufa red knot (Calidris canutus rufa)– threatened, and
- Seabeach amaranth (*Amaranthus pumilus*) - threatened.

Piping plover

The breeding range of the Piping plover within New York State is limited to the coastlines of Long Island, where plovers nest from Queens to eastern Suffolk County (Wasilco 2008). Most Piping plover colonies on Long Island have grown steadily in recent decades in response to protection and management and currently represent approximately one quarter of the total Atlantic Coast population (Hecht and Melvin 2009). Piping plovers nest in several areas of oceanfront beach along the southern shoreline and eastern and western points of Jones Beach Island (e.g., McIntyre and Heath 2011), including Gilgo State Park (NYSOPRHP 2015). Piping plovers nest on the oceanfront beaches of Long Island's barrier islands, and not on the bayside or mainland beaches. Their home range commonly includes bayside flats and back-barrier storm overwash areas, which are important foraging habitats for adults and fledglings (Elias et al. 2000, McIntyre and Heath 2011).

The project is limited to the improvements to the existing infrastructure. The project area does not provide suitable habitat for the Piping plover. The project area consists of asphalt and concrete with a lot of human activity and car traffic. Because Piping plovers are not expected to occur near the project site, the Proposed Action is considered to have **"No Effect"** on the Piping plover or the habitats on which it depends.

Roseate Tern

According to New York Natural Heritage Program (NYNHP), there are only two sizeable colonies in New York and almost exclusively on island where predation pressure is lower. Breeding locations in New York is confined to between 5 to 10 locations on Long Island annually (McGowan and Corwin 2008). The great majority of the State's birds nest on Great Gull Island which is located east of Plum Island north of the eastern tip of Long Island. Cartwright Island supported substantial numbers in 2001-2004. The eastern tip of Long Island is an important staging area where birds collect for several weeks before migrating en masse to South America (USFWS, 1998). Roseate terns are threatened by the loss of breeding habitat to coastal development, rising sea-levels, human disturbance, predation, and increased flooding from storms due to climate change. Roseate terns are listed as endangered in the State by the New York Department of Environmental Conservation (NYDEC) and the northeastern U.S. population is federally-listed as endangered. There are an estimated 1,000 miles of maritime beach on Long Island covering about 10,000 to 16,000 acres; there may be more than 30 to 50 extant occurrences statewide. The several documented occurrences of this community have good viability and are protected on public or private conservation land. The community is restricted to the ocean shoreline of the Coastal Lowlands ecozone in Suffolk, Richmond, Queens, Kings, and Nassau Counties. Although the number of maritime beaches may have increased slightly when formerly long, continuous examples were fragmented by development, the overall trend for the community is declining as a result of coastal development and recreational overuse.

The project is limited to improvements to the existing infrastructure. The potential for Roseate terns to occur near the project site is considered low because preferred breeding sites occur on small islands where predation is low and the area is highly developed consisting of asphalt, sidewalks, cars and structures with a lot of human traffic. As such, the Proposed Action is considered to have **"No Effect"** on Roseate terns or their habitat.

Rufa red knot

The Rufa subspecies of the red knot, which has recently been listed as federally threatened, migrates up to 30,000 miles round trip between primary wintering grounds at the tip of South America in Tierra del Fuego, in northern Brazil, throughout the Caribbean and along US coasts from Texas to North Carolina. The Rufa red knot breeds in the tundra of the Central Canadian Artic from northern Hudson Bay to the southern Queen Elizabeth Islands. Rufa red knots require stopover habitats rich in easily digested foods with thin or no shells (like juvenile clams, mussels and horseshoe crab eggs) in order to gain enough weight to fuel the next flight. Delaware Bay is the most significant spring migration staging area for Rufa red knots, which time their arrival in the bay to coincide with the peak horseshoe crab spawning period (Baker et al. 2004, Niles et al. 2009). Monomoy National Wildlife Refuge in Cape Cod, Massachusetts appears to be among the most significant staging areas for red knots during their southbound autumn migration (Harrington et al. 2010, Burger et al. 2012). In addition to these primary staging areas in Delaware Bay and Cape Cod, migrating Rufa red knots may stage in much lower densities elsewhere along the Atlantic coast (Harrington 2010, Burger et al. 2012). Although migrating Rufa red knots occur along Long Island (e.g., Tanacredi and Badger 1995:104, Fowle and Kerlinger 2001:81, Boretti et al. 2007), none of its beaches, bays, or estuaries are known to be high-use staging areas that support large concentrations of individuals. Instead, red knots are usually seen on Long Island in small groups (e.g., Wells 1996:59) relative to the tens of thousands of birds observed staging together in Delaware Bay and Cape Cod. Additionally, Rufa red knots are highly sensitive to human disturbance at staging sites (Burger et al. 2004, 2007), and as such, would not be expected to occur near the project site(s).

The project activities area limited to improvements to the existing infrastructure within a highly developed area consisting of asphalt and concrete with a lot of human activity. Because Red knots are not expected to occur near the project site, the Proposed Action is considered to have **"No Effect"** on the Rufa red knot or the habitats on which it depends.

Seabeach amaranth

Seabeach amaranth is an herbaceous annual plant that occurs on barrier island beaches, where its primary habitat consists of overwash flats at accreting ends of islands and lower foredunes and upper strands of non-eroding beaches. It occasionally establishes small temporary populations in other habitats, including sound-side beaches, blowouts in foredunes, and sand and shell material placed as beach replenishment or dredge spoil. Seabeach amaranth appears to be intolerant of competition and does not occur on well-vegetated sites. The species appears to need extensive areas of barrier island beaches and inlets, functioning in a relatively natural and dynamic manner. These characteristics allow it to move around in the landscape as a fugitive species, occupying suitable habitat as it becomes available (USFWS 2011). It is only known from Long Island, ranging from Coney Island to near the east end of the South Fork along the southern shore.

The potential for the Seabeach amaranth to occur near the Proposed Action site is considered unlikely. The project activities are limited to the replace of existing infrastructure within previously developed areas that do not provide habitat for this species. Because Seabeach amaranth are not expected to occur near the project site, the project is considered to have "No Effect" on either species or the habitats on which it depends.

Compliance

For purposes of consultation under Section 7(a)(2) of the ESA, we conclude that the Proposed Action will have "No Effect" on the Piping plover, Roseate tern, Rufa red knot,and Seabeach amaranth or the habitats on which these species depend. We request your concurrence with this determination

Species	Listing Status	Effect Determination	Critical Habitat Determination
Piping plover (*Charadrius melodus*)	Threatened	No Effect	No Effect
Roseate tern (*Sterna gougallii*)	Endangered	No Effect	No Effect
Rufa red knot (*Calidris canutus rufa*)	Threatened	No Effect	No Effect
Seabeach amaranth (*Amaranthus pumilus*)	Threatened	No Effect	No Effect

Migratory Bird Treaty Act

The project activities take place within the Atlantic Flyway. However, the activities are limited to the replacement of an existing infrastructure and provides little habitat for migratory birds. Migratory birds are expected to leave the project area during construction. GOSR has determined that the project activities will have no significant adverse impact on migratory birds or their habitat. Therefore, it is anticipated that migrating birds would not be impacted by the Proposed Action.

Bald and Golden Eagle Protection Act

Bald Eagles (*Haliaeetus leucocephalus*) have been site in Queens. However, there are no known breeding bald eagles within the vicinity of the project area; therefore, no adverse impacts to breeding bald eagles are expected as a result of the project. GOSR has determined that the proposed action would have no impact on the Bald Eagle.

If you have questions or require additional information regarding this request, please contact me at (518) 474-0647 or Alicia.Shultz@nyshcr.org. Thank you for your time and consideration.

Sincerely,

Alicia Shultz
Senior Environmental Scientist
New York State Homes & Community Renewal
Governor's Office of Storm Recovery

Enclosures:
Attachment 1 – Project Maps
Attachment 2 – Project Plans
Attachment 3 – IPaC Trust Resource Report

Attachment 1 – Project Maps

Beach 108th Street
Legend
211
Beach 105 St
Beach 108th St
Feature 2
Mobil
Rockaway Beach
YANA Community Center
Beach Channel Dr
Beach 108th St
Beach 108th St
Beach 106th St
Rockaway Beach Blvd
Beach 105th St
Irene Ct
Curtis Ct
Albany Ct
Breeney Ct
Betty Ct
Susan Ct
Mae Ct
Glynns Ct
Beach 110th St
Beach 111th St
Shore Front Pkwy
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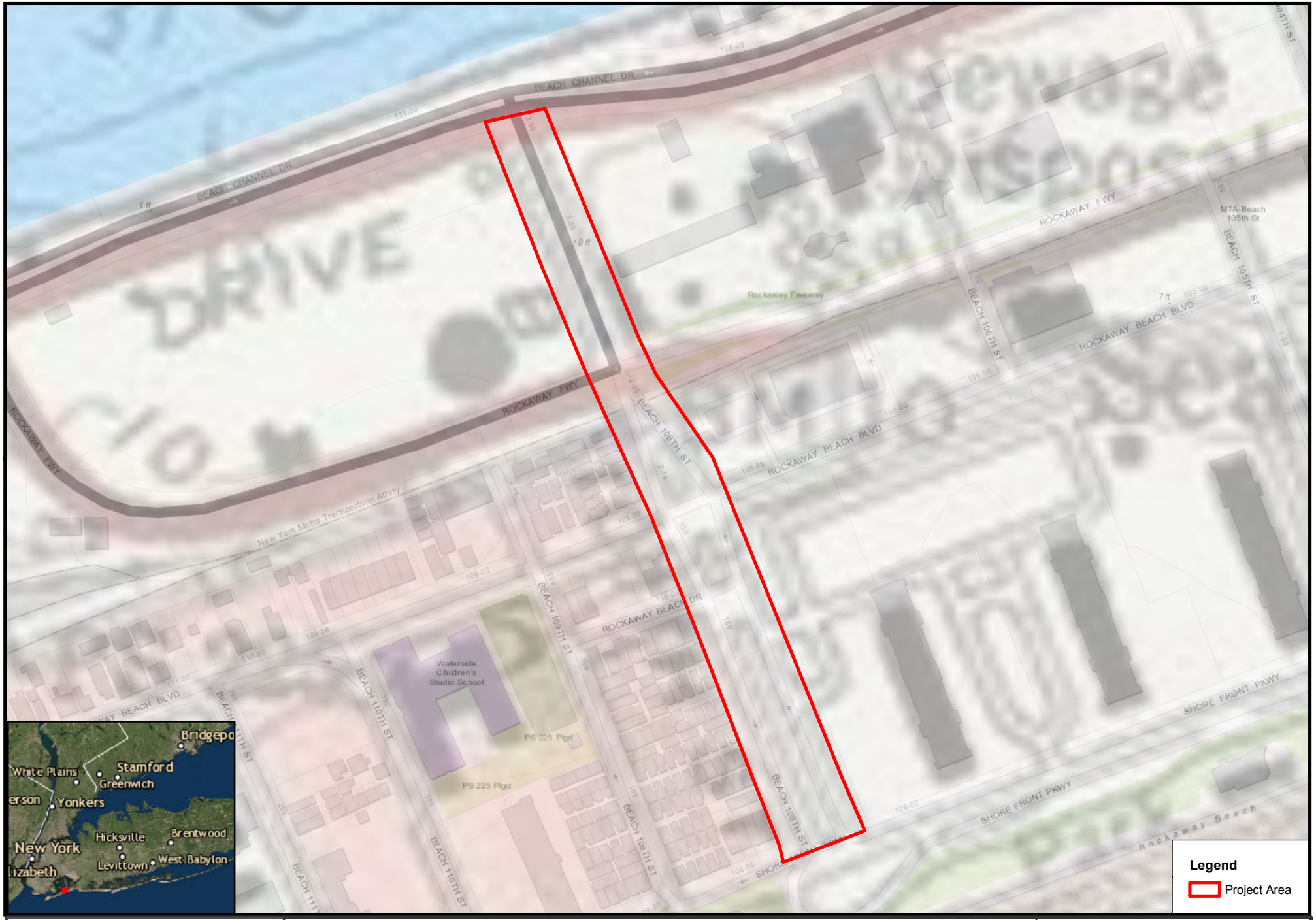
800 ft
Google earth
© 2018 Google



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Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

Governor's Office of Storm Recovery

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Drawn By: ASL | Version: 1.0 | Date:9/11/2018

FEMA data uses NAVD88*

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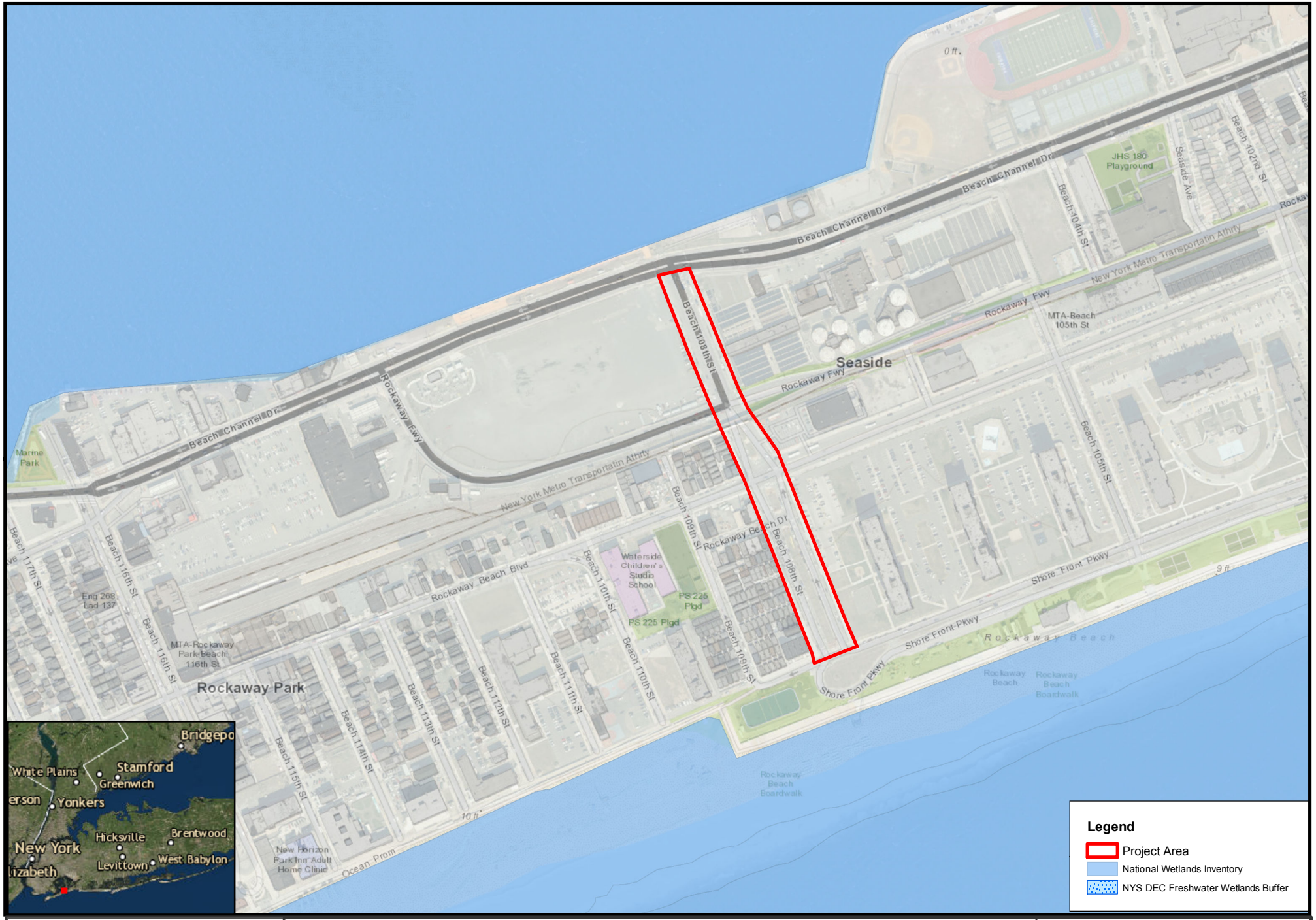
In using this information, users further agree to indemnify,defend, and hold harmless New York State for any and all liability of any nature arising out of or resulting from the lack of accuracy or correctness of the information, or the use of the information. New York State reserves the right to make changes and updates to the information at any time and without notice.



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Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

Governor's Office of Storm Recovery

N

Drawn By: ASL | Version: 1.0 | Date:9/11/2018

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Attachment 2 – Project Plans

See Attachment 1 of the Environmental Review which contains the project Plans

Attachment 3 – IPaC Trust Resource Report

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
Phone: (631) 286-0485 Fax: (631) 286-4003

In Reply Refer To: September 05, 2018
Consultation Code: 05E1LI00-2018-SLI-0851
Event Code: 05E1LI00-2018-E-01828
Project Name: Beach 108th Streetscape Improvements

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
(631) 286-0485

Project Summary

Consultation Code: 05E1LI00-2018-SLI-0851

Event Code: 05E1LI00-2018-E-01828

Project Name: Beach 108th Streetscape Improvements

Project Type: ** OTHER **

Project Description: The City of New York is requesting CDBG-DR funding to construct improvements to the streetscape of Beach 108th Street, a 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive (the location of the ferry) to Shore Front Parkway, Rockaway West, Rockaway Peninsula in Queens, New York.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/40.581872074802924N73.82971798127366W

Counties: Queens, NY

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Piping Plover *Charadrius melodus* Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot *Calidris canutus rufa* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened
Roseate Tern *Sterna dougallii dougallii* Population: northeast U.S. nesting pop. No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2083	Endangered

Flowering Plants

NAME	STATUS
Seabeach Amaranth *Amaranthus pumilus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8549	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Appendix H

Governor's Office of
Storm Recovery

ANDREW M. CUOMO
Governor

September 18, 2018

Mr. Steve Papa
U.S. Fish and Wildlife Service
Long Island Field office
340 Smith Rd
Shirley, NY 11967

RE: ESA/MBTA/BGEPA consultation for the Beach 108th Streetscape Improvements, Between Beach Channel Drive and Shore Front Parkway, Rockaway West, Queens, NY (Latitude: 40.583287; Longitude: -73.830605)

Dear Mr. Papa:

The Governor's Office of Storm Recovery (GOSR), acting under the auspices of New York State Homes and Community Renewal's (HCR) Housing Trust Fund Corporation (HTFC), on behalf of the Department of Housing & Urban Development (HUD), is preparing an environmental review in accordance with the National Environmental Policy Act (NEPA) process for the Beach 108th Streetscape Improvements, Between Beach Channel Drive and Shore Front Parkway, Rockaway West, Queens, NY. GOSR proposes to use HUD Community Development Block Grant Disaster Recovery (CDBG-DR) program funding to complete this project.

GOSR is initiating informal consultation with your office concerning the proposed change in the action in accordance with the following laws: Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), Migratory Bird Treaty Act of 1918 (MBTA) (40 Stat. 755, as amended; 16 U.S.C. 703-712) and the Bald and Golden Eagle Protection Act of 1940 (BGEPA) (54 Stat. 240, as amended; 16 U.S.C. 668-668c).

Proposed Action – Project Activities

The City of New York is requesting CDBG-DR funding to construct improvements to the streetscape of Beach 108th Street, a 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive (the location of the ferry) to Shore Front Parkway. The NYC Department of Transportation (DOT) will function as the implementing agency on behalf of the City of New York. The proposed project includes:

- Excavation and removal of existing roadway and sidewalk;
- Creation of new roadway and sidewalk (including typical asphalt for travel lanes and permeable materials for bike lanes, parking lanes, and sidewalks);
- Expand sidewalks in certain areas to provide safe pedestrian access and waiting space for potential shuttle stop;
- Provide continuous dedicated bicycle facility, connecting the new ferry landing to the existing bike lane along Shore Front Parkway and the planned Rockaway Beach Blvd route.
- Upgrade all crosswalks and pedestrian ramps at the intersection of Shore Front Parkway to current ADA standards and reconfigure to allow for safe bicycle crossing and access to exiting bicycle pathway along the beach;

- Install bike racks;
- Installation of a dedicated left-turn bay, and move signal infrastructure to improve the safety of the high crash intersection at Beach 108th Street and Rockaway Beach Blvd.;
- Landscaping and street furniture such as trees, benches, and bike racks;
- Storm water drainage improvements including catch basins and constructing new catch basis, old catch basins will be filled in;
- Replace water main lines and abandon existing water main line; and
- Install high efficiency LED streetlights with resilient means of backup power, such as small solar panels, that remain functional in a power outage.

Construction will include excavation and removal of existing roadway and sidewalk and creation of new roadway and sidewalk, full reconstruction of Beach 108 Street. Streetscape elements will also include storm water drainage improvements. All proposed drainage work shall be done in conformance with the latest standards of the New York City Department of Environmental Protection (N.Y.C.D.E.P.) Bureau of Sewers. All new catch basin connections shall be made to existing sewers at Manholes, with 12" diameter ductile iron pipe, class 56, with internally locked "push-on" joints laid on 6" of broken stone for the entire width of the trench and for one-half the pipe diameter. The broken stone shall be hard, un-weathered stone, uniformly graded from 1/4" to 3/4" in diameter and conform to commercially available 1/4" to 3/4" stone. All new catch basins will have a hood on the outlet pipe. As a result of curb relocation, existing Street appurtenances, such as Hydrants, lampposts and traffic signal poles, bus shelters, etc., will have to be relocated. Water hydrants will be relocated in accordance with the specifications of the Department of Environmental Protection, Bureau of Water Supply.

To make way for the improvements, 23 trees will be removed. Grading will be required and would remove existing shrubbery and fences, as necessary. Tree removals will be avoided to the greatest extend possible by considering the curb detail at existing trees, by slight modifications in curb alignments, or by other methods so ordered by the engineer, in accordance with acceptable engineering practices.

Need:

Rockaway West's low elevation and varied coastal protection leaves the community exposed to high risks associated with future storm events, sea level rise, and frequent flooding. Access to the community is limited to two transportation links, which are both vulnerable and limited. The project area suffered extensive flooding and infrastructure damage as a result of Superstorm Sandy. The community continues to struggle to recover as businesses remain shuttered and the Beach 108 Street corridor remains underutilized. The ongoing struggle to recover from Superstorm Sandy is hampering the full revitalization of the area at large.

The existing condition of Beach 108th Street is unsafe for pedestrians and an uninviting site for community members, local businesses and tourists to utilize. The street is flanked by vacant lots and runs under the elevated A train. The community sees this corridor as a gateway to their beach, which is a major driver for the local economy.

Endangered Species Act

According to the New York Department of Environmental Conservation, Natural Heritage Program data, there "no records of rare or state-listed animals or plants, or significant natural communities at the project site. Given the location and nature of the proposed work, we have no concerns regarding any impacts to rare or state-listed animals or significant natural communities in the general vicinity of the project site." The USFWS Information, Planning and Conservation (IPaC) online planning tool Official Species List was generated for the Proposed Action (attached) notes "[t]here are no critical habitat within this project area" and lists the following federally-listed species as having the potential to occur within the vicinity of the Proposed Action:

- Piping plover (*Charadrius melodus*) - threatened,
- Roseate tern (*Sterna dougalli*) - endangered,
- Rufa red knot (Calidris canutus rufa)– threatened, and
- Seabeach amaranth (*Amaranthus pumilus*) - threatened.

Piping plover

The breeding range of the Piping plover within New York State is limited to the coastlines of Long Island, where plovers nest from Queens to eastern Suffolk County (Wasilco 2008). Most Piping plover colonies on Long Island have grown steadily in recent decades in response to protection and management and currently represent approximately one quarter of the total Atlantic Coast population (Hecht and Melvin 2009). Piping plovers nest in several areas of oceanfront beach along the southern shoreline and eastern and western points of Jones Beach Island (e.g., McIntyre and Heath 2011), including Gilgo State Park (NYSOPRHP 2015). Piping plovers nest on the oceanfront beaches of Long Island's barrier islands, and not on the bayside or mainland beaches. Their home range commonly includes bayside flats and back-barrier storm overwash areas, which are important foraging habitats for adults and fledglings (Elias et al. 2000, McIntyre and Heath 2011).

The project is limited to the improvements to the existing infrastructure. The project area does not provide suitable habitat for the Piping plover. The project area consists of asphalt and concrete with a lot of human activity and car traffic. Because Piping plovers are not expected to occur near the project site, the Proposed Action is considered to have **"No Effect"** on the Piping plover or the habitats on which it depends.

Roseate Tern

According to New York Natural Heritage Program (NYNHP), there are only two sizeable colonies in New York and almost exclusively on island where predation pressure is lower. Breeding locations in New York is confined to between 5 to 10 locations on Long Island annually (McGowan and Corwin 2008). The great majority of the State's birds nest on Great Gull Island which is located east of Plum Island north of the eastern tip of Long Island. Cartwright Island supported substantial numbers in 2001-2004. The eastern tip of Long Island is an important staging area where birds collect for several weeks before migrating en masse to South America (USFWS, 1998). Roseate terns are threatened by the loss of breeding habitat to coastal development, rising sea-levels, human disturbance, predation, and increased flooding from storms due to climate change. Roseate terns are listed as endangered in the State by the New York Department of Environmental Conservation (NYDEC) and the northeastern U.S. population is federally-listed as endangered. There are an estimated 1,000 miles of maritime beach on Long Island covering about 10,000 to 16,000 acres; there may be more than 30 to 50 extant occurrences statewide. The several documented occurrences of this community have good viability and are protected on public or private conservation land. The community is restricted to the ocean shoreline of the Coastal Lowlands ecozone in Suffolk, Richmond, Queens, Kings, and Nassau Counties. Although the number of maritime beaches may have increased slightly when formerly long, continuous examples were fragmented by development, the overall trend for the community is declining as a result of coastal development and recreational overuse.

The project is limited to improvements to the existing infrastructure. The potential for Roseate terns to occur near the project site is considered low because preferred breeding sites occur on small islands where predation is low and the area is highly developed consisting of asphalt, sidewalks, cars and structures with a lot of human traffic. As such, the Proposed Action is considered to have **"No Effect"** on Roseate terns or their habitat.

Rufa red knot

The Rufa subspecies of the red knot, which has recently been listed as federally threatened, migrates up to 30,000 miles round trip between primary wintering grounds at the tip of South America in Tierra del Fuego, in northern Brazil, throughout the Caribbean and along US coasts from Texas to North Carolina. The Rufa red knot breeds in the tundra of the Central Canadian Artic from northern Hudson Bay to the southern Queen Elizabeth Islands. Rufa red knots require stopover habitats rich in easily digested foods with thin or no shells (like juvenile clams, mussels and horseshoe crab eggs) in order to gain enough weight to fuel the next flight. Delaware Bay is the most significant spring migration staging area for Rufa red knots, which time their arrival in the bay to coincide with the peak horseshoe crab spawning period (Baker et al. 2004, Niles et al. 2009). Monomoy National Wildlife Refuge in Cape Cod, Massachusetts appears to be among the most significant staging areas for red knots during their southbound autumn migration (Harrington et al. 2010, Burger et al. 2012). In addition to these primary staging areas in Delaware Bay and Cape Cod, migrating Rufa red knots may stage in much lower densities elsewhere along the Atlantic coast (Harrington 2010, Burger et al. 2012). Although migrating Rufa red knots occur along Long Island (e.g., Tanacredi and Badger 1995:104, Fowle and Kerlinger 2001:81, Boretti et al. 2007), none of its beaches, bays, or estuaries are known to be high-use staging areas that support large concentrations of individuals. Instead, red knots are usually seen on Long Island in small groups (e.g., Wells 1996:59) relative to the tens of thousands of birds observed staging together in Delaware Bay and Cape Cod. Additionally, Rufa red knots are highly sensitive to human disturbance at staging sites (Burger et al. 2004, 2007), and as such, would not be expected to occur near the project site(s).

The project activities area limited to improvements to the existing infrastructure within a highly developed area consisting of asphalt and concrete with a lot of human activity. Because Red knots are not expected to occur near the project site, the Proposed Action is considered to have **"No Effect"** on the Rufa red knot or the habitats on which it depends.

Seabeach amaranth

Seabeach amaranth is an herbaceous annual plant that occurs on barrier island beaches, where its primary habitat consists of overwash flats at accreting ends of islands and lower foredunes and upper strands of non-eroding beaches. It occasionally establishes small temporary populations in other habitats, including sound-side beaches, blowouts in foredunes, and sand and shell material placed as beach replenishment or dredge spoil. Seabeach amaranth appears to be intolerant of competition and does not occur on well-vegetated sites. The species appears to need extensive areas of barrier island beaches and inlets, functioning in a relatively natural and dynamic manner. These characteristics allow it to move around in the landscape as a fugitive species, occupying suitable habitat as it becomes available (USFWS 2011). It is only known from Long Island, ranging from Coney Island to near the east end of the South Fork along the southern shore.

The potential for the Seabeach amaranth to occur near the Proposed Action site is considered unlikely. The project activities are limited to the replace of existing infrastructure within previously developed areas that do not provide habitat for this species. Because Seabeach amaranth are not expected to occur near the project site, the project is considered to have "No Effect" on either species or the habitats on which it depends.

Compliance

For purposes of consultation under Section 7(a)(2) of the ESA, we conclude that the Proposed Action will have "No Effect" on the Piping plover, Roseate tern, Rufa red knot,and Seabeach amaranth or the habitats on which these species depend. We request your concurrence with this determination

Species	Listing Status	Effect Determination	Critical Habitat Determination
Piping plover (*Charadrius melodus*)	Threatened	No Effect	No Effect
Roseate tern (*Sterna gougallii*)	Endangered	No Effect	No Effect
Rufa red knot (*Calidris canutus rufa*)	Threatened	No Effect	No Effect
Seabeach amaranth (*Amaranthus pumilus*)	Threatened	No Effect	No Effect

Migratory Bird Treaty Act

The project activities take place within the Atlantic Flyway. However, the activities are limited to the replacement of an existing infrastructure and provides little habitat for migratory birds. Migratory birds are expected to leave the project area during construction. GOSR has determined that the project activities will have no significant adverse impact on migratory birds or their habitat. Therefore, it is anticipated that migrating birds would not be impacted by the Proposed Action.

Bald and Golden Eagle Protection Act

Bald Eagles (*Haliaeetus leucocephalus*) have been site in Queens. However, there are no known breeding bald eagles within the vicinity of the project area; therefore, no adverse impacts to breeding bald eagles are expected as a result of the project. GOSR has determined that the proposed action would have no impact on the Bald Eagle.

If you have questions or require additional information regarding this request, please contact me at (518) 474-0647 or Alicia.Shultz@nyshcr.org. Thank you for your time and consideration.

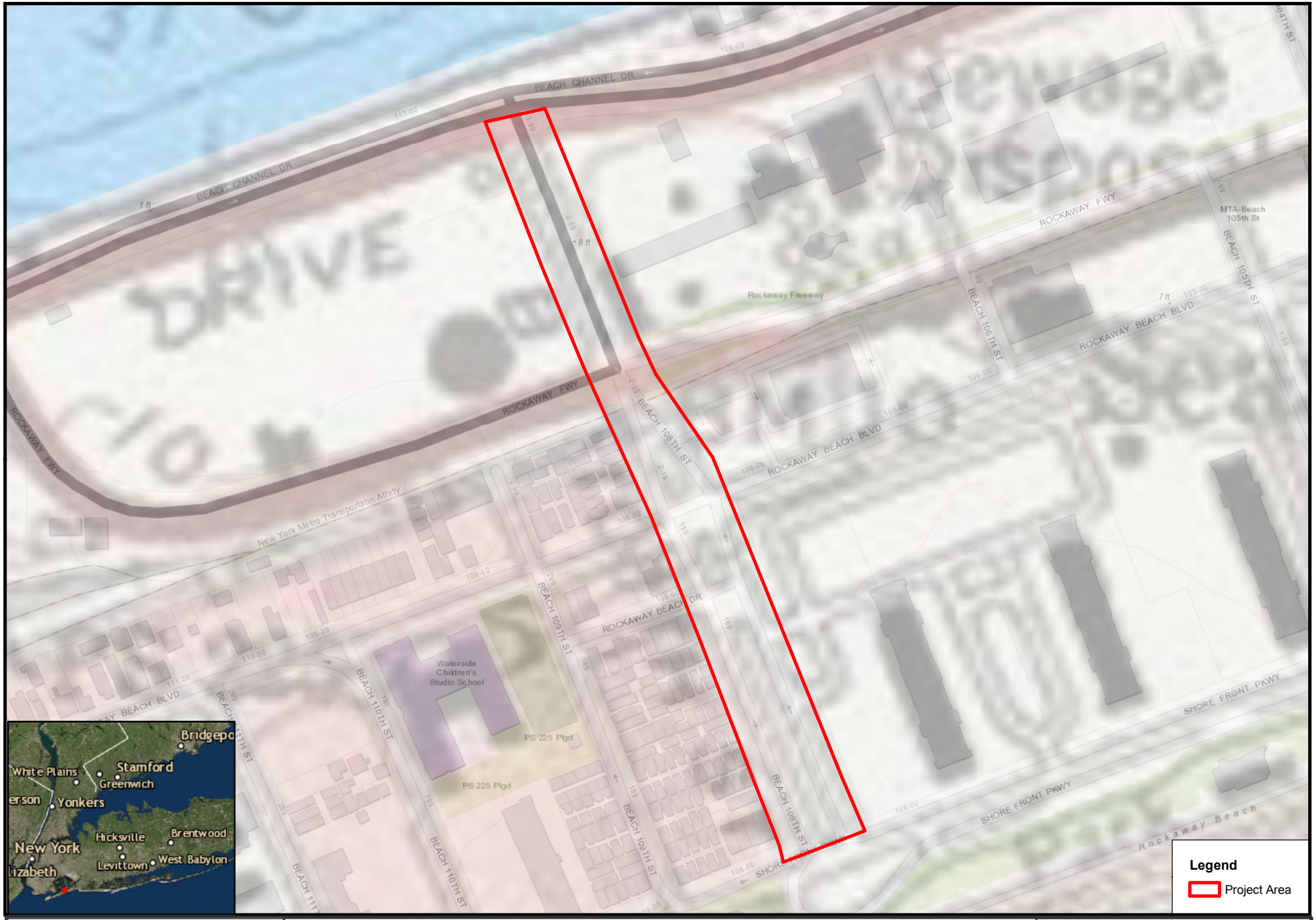
Sincerely,

Alicia Shultz
Senior Environmental Scientist
New York State Homes & Community Renewal
Governor's Office of Storm Recovery

Enclosures:
Attachment 1 – Project Maps
Attachment 2 – Project Plans
Attachment 3 – IPaC Trust Resource Report

Attachment 1 – Project Maps

Beach 108th Street
Legend
211
Beach 105 St
Beach 108th St
Feature 2
Mobil
Rockaway Beach
YANA Community Center
Beach Channel Dr
Beach 108th St
Beach 108th St
Beach 106th St
Rockaway Beach Blvd
Beach 105th St
Irene Ct
Curtis Ct
Albany Ct
Breeney Ct
Betty Ct
Susan Ct
Mae Ct
Glynns Ct
Beach 110th St
Beach 111th St
Shore Front Pkwy
908L
N
800 ft
Google earth
© 2018 Google



0 0.0325 0.065 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

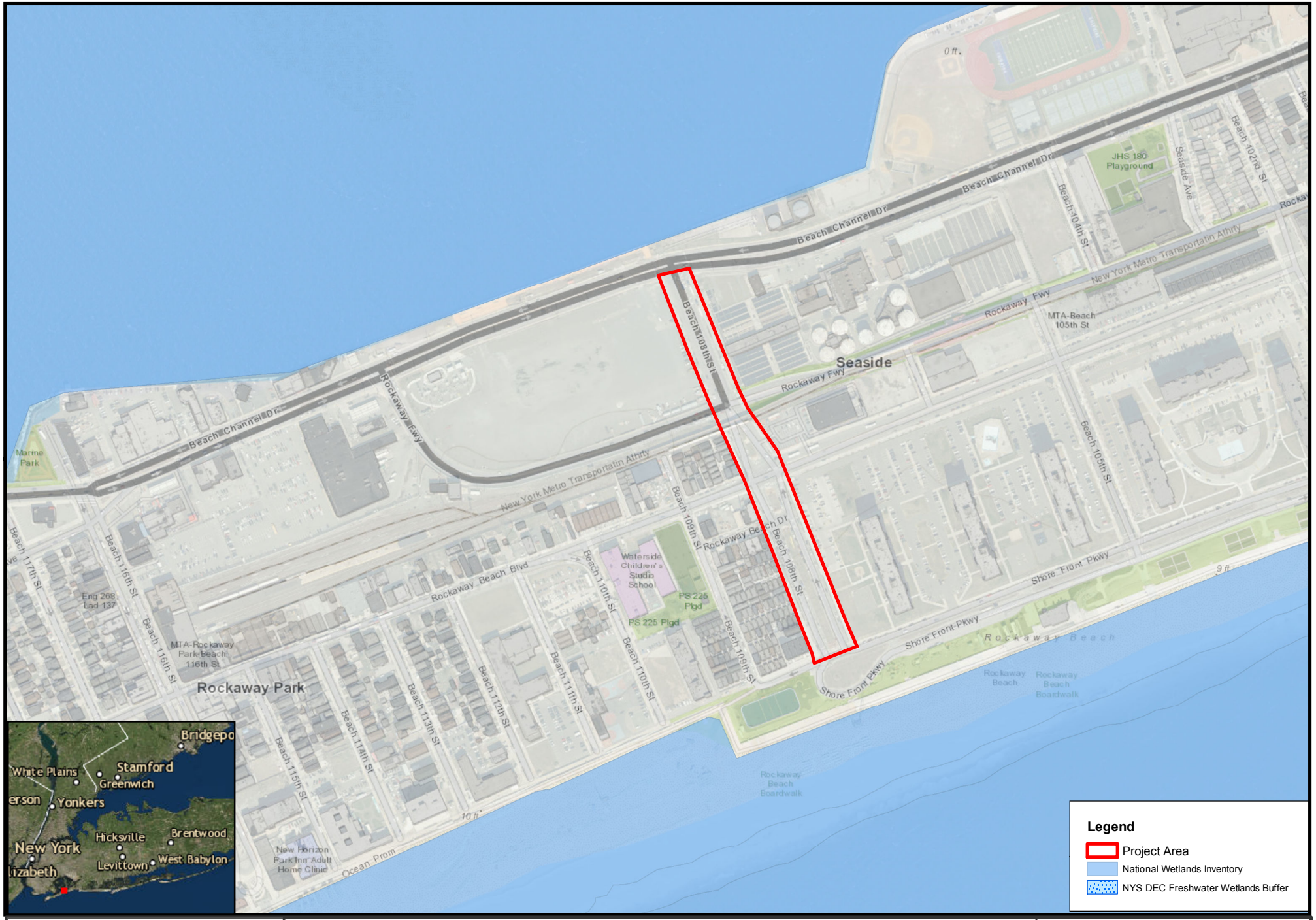
Governor's Office of Storm Recovery

N

Drawn By: ASL | Version: 1.0 | Date:9/11/2018

FEMA data uses NAVD88*

The information contained may be incorrect, incomplete or outdated,and New York State disclaims any responsibility for the accuracy or correctnesof the information. New York State, its officers, employees, or agents shall not be liable for damages or losses of any kind, consequentialor otherwise, incurred as a result of the use of this information, directly or indirectly.
In using this information, users further agree to indemnify,defend, and hold harmless New York State for any and all liability of any nature arising out of or resulting from the lack of accuracy or correctness of the information, or the use of the information. New York State reserves the right to make changes and updates to the information at any time and without notice.



0 0.05 0.1 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

Governor's Office of Storm Recovery

N

Drawn By: ASL | Version: 1.0 | Date:9/11/2018

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Attachment 2 – Project Plans

See Attachment 1 of the Environmental Review which contains the project Plans

Attachment 3 – IPaC Trust Resource Report

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
Phone: (631) 286-0485 Fax: (631) 286-4003

In Reply Refer To: September 05, 2018
Consultation Code: 05E1LI00-2018-SLI-0851
Event Code: 05E1LI00-2018-E-01828
Project Name: Beach 108th Streetscape Improvements

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
(631) 286-0485

Project Summary

Consultation Code: 05E1LI00-2018-SLI-0851

Event Code: 05E1LI00-2018-E-01828

Project Name: Beach 108th Streetscape Improvements

Project Type: ** OTHER **

Project Description: The City of New York is requesting CDBG-DR funding to construct improvements to the streetscape of Beach 108th Street, a 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive (the location of the ferry) to Shore Front Parkway, Rockaway West, Rockaway Peninsula in Queens, New York.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/40.581872074802924N73.82971798127366W

Counties: Queens, NY

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Piping Plover *Charadrius melodus* Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot *Calidris canutus rufa* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened
Roseate Tern *Sterna dougallii dougallii* Population: northeast U.S. nesting pop. No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2083	Endangered

Flowering Plants

NAME	STATUS
Seabeach Amaranth *Amaranthus pumilus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8549	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Appendix H

Governor's Office of
Storm Recovery

ANDREW M. CUOMO
Governor

September 19, 2018

Mr. Larry Moss
Historic Preservation Technical Specialist
New York State Office of Parks, Recreation and Historic Preservation
Division of Historic Preservation
Peebles Island
P.O. Box 189
Waterford, New York 12188-0189

Re: Section 106 Compliance for **Beach 108th Streetscape Improvements, Rockaway West, Queens County, NY (Between Beach Channel Drive and Shore Front Parkway, Rockaway West, Queens, NY)**

Dear Mr. Moss:

Pursuant to the Disaster Relief Appropriations Act, 2013 (Public Law 113-2) and the Housing and Community Development Act (42 U.S.C. § 5301 et seq.), the Governor's Office of Storm Recovery (GOSR), an office of New York State Homes and Community Renewal's Housing Trust Fund Corporation as a recipient of Community Development Block Grant – Disaster Recovery ("CDBG-DR") funds from the United States Department of Housing and Urban Development ("HUD"), is serving as the entity responsible for compliance with the HUD environmental review procedures set forth in 24 CFR Part 58. GOSR is acting on behalf of HUD in providing the enclosed Program information and request for consultation.

GOSR processes environmental reviews for projects funded with HUD CDBG-DR on a case-by-case basis. In accordance with Section 101(d)(6)(B) of the National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. 470f), and its implementing regulations, 36 Code of Federal Regulations (CFR) Part 800, this letter serves as notification of the proposed action.

Area of Potential Effect: The City of New York is requesting CDBG-DR funding to construct improvements to the streetscape of Beach 108th Street, a 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive (the location of the ferry) to Shore Front Parkway, Rockaway West, Queens County, NY (see maps and design plans uploaded to CRIS). **No new disturbance would occur. The work will be completed in areas previously disturbed. The area of disturbance is shown in the figures upload into CRIS and include the area of existing roads, walkways and drainage systems.** The Proposed Project will address roadway flooding and stormwater drainage issues in the area that were exacerbated by Hurricane Irene and Superstorm Sandy, and would directly contribute to the rebuilding and recovery of the area with a focus on resiliency and mitigation.

Proposed Project Description:

The proposed project includes:

- Excavation and removal of existing roadway and sidewalk;
- Creation of new roadway and sidewalk (including typical asphalt for travel lanes and permeable materials for bike lanes, parking lanes, and sidewalks);
- Expand sidewalks in certain areas to provide safe pedestrian access and waiting space for potential shuttle stop;
- Provide continuous dedicated bicycle facility, connecting the new ferry landing to the existing bike lane along Shore Front Parkway and the planned Rockaway Beach Blvd route.
- Upgrade all crosswalks and pedestrian ramps at the intersection of Shore Front Parkway to current ADA standards and reconfigure to allow for safe bicycle crossing and access to exiting bicycle pathway along the beach;
- Install bike racks;
- Installation of a dedicated left-turn bay, and move signal infrastructure to improve the safety of the high crash intersection at Beach 108th Street and Rockaway Beach Blvd.;
- Landscaping and street furniture such as trees, benches, and bike racks;
- Storm water drainage improvements including catch basins and constructing new catch basis, old catch basins will be filled in;
- Replace water main lines and abandon existing water main line; and
- Install high efficiency LED streetlights with resilient means of backup power, such as small solar panels, that remain functional in a power outage.

Construction will include excavation and removal of existing roadway and sidewalk and creation of new roadway and sidewalk, full reconstruction of Beach 108 Street. Streetscape elements will also include storm water drainage improvements.

The project area is not located in an historic area. The purpose of this letter is to initiate consultation pursuant to Section 106 of the NHPA per the implementing regulations at 36 Code of Federal Regulations (CFR) Part 800. GOSR respectfully requests your review of the proposed project described herein. If you have any questions or require additional information regarding this request, please feel free to contact me at (518) 474-0647 or via email at Alicia.Shultz@nyshcr.org. Thank you for your time and consideration.

Sincerely,

Alicia Shultz
Senior Environmental Scientist
New York State Homes & Community Renewal
Governor's Office of Storm Recovery

Appendix I

Beach 108th Streetscape Improvements

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

The City of New York is requesting CDBG-DR funding to construct improvements to the streetscape of Beach 108th Street, a 3,000 linear-foot corridor from the ferry landing at Beach Channel Drive (the location of the ferry) to Shore Front Parkway. The project is located over the Brooklyn-Queens Sole Source Aquifer. The NYC Department of Transportation (DOT) will function as the implementing agency on behalf of the City of New York. The proposed project includes:

- Excavation and removal of existing roadway and sidewalk;
- Creation of new roadway and sidewalk (including typical asphalt for travel lanes and permeable materials for bike lanes, parking lanes, and sidewalks);
- Expand sidewalks in certain areas to provide safe pedestrian access and waiting space for potential shuttle stop;
- Provide continuous dedicated bicycle facility, connecting the new ferry landing to the existing bike lane along Shore Front Parkway and the planned Rockaway Beach Blvd route.
- Upgrade all crosswalks and pedestrian ramps at the intersection of Shore Front Parkway to current ADA standards and reconfigure to allow for safe bicycle crossing and access to exiting bicycle pathway along the beach;
- Install bike racks;
- Installation of a dedicated left-turn bay, and move signal infrastructure to improve the safety of the high crash intersection at Beach 108th Street and Rockaway Beach Blvd.;
- Landscaping and street furniture such as trees, benches, and bike racks;
- Storm water drainage improvements including catch basins and constructing new catch basis, old catch basins will be filled in;
- Replace water main lines and abandon existing water main line; and
- Install high efficiency LED streetlights with resilient means of backup power, such as small solar panels, that remain functional in a power outage.

Construction will include excavation and removal of existing roadway and sidewalk and creation of new roadway and sidewalk, full reconstruction of Beach 108 Street. Streetscape elements will also include storm water drainage improvements. All proposed drainage work shall be done in conformance with the latest standards of the New York City Department of Environmental Protection (N.Y.C.D.E.P.) Bureau of Sewers. All new catch basin connections shall be made to existing sewers at Manholes, with 12" diameter ductile iron pipe, class 56, with internally locked "push-on" joints laid on 6" of broken stone for the entire width of the trench and for one-half the pipe diameter. The broken stone shall be hard, un-weathered stone, uniformly graded from 1/4" to 3/4" in diameter and conform to commercially available 1/4" to 3/4" stone. All new catch basins will have a hood on the outlet pipe. As a result of curb relocation, existing Street appurtenances, such as Hydrants, lampposts and traffic signal poles, bus shelters, etc., will have to be relocated. Water hydrants will be relocated in accordance with the specifications of the Department of Environmental Protection, Bureau of Water Supply.

To make way for the improvements, 23 trees will be removed. Grading will be required and would remove existing shrubbery and fences, as necessary. Tree removals will be avoided to the

greatest extend possible by considering the curb detail at existing trees, by slight modifications in curb alignments, or by other methods so ordered by the engineer, in accordance with acceptable engineering practices.

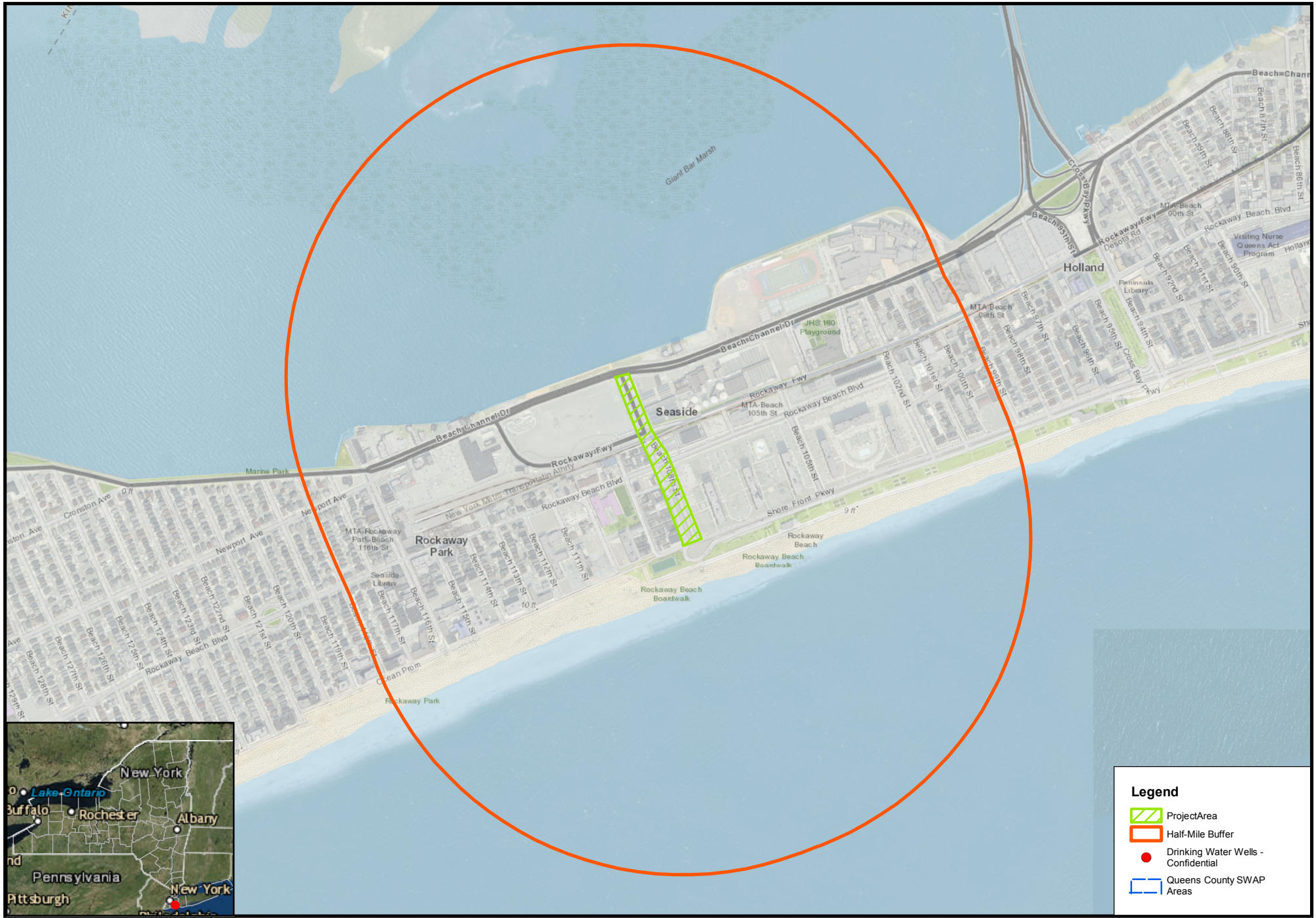
Existing Conditions and Trends [24 CFR 58.40(a)]:
Rockaway West's low elevation and varied coastal protection leaves the community exposed to high risks associated with future storm events, sea level rise, and frequent flooding. Access to the community is limited to two transportation links, which are both vulnerable and limited. The project area suffered extensive flooding and infrastructure damage as a result of Superstorm Sandy. The community continues to struggle to recover as businesses remain shuttered and the Beach 108 Street corridor remains underutilized. The ongoing struggle to recover from Superstorm Sandy is hampering the full revitalization of the area at large.

The existing condition of Beach 108th Street is unsafe for pedestrians and an uninviting site for community members, local businesses and tourists to utilize. The street is flanked by vacant lots and runs under the elevated A train. The community sees this corridor as a gateway to their beach, which is a major driver for the local economy.

The Rockaway Peninsula is geographically isolated and characteristically different from the rest of New York City. It includes residential beach neighborhoods, with small pockets of largely local retail and proximity to a wealth of natural resources; an anomaly in a City more commonly associated with global commerce and communication. Rockaway West offers residents and visitors a series of local shops, restaurants, and other small businesses, but the Community's economic vitality fluctuates seasonally. Rockaway West is made up of four neighborhoods: Neponsit, Belle Harbor, Rockaway Park, and Rockaway Beach. Rockaway West is located at the midsection of the Rockaway Peninsula, bounded by Jacob Riis Park to the west and by Beach 74th Street to the east. The Planning Area includes a large, recreational beach along the Atlantic Ocean to the south and the bayside perimeter is bound primarily by Beach Channel Drive to the north, which is lined with a mix of schools, commercial, parks, housing, and utilities, and the Rockaway Wastewater Treatment Plant.

Because of its natural resources, the Rockaway West Community has long served as an escape and summertime destination for New Yorkers. Rockaway West is predominantly residential, but includes commercial pockets and numerous natural amenities. The population of Rockaway West is diverse among many demographics and relies heavily on vehicular travel as well as public transit. Rockaway West infrastructure is aging and vulnerable.

The total population in the area is 6,925.



0 800 1,600 Feet

Beach 108th Streetscape Improvements

Rockaway Park, Queens County, New York

Half-Mile Buffer SSA and SWAP Analysis

Governor's Office of Storm Recovery

N

Drawn By: Initials | Version: 1.0 | Date:9/11/2018

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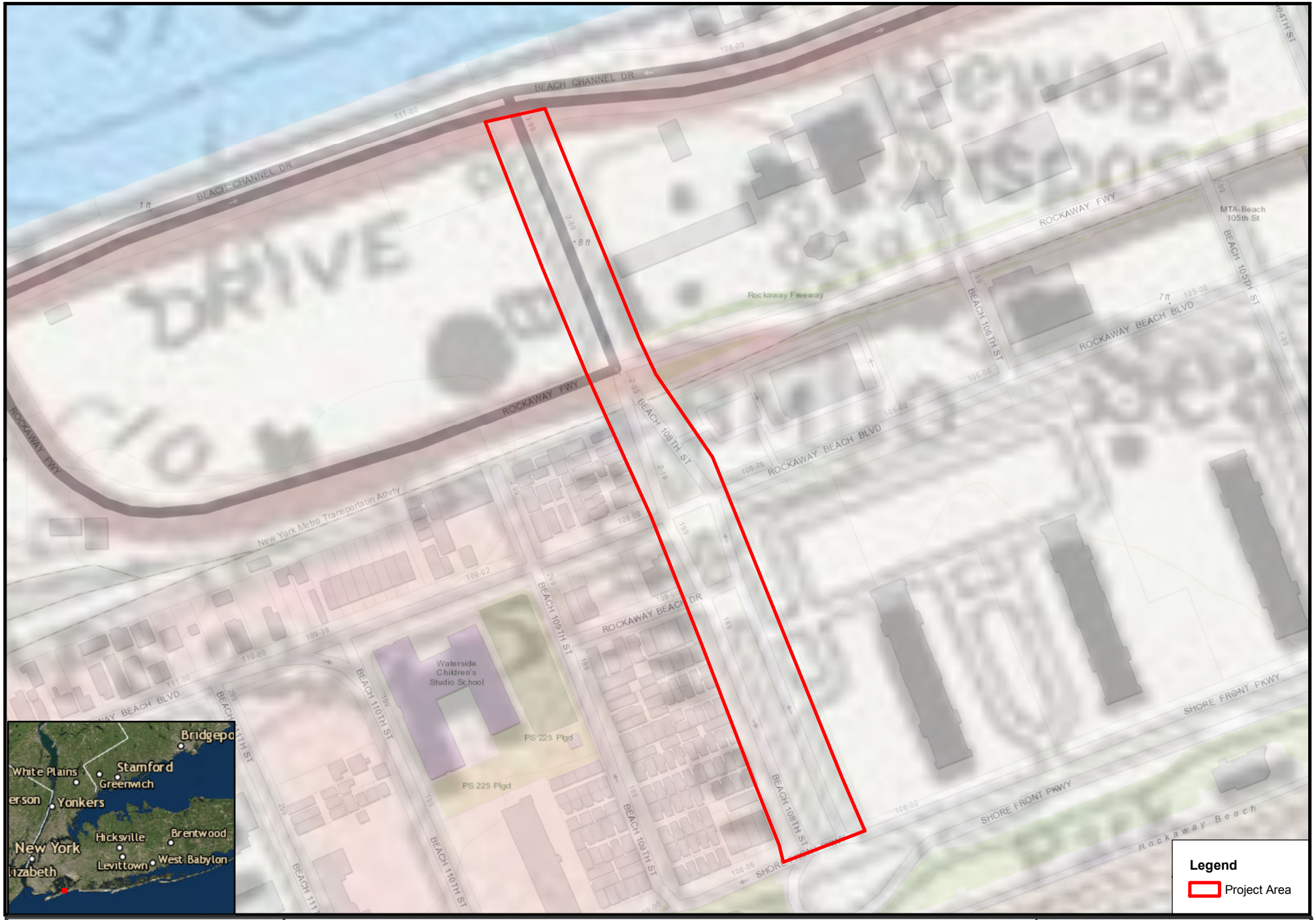

0 0.0325 0.065 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

Governor's Office of Storm Recovery

N

Drawn By: ASL | Version: 1.0 | Date:9/11/2018

FEMA data uses NAVD88*

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Beach 108th Streetscape Improvements Project

ATTACHMENT 2.A

NON-HOUSING/PROJECT ACTIVITY INITIAL SCREEN CRITERIA

The following list of criteria questions are to be used as an initial screen to determine which **non-housing** projects/activities should be forwarded to the Environmental Protection Agency (EPA) for Preliminary Sole Source Aquifer (SSA) Review. (For housing projects/activities see Attachment 2.B) If any of the questions are answered affirmatively, Attachment 3, SSA Preliminary Review Requirements, should also be completed. The application/final statement, this Attachment, Attachment 3, and any other pertinent information should than be forwarded to EPA at the address below.

Any project/activity not meeting the criteria in this Attachment, but suspected of having a potential adverse effect on the Sole Source Aquifer should also be forwarded.

CRITERIA QUESTIONS	YES	NO	N/A
1. Is the project/activity located within a currently designated or proposed groundwater sensitive area such as a special Ground Water Protection Area, Critical Supply Area, Wellhead Protection Area, etc.? [This information can be obtained from the County or Regional Planning board, the local health department, the State health department or the State environmental agency.] No see attached map, but is in the Brooklyn-Queens SSA.	☐	☒	☐
2. Is the project/activity located within a one half mile radius (2640 feet) of a current or proposed public water supply well or wellfield? [This information can be obtained from the local health department, the State health department or the State environmental agency.] see attached map.	☐	☒	☐

3. Will the project/activity include or directly cause (check appropriate items):

	YES	NO	N/A
construction or expansion of solid waste disposal, recycling or conversion facilities	☐	☒	☐
construction or expansion or closure of landfills	☐	☒	☐
construction or expansion of water supply facilities	☐	☒	☐
construction or expansion of on-site wastewater treatment plants or sewage trunk lines	☐	☒	☐
construction or expansion of gas or petroleum trunk lines greater than 1320 feet	☐	☒	☐
construction or expansion of railroad spurs or similar extensions	☐	☒	☐
construction or expansion of municipal sewage treatment plants	☐	☒	☐

4. Will the project/activity include storage or handling of any hazardous constituents as listed in Attachment 4, Hazardous Constituents	☐	☒	☐
5. Will the project/activity include bulk storage of petroleum in underground or above ground tanks in excess of 1100 gallons? (Please give what assurance they are done in a proper manner.)	☐	☒	☐
6. Will the project/activity require a federal or state discharge elimination permit or modification of an existing permit?	☐	☒	☐

This attachment was completed by:

Name:	Alicia Shultz
Title:	Senior Environmental Scientist
Address:	38-40 State Street
	Albany, New York, 12207
Telephone number:	518 817 2873
Date:	09/18/2018

Appendix J

SUMMARY OF 5-STEP FLOODPLAIN AND WETLAND ANALYSIS FOR THE BEACH 108TH STREETSCAPE IMPROVEMENTS PROJECT ROCKAWAY WEST, QUEENS COUNTY, NEW YORK

Governor's Office of Storm Recovery
U.S. Department of Housing and Urban Development Community Development Block Grant – Disaster Recovery

Below is a summary of the analysis conducted in accordance with 24 CFR Part 55 (Floodplain Management and Protection of Wetlands) and Executive Orders 11988 (Floodplain Management).

Pursuant to 24 CFR §55.12(a)(4), steps 2, 3, and 7 of the 8-step process for floodplain management do not apply to projects involving the improvement of existing nonresidential buildings and structures, in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and are in good standing, provided that the action does not meet the thresholds for "substantial improvement" under §55.2(b)(10) and that the footprint of the structure and paved areas is not significantly increased. Roadways, sidewalks, landscaping and water lines are not insurable structures under the NFIP.

The Proposed Activity will include excavation and removal of existing roadway and sidewalk and creation of new roadway and sidewalk, full reconstruction of Beach 108 Street. Streetscape elements will also include stormwater drainage improvements. New catch basin connections will be made to existing sewers at Manholes, with 12" diameter ductile iron pipe, class 56, with internally locked "push-on" joints laid on 6" of broken stone for the entire width of the trench and for one-half the pipe diameter. The new catch basins will have a hood on the outlet pipe. As a result of curb relocation, existing street appurtenances, such as hydrants, lampposts and traffic signal poles, bus shelters, etc., will have to be relocated.

GOSR has determined that the proposed project will have no direct or indirect adverse impacts to the floodplain, wetland, or waterway and decided to proceed with the proposed project. The project would directly contribute to the rebuilding and recovery of the area with a focus on resiliency and mitigation. Project implementation is conditioned upon issuance of applicable local, state and federal permits and the project will be constructed in accordance with the permit conditions, as regulated by the Army Corps of Engineers (ACOE), New York State Department of Environmental Conservation (NYSDEC) and municipality.

Step 1: Determine if the proposed action is in a 100-year floodplain or wetland.

Based on best available data, the 2015 NYC Preliminary FIRM, the project location is located in 100-year floodplain. No wetlands have been identified within the project area (see attached figures).

Step 4: Identify and describe the proposed action's direct and indirect effects associated with occupying or modifying the floodplain or wetland.

This 5-step Floodplain Management Plan was completed pursuant to 24 CFR 55.20. Pursuant to 24 CFR §55.12(a)(4), steps 2, 3, and 7 of the 8-step process for floodplain management do not

apply to projects involving the improvement of existing nonresidential buildings and structures, in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and are in good standing, provided that the action does not meet the thresholds for "substantial improvement" under §55.2(b)(10) and that the footprint of the structure and paved areas is not significantly increased.

The proposed project will not result in any negative impact to the 100-year floodplain. The proposed drainage system upgrades would reduce the accumulation of storm water on the roadbeds. None of the construction will have any impact on potential coastal flooding elevations. There will be no increase in impermeable surfaces. There will be no temporary impacts during construction. The proposed project elements are designed to resist damage during flooding events and permeable surfaces are incorporated where possible.

The project would directly contribute to the rebuilding and recovery of the area with a focus on resiliency and mitigation.

Step 5: Identify methods to minimize the potential adverse impacts within a floodplain and wetland and to restore and preserve the natural and beneficial values.

No new impacts will result from the Project Activities. The Project Activities include improvements to existing infrastructure. All work will be completed in accordance with mitigation measures identified by the required permits. All permits will be obtained prior to construction. No wetlands are located within the project area. Therefore, the Project Activities will affect the natural and beneficial values of wetlands.

A Storm Water Pollution Prevention Plan (SWPPP) that minimizes the pollutants entering the storm sewer system and local waterbodies by complying with New York's State Pollutant Discharge Elimination System (SPDES) General Permit will be required prior to project implementation. The Project Activities will also be completed in accordance with best management practices (BMP) and all applicable federal, state, and local permits and their requirements and conditions, which will be obtained prior to commencing work. The projects will incorporate mitigative measures and BMPs to reduce construction-related pollutants. No changes in land use or impervious surface would occur as a result of the Project Activities.

Step 6: Reevaluate the proposed action to determine if it is still practicable given its floodplain effects.

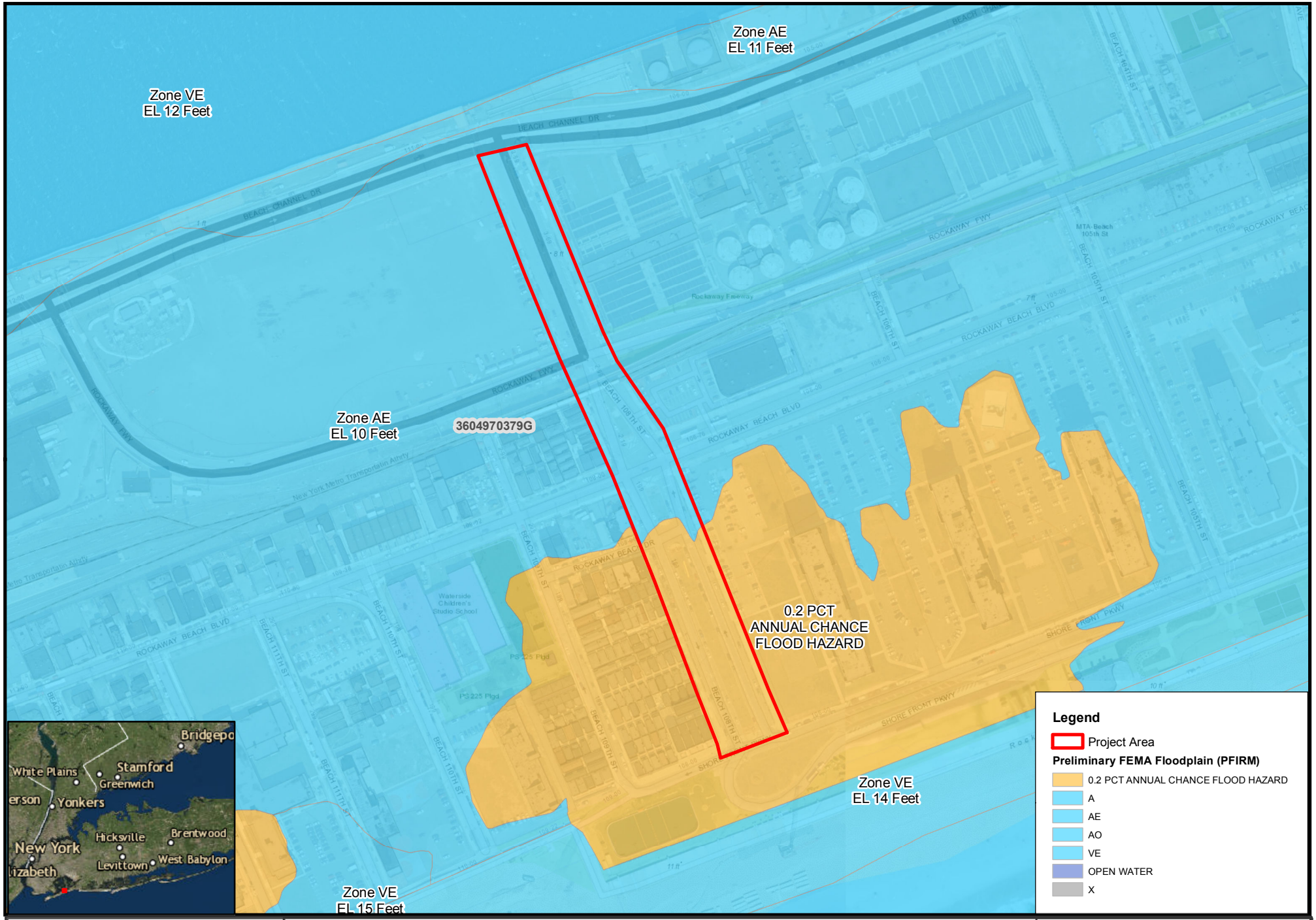
The Project Activities will not increase impervious surfaces within a floodplain. The Project Activities include improving existing infrastructure. The proposed project will not adversely affect the natural and beneficial floodplain values of the floodplain or lives and property. The Project Activities will provide a beneficial increase in the community's resiliency. No changes in land use or impervious surface would occur as a result of the proposed project that would affect the floodplain in the long term. The project activities will be completed within the existing footprint of developed areas. As a result, the proposed action is still practicable.

Step 8: The proposed action can be implemented after the above steps have been completed.

GOSR has determined that the proposed project will have no direct or indirect adverse impacts to the floodplain, wetland or waterway and will proceed with the proposed project. Project implementation is conditioned upon issuance of applicable local, state and federal permits and the project will be constructed in accordance with the permit conditions, as regulated by the ACOE, NYSDEC and municipality.

Attachments

Floodplain Map
Freshwater Wetland Map
Coastal Tidal Wetland Map



0 0.035 0.07 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

Governor's Office of Storm Recovery

N

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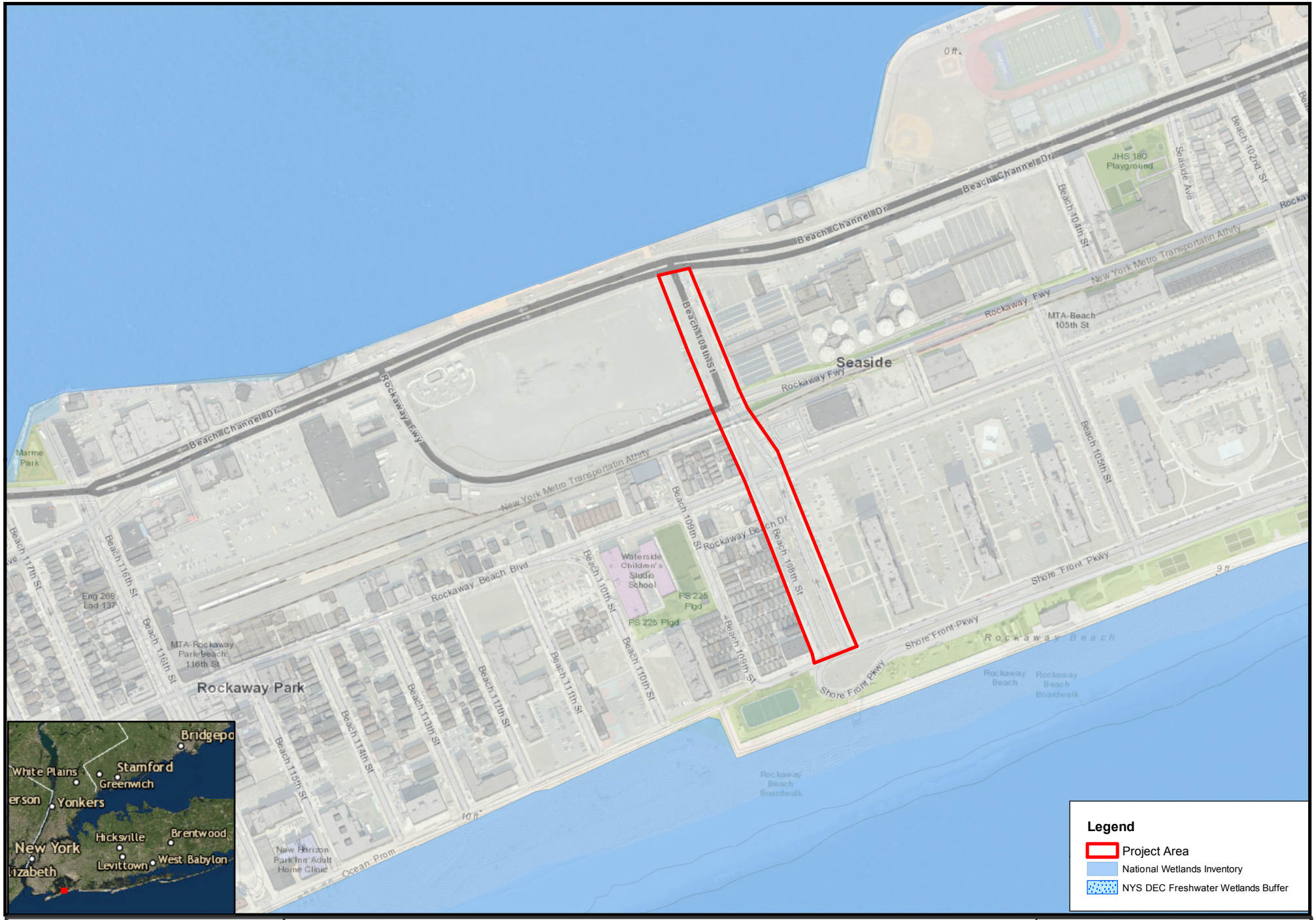

0 0.05 0.1 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

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0 0.05 0.1 Miles

Beach 108th Streetscape Improvements
Rockaway Park, Queens County, New York

Data Sources: Esri Topographic and World Imagery Basemap, NYOPDIG, NYDEC, USGS, USFWS, FEMA, NYC MapPluto, EPA OAR-OAQPS, NYS GIS Clearinghouse

Governor's Office of Storm Recovery

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FEMA data uses NAVD88*

ATTACHMENT 1

Department of Design and Construction

DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PROJECT ID: SANDR04

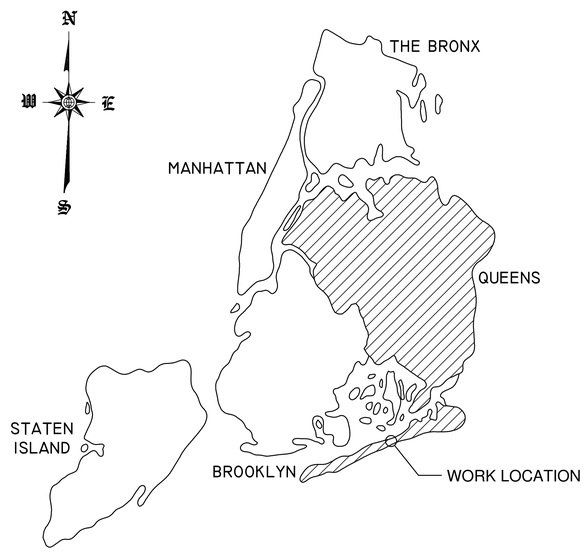
MASS MAILING NO. 1

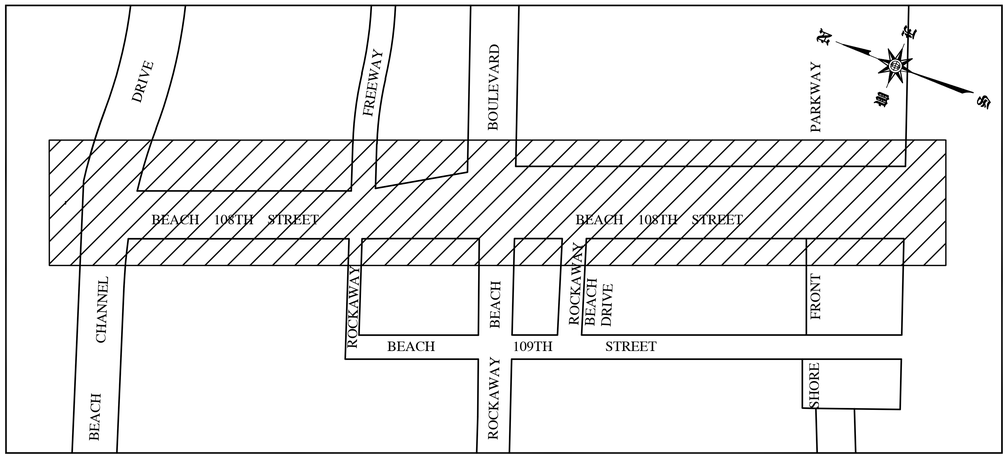
DATE: 08/17/2018

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE

INCLUDING UNDER QED-1044: CONSTRUCTION OF DISTRIBUTION WATER MAINS AND APPURTENANCES TOGETHER WITH STREET LIGHTING, TRAFFIC WORK AND ALL WORK INCIDENTAL THERETO

BOROUGH OF QUEENS





LOCATION PLAN
N.T.S.

PROJECT SITE

COMMUNITY BOARD NO. 14

ERIC MACFARLANE, P.E.
DEPUTY COMMISSIONER — DATE

MOHSEN ZARGARELAHI, P.E.
ASSOCIATE COMMISSIONER — DATE

HOW SHEEN PAU, P.E.
ASSISTANT COMMISSIONER — DATE

REVIEWED AND APPROVED BY:

HERVE MATHELIER
DIRECTOR — DATE

NAYEEM AMEEN, P.E.
ENGINEER-IN-CHARGE — DATE

FINAL DESIGN PREPARED BY:

P.E. NO. — DATE

0 1 2 3 4
ORIGINAL SIZE IN INCHES

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

PROJECT ID: SANDR04 | DATE: 8/17/2018 | SHEET 1 OF ---- | T1/T1

PROJECT ID SANDR04

CONSULTANT DESIGN

INDEX OF DRAWINGS

SHEET NO.	DWG. NO.	DESCRIPTION
	T1	TITLE SHEET
	I1	INDEX OF DRAWINGS AND LIST OF STANDARD DRAWINGS
	L1	LEGEND AND ABBREVIATIONS
	G1	GENERAL NOTES - 1
	G2	GENERAL NOTES - 2
	G3	GENERAL NOTES - NYCT
	SC	SURVEY CONTROL
	TS1	TYPICAL SECTIONS - 1
	TS2	TYPICAL SECTIONS - 2
	C1	HIGHWAY CONSTRUCTION PLAN - 1
	C2	HIGHWAY CONSTRUCTION PLAN - 2
	P1	HIGHWAY PROFILE EAST SIDE - NORTHBOUND STA. 10+00 TO STA. 19+00
	P2	HIGHWAY PROFILE EAST SIDE - NORTHBOUND STA. 19+00 TO STA. 28+00
	P3	HIGHWAY PROFILE WEST SIDE - NORTHBOUND STA. 10+00 TO STA. 19+00
	P4	HIGHWAY PROFILE WEST SIDE - NORTHBOUND STA. 19+00 TO STA. 28+00
	P5	HIGHWAY PROFILE WEST SIDE - SOUTHBOUND STA. 10+00 TO STA. 19+00
	P6	HIGHWAY PROFILE WEST SIDE - SOUTHBOUND STA. 19+00 TO STA. 28+00
	P7	HIGHWAY PROFILE EAST SIDE - SOUTHBOUND STA. 10+00 TO STA. 19+00
	P8	HIGHWAY PROFILE EAST SIDE - SOUTHBOUND STA. 19+00 TO STA. 28+00
	U1	UTILITY PLAN AND PROFILE - 1
	U2	UTILITY PLAN AND PROFILE - 2
	U3	UTILITY PLAN AND PROFILE - 3
	PM1	SIGNING & PAVEMENT MARKING PLAN - 1
	PM2	SIGNING & PAVEMENT MARKING PLAN - 2
	LN1	LANDSCAPE NOTES
	TM1	TREE MITIGATION PLAN - 1
	TM2	TREE MITIGATION PLAN - 2
	TM3	TREE MITIGATION TABLE
	TM4	TREE MITIGATION DETAILS - 1
	TM5	TREE MITIGATION DETAILS - 2
	TM6	TREE MITIGATION DETAILS - 3
	LL1	LANDSCAPE LAYOUT PLAN - 1
	LL2	LANDSCAPE LAYOUT PLAN - 2
	LL3	LANDSCAPE DETAIL - 1
	LL4	LANDSCAPE DETAIL - 2

LIST OF STANDARD DRAWINGS

NOTE: THE LATEST REVISIONS OF THE APPLICABLE REFERENCED STANDARDS THAT HAVE BEEN AUTHORIZED UP TO THE START OF ADVERTISING SHALL BE CONSIDERED AS PART OF THESE CONTRACT DOCUMENTS.

DRAWING NO.	DESCRIPTION	AGENCY
H-1004	TYPICAL TEMPORARY PEDESTRIAN PASSAGEWAY IN ROADWAY AREA DURING CONSTRUCTION	NYCDOT
H-1005	BUS STOP IN NEW ROADWAY	NYCDOT
H-1010	STEEL FACED CONCRETE CURB/STEEL FACING, TYPE D	NYCDOT
H-1011	SIDEWALK PEDESTRIAN RAMPS	NYCDOT
H-1012	TIMBER CURB	NYCDOT
H-1013	ILLUMINATED TIMBER BARRICADE	NYCDOT
H-1014	TEMPORARY PEDESTRIAN STEEL BARRICADE	NYCDOT
H-1015	STEEL FACED DROP CURB DRIVEWAYS	NYCDOT
H-1034	TYPICAL CONSTRUCTION JOINTS FOR CONCRETE BASE FOR PAVEMENT	NYCDOT
H-1040	TRANSVERSE CONSTRUCTION JOINTS FOR CONC. BASE	NYCDOT
H-1042A	STANDARD TRENCH OR HOLE RESTORATION	NYCDOT
H-1044	CONCRETE CURB	NYCDOT
H-1045	CONCRETE SIDEWALK	NYCDOT
H-1046	STREET TREE PLANTING DETAIL – TYPE I	NYCDOT
H-1046A	PROTECTIVE TREE BARRIER	NYCDOT
H-1047	TYPICAL CURB DETAIL AT EXISTING TREES	NYCDOT
H-1049	PLASTIC BARREL – ITEM NO. 6.87	NYCDOT
H-1053	DETAILS FOR CONSTRUCTING AREAS OF ADJUSTMENT AND TRANSITION SECTIONS	NYCDOT
H-1054	LIMITS OF MEASUREMENT FOR PAYMENT OF TEMPORARY ASPHALT PAVEMENT	NYCDOT
H-1055	PAVEMENT KEY TYPE A, B-1, B-2, C	NYCDOT
MS-1000	NEW YORK CITY COMPARISON OF DATUM PLANES	NYCDOT
MS-1001	SIDEWALK PAYMENT LIMITS	NYCDOT
MS-1003	TYPICAL PAVEMENT CROSS SECTION/ RESURFACING	NYCDOT
TWM-1	TYPICAL PAVEMENT MARKINGS WORD MESSAGES	NYCDOT-TRAFFIC
TCW-1	TYPICAL PAVEMENT MARKINGS PEDESTRIAN CROSSWALKS AND STRIPING	NYCDOT-TRAFFIC
TIN-1	TYPICAL PAVEMENT MARKINGS INSTALLATION	NYCDOT-TRAFFIC
TPK-1	TYPICAL ANGLE PARKING	
45161-A-Z	STANDARD STEEL HYDRANT FENDERS	NYCDEP

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NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

TOPOGRAPHIC SURVEY PREPARED BY:
NYCDDC
LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry
NAME OF CONSULTANT
SIGNATURE

DRAWN BY MV
CADD FILE SANDR04-INDEX

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

INDEX OF DRAWINGS AND
LIST OF STANDARD DRAWINGS

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04
DATE: 8/17/2018
SHEET ---- OF ----
I1 / I1

CONSULTANT DESIGN

Sheet File: Q:\50064552\CAD\Civil\Final Design\Layout\SANDR04-INDEX.dwg
Date/Time: Aug 17, 2018, 10:20am

ABBREVIATIONS

ABANDONED	ABDN.
APARTMENT	APT.
ASPHALT	ASPH.
BASEMENT	BSMT.
BITUMINOUS	BIT.
BLOCK	BLK.
BLUESTONE	B.S.
BLUESTONE CURB	B.S.C.
BLUESTONE WALK	B.S.W.
BOTTOM OF CURB	B.C.
BRICK	BRK.
BUILDING	BLDG.
BUILT	BLT.
CAST IRON	C.I.
CENTER LINE	C.L.
CHAIN LINK FENCE	C.L.F.
CHAMBER	CH.
CLASS NUMBER	CL. #
COMBINED	COMB.
COMMERCIAL	COMM.
CONCRETE	CONC.
CONCRETE CURB	C.C.
CONCRETE WALK	C.W.
DIAMETER	DIA.
DOUBLE BARREL	D.B.
DOWN	DN.
DRAWING	DWG.
DUCTILE IRON PIPE	D.I.P.
EXISTING	EXIST.
EXTRA STRENGTH VITRIFIED PIPE	E.S.V.P.
FIRE ALARM	F.A.
FIRE DEPARTMENT	F.D.
FLAT TOP REINFORCED CONCRETE	F.T.R.C.
FRAME	FR.
GRANITE	GRAN.
GRANITE CURB	GRAN. C.
INTERCEPTOR	INT.
INVERT ELEVATION	INV.
IRREGULAR	IRR.
MANHOLE	MH
NOT IN CONTRACT	N.I.C.
NOT TO SCALE	N.T.S.
PAVEMENT	PVMT.
POINT OF CURVATURE	P.C.
POINT OF INTERSECTION	P.I.
POINT OF TANGENCY	P.T.
PRECAST REINFORCED CONCRETE	P.R.C.
RADIUS	R
REINFORCED CONCRETE PIPE	R.C.P.
ROADWAY	RDWY.
SANITARY	SAN.
SEWER	SWR.
SIDEWALK	SW.
STANDARD	STD.
STEAM	ST.
STEEL	STL.
STEEL FACED CURB	SFC
STEEL NOSED CURB	S.N.C.
STONE	STN.
STORM	STM.
STORY	STY.
TOP OF CURB	T.C.
TRAFFIC SIGN	T.S.
VACANT	VAC.
WORKING POINT	W.P.

LEGEND

	EXISTING	PROPOSED
MANHOLES		
ELECTRIC	E	E
CABLE TV	C	
TELEPHONE	T	
TRAFFIC	TF	
NYC MH	NYC	
GAS	G	
WATER	W	
FIRE DEPT.	F	
SUBWAY	SU	
COAL CHUTE	CC	
STORM SEWER	STM	STM
COMBINED SEWER	COMB	COMB
SANITARY SEWER	SAN	SAN
INTERCEPTOR SEWER	INT	INT
UNIDENTIFIED MANHOLE (NO RECORD AVAILABLE)	UM	
BUILT MANHOLE REPLACED BY NEW MANHOLE		
RECORD MANHOLE	S	
HARDWARE RIM EL. & INV. EL. (SEWER, ETC.)	S 61.23 INV.47.89	
BASINS		
CATCH BASIN WITH CURB PIECE – TYPE 1	1	1
CATCH BASIN WITHOUT CURB PIECE – TYPE 2	2	2
CATCH BASIN WITHOUT CURB PIECE – TYPE 3	3	3
EXISTING CATCH BASIN TO BE REMOVED		X
TO BE ABANDONED		XA
TO BE MODIFIED		M
TO BE ADJUSTED		A
CATCH BASIN – NON-STANDARD		N
NEW CATCH BASIN TO BE CONSTRUCTED IN SAME LOCATION AS OLD BASIN		
INLET		
SEEPAGE BASIN	SB	SB
HYDRANTS		
LOW PRESSURE HYDRANT		
HIGH PRESSURE HYDRANT		
LOW PRESSURE HYDRANT TO BE RELOCATED		R
HIGH PRESSURE HYDRANT TO BE RELOCATED		R
LOW PRESSURE HYDRANT TO BE ADJUSTED (VERTICALLY)		A
HIGH PRESSURE HYDRANT TO BE ADJUSTED (VERTICALLY)		A
SIAMESE CONNECTION		
STREET LIGHTING AND TRAFFIC SIGNALS		
WOOD UTILITY POLE		
WOOD UTILITY POLE WITH STREET LIGHT		
WOOD UTILITY POLE WITH TRAFFIC SIGNAL	T	
WOOD UTILITY POLE WITH STREET LIGHT AND FIRE ALARM BOX	F	
WOOD UTILITY POLE WITH FIRE ALARM BOX	F	
WOOD UTILITY POLE WITH PEDESTRIAN SIGNAL	PS	
WOOD UTILITY POLE WITH TRAFFIC AND PEDESTRIAN SIGNAL	TPS	
WOOD UTILITY POLE WITH STREET LIGHT AND TRAFFIC AND PEDESTRIAN SIGNAL	TPS	
WOOD UTILITY POLE WITH STREET LIGHT AND PEDESTRIAN SIGNAL	PS	
STREET LIGHT (METAL POLE)		
STREET LIGHT AND TRAFFIC SIGNAL	T	
STREET LIGHT AND TRAFFIC SIGNAL WITH PEDESTRIAN SIGNAL	TPS	
STREET LIGHT WITH PEDESTRIAN SIGNAL	PS	
STREET LIGHT WITH FIRE ALARM BRACKET	F	
TRAFFIC SIGNAL POST	T	
TRAFFIC SIGNAL CONTROL BOX		
STANCHION WITH TRAFFIC SIGNAL	T	
STANCHION W/PEDESTRIAN SIGNAL	TPS	
TRAFFIC SIGNAL POST W/PEDESTRIAN SIGNAL	TPS	

LEGEND

	EXISTING	PROPOSED
VALVE BOXES		
GAS	G	
WATER	W	
STEAM	St	
TREES		
EXISTING TREE (SIZE AS LABELED)	7"	
EXISTING TREE TO BE REMOVED		7"
NEW TREE TO BE PLANTED		
SHRUB		
HEDGE (HEIGHT AS LABELED)		
MISCELLANEOUS		
VAULT (SIDEWALK)	V	
CELLAR WINDOW GRATING		
CELLAR DOOR	CD	
SUBWAY GRATING		
SURFACE WATER FLOW		
TRAFFIC DIRECTION		
PARKING METER		
OIL FILL CAP OR OIL VENT	OR	OFILL
FIRE ALARM POST	F	
POLICE CALL BOX	P	
MAIL BOX, PUBLIC PHONE	MB	TEL.
COLUMN – FOUNDATION (OF ELEVATED STRUCTURES)	OR	
HEADER		
AREA OF ADJUSTMENT		
LIMIT OF NEW PAVEMENT		
LIMIT OF MILLING AND RESURFACING		
BUS PAD		
SIGN (GROUND MOUNTED)		
SIGN (OVERHEAD)		
TRAIN STATION ENTRANCE	DOWN	
SHAFT TO BUILDING BASEMENT	SH	
PEDESTRIAN RAMP		
CURB (CONCRETE UNLESS OTHERWISE INDICATED)		
CURB WITH DROP CURB (DRIVEWAY)	DC	DC
EDGE OF PAVEMENT WITHOUT CURB		
PROPOSED CONSTRUCTION (TOP OF CURB) ELEVATION AND STATION		T.C. 13.8 STA. 26+33
ROCK OUTCROP		
NORTH ARROW		
BARRIERS		
BEAM TYPE MALL BARRIER		
PORTABLE PRECAST CONCRETE BARRIER		
CAST IN PLACE CONCRETE BARRIER		
RETAINING WALL (W/TYPE)	RW (STN.)	
RAILROAD/TROLLEY TRACK		
FENCE (WITH HEIGHT AND TYPE)		
CHAIN LINK FENCE	6'	
IRON PICKET FENCE	5'	
WIRE FENCE	5'	
IRON ON CONCRETE COPING		
WOOD PICKET FENCE	4'	
GUARD POST	GP	
BUILDINGS		
HOUSE INFORMATION – HOUSE NUMBER, BLDG TYPE, FIRST FLOOR ELEV., (CE) CELLAR ENTR., (GE) GARAGE ENTR.	95-02 2-STY.FR. ▼ FF 25.3 G.E.17.5	
STAIRS OR STOOPS		
CANOPY	CANOPY	

LEGEND

	EXISTING	PROPOSED
CONDUITS		
6" WATER MAIN		
8" WATER MAIN		
12" WATER MAIN		
16" WATER MAIN		
20" WATER MAIN		
24" WATER MAIN		
30" WATER MAIN		
36" WATER MAIN		
42" WATER MAIN		
48" WATER MAIN		
54" WATER MAIN		
60" WATER MAIN		
66" WATER MAIN		
72" WATER MAIN		
84" WATER MAIN		
96" WATER MAIN		
STORM SEWER (WITH SIZE – LESS THAN 24")	15" STM. SEWER	15" STM. SEWER
STORM SEWER (WITH SIZE – 24" AND GREATER)*	24" STM. SEWER	24" STM. SEWER
SANITARY SEWER (WITH SIZE – LESS THAN 24")	15" SAN. SEWER	15" SAN. SEWER
SANITARY SEWER (WITH SIZE – 24" AND GREATER)*	24" SAN. SEWER	24" SAN. SEWER
COMBINED SEWER (WITH SIZE – LESS THAN 24")	15" COMB. SEWER	15" COMB. SEWER
COMBINED (WITH SIZE – 24" AND GREATER)*	24" COMB. SEWER	24" COMB. SEWER
INTERCEPTOR SEWER (WITH SIZE – LESS THAN 24")	15" INTERCEPTOR SEWER	15" INTERCEPTOR SEWER
INTERCEPTOR SEWER (WITH SIZE – 24" AND GREATER)*	24" INTERCEPTOR SEWER	24" INTERCEPTOR SEWER
CATCH BASIN CONNECTION		
GAS LINE (WITH SIZE)	4" GAS	
STEAM (WITH SIZE)	16" STEAM	
ELECTRIC	ELECTRIC	
TELEPHONE	TELEPHONE	
CABLE	CABLE	
FIRE ALARM	FIRE ALARM	
OVERHEAD (AERIAL) UTILITY LINE	A/E,T,F	
TA SUBWAY CONDUIT	Su	
LEGAL DATA		
LOT & BLOCK NUMBER	39 BLOCK 2109	
ESTABLISHED/LEGAL GRADE	0.00	
ANGLE	86°30'48"	
BLOCK LENGTH	167.01' (65.75 m)	
INTERPOLATED/CALCULATED ANGLE OR LENGTH	[86°30'48"] [167.01'(65.75 m)]	
PROPERTY POSSESSION LINE		
MAPPED PROPERTY LINE (RIGHT-OF-WAY LINE)		
LOT LINE		
SURVEY MONUMENT (CITY) – IDENTIFY BY TOPO NUMBER	M#	
BENCH MARK (LABEL)	BM#	
SURVEY CONTROLS		
CONTROL SURVEY TRAVERSE		
CENTER LINE BASE LINE	10+00 10+50	

"IT IS A VIOLATION OF THE PROFESSIONAL LICENSE LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER/ARCHITECT AS APPLICABLE. THE ALTERING ENGINEER/ARCHITECT SHALL AFFIX HIS/HER SEAL AND THE NOTATION 'ALTERED BY' FOLLOWED BY HIS/HER SIGNATURE AND DATE OF ALTERATION."

* LINE SPACING IN SYMBOL TO BE SCALED TO CONDUIT SIZE

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

TOPOGRAPHIC SURVEY PREPARED BY:
NYCDDC
LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry
NAME OF CONSULTANT
SIGNATURE

DRAWN BY MV
CADD FILE SANDR04-LEG

SCALE AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

LEGEND AND ABBREVIATIONS

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04
DATE: 8/17/2018
SHEET ---- OF ---- L1/L1

CONSULTANT DESIGN

Sheet File: Q:\50064552\CAD\Civil\Final Design\Layout\SANDR04-LEG.dwg
Date/Time: Aug 17, 2018, 10:20am

1. GENERAL

1.01A (NO TEXT)

1.01B ELEVATION 0.0 IS 2.725 FEET ABOVE THE MEAN SEA LEVEL AS ESTABLISHED BY THE U.S.C.&G SURVEY AT SANDY HOOK, NEW JERSEY.

1.02 BLOCK INTERIOR ANGLES, BLOCK LENGTHS AND LEGAL GRADES WERE OBTAINED FROM THE FINAL MAPS OF THE BOROUGH OF QUEENS.

1.03 EXISTING UNDERGROUND AND OVERHEAD UTILITIES AS SHOWN HERE HAVE BEEN DETERMINED BY STANDARD SURVEYING METHODS AND AVAILABLE RECORDS. NEITHER THE EXACT LOCATION NOR THE INFORMATION OF THESE EXISTING UTILITIES IS GUARANTEED TO BE COMPLETE OR CORRECT.

1.04 BUS ROUTES AFFECTED BY THE PROJECT WILL OR MAY REQUIRE COORDINATION. ARRANGEMENTS FOR BUS DIVERSIONS SHALL BE MADE THROUGH:

1. MS. SARAH WYSS
DIRECTOR, SHORT RANGE BUS SERVICE PLANNING
MTA NEW YORK CITY TRANSIT
2 BROADWAY, ROOM A17.50
NEW YORK, NY 10004
Sarah.Wyss@NYCT.com

1.05 ALL COMMUNICATIONS AND COORDINATION MEETINGS RELATIVE TO THIS PROJECT BETWEEN THE CONTRACTOR AND ANY AGENCY, UTILITY COMPANY OR ORGANIZATION WILL BE CONDUCTED AND/OR APPROVED BY THE ENGINEER.

1.06 (NO TEXT)

1.07 (NO TEXT)

1.08 ALL SHEETING PLACED UNDER THIS CONTRACT, NO MATTER UNDER WHICH ITEMS, SHALL BE REMOVED, AND THE COST SHALL BE DEEMED INCLUDED IN THE PRICES BID FOR ALL SCHEDULED ITEMS.

1.09 THE FOLLOWING SHALL PERTAIN TO ALL ITEMS HAVING BACKFILL AS PART OF THE WORK: "THE BACKFILLING SHALL COMPLY WITH SUBSECTION 4.11.3 OF THE STANDARD SPECIFICATIONS, AND THE COST THEREOF SHALL BE DEEMED INCLUDED IN THE PRICES BID FOR ALL RELATED ITEMS UNLESS OTHERWISE SPECIFICALLY NOTED ON DRAWINGS."

1.10 ALL HYDRANTS, LIGHT POLES, TREES OR OTHER FIXED OBJECTS THAT ARE TO BE CONSTRUCTED, PLANTED, RESET, OR RELOCATED AS A RESULT OF THE PROJECT SHALL BE CONSTRUCTED OR PLANTED SO AS TO PROVIDE AT LEAST ONE AND ONE HALF (1 1/2) FOOT CLEAR DISTANCE FROM THE FACE OF THE CURB TO THE FACE OF THE OBJECT.

1.11 AS A RESULT OF CURB RELOCATION WITHIN THE CONTRACT LIMITS, EXISTING STREET APPURTENANCES PROJECTING ABOVE PAVED SURFACES, SUCH AS HYDRANTS, LAMPPOSTS AND TRAFFIC SIGNAL POLES, BUS SHELTERS, ETC., WILL HAVE TO BE RELOCATED. NOT WITHSTANDING ANY CONSTRUCTION SEQUENCE AS DEFINED BY THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PLAN HIS CONSTRUCTION OPERATIONS TO INSURE THAT THESE APPURTENANCES ARE CONSTRUCTED OR RELOCATED IN CONJUNCTION WITH THE INSTALLATION OF THE NEW CURB.

IN PARTICULAR, IN THE EVENT THE SIDEWALK IS WIDENED, THE STREET APPURTENANCES SHALL BE MAINTAINED AT THEIR EXISTING LOCATION BEHIND THE EXISTING CURB UNTIL THE NEW SIDEWALK IS CONSTRUCTED. IF THE SIDEWALK IS NARROWED, THE STREET APPURTENANCES MUST BE MOVED TO THEIR NEW LOCATIONS BEHIND THE PROPOSED NEW CURB PRIOR TO REMOVAL OF THE EXISTING CURB.

SERVICES MUST BE MAINTAINED BY INSTALLING AND ENERGIZING NEW APPURTENANCES OR BY USING TEMPORARY APPURTENANCES, AS DIRECTED BY THE ENGINEER. UNLESS OTHERWISE PROVIDED FOR, ALL TEMPORARY APPURTENANCES SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE CITY.

2. GRADING WORK

2.01 REMOVAL OF ALL SHRUBBERY, DEBRIS, FENCES, AND OTHER ENCROACHMENTS FOUND ON AND WITHIN THE CITY'S RIGHT OF WAY WHICH INTERFERE WITH THE NEW WORK ARE DEEMED INCLUDED IN THE PRICES BID FOR ALL SCHEDULED ITEMS, UNLESS OTHERWISE NOTED ON THE PLANS.

3. CURB WORK

3.01 CURBS AND DEPRESSED CURBS IN DRIVEWAYS ARE TO BE CONSTRUCTED WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

3.02 ALL NEW STEEL FACED CONCRETE CURB WITH RADIUS GREATER THAN 100 FEET WILL BE PAID FOR AS STRAIGHT CURB. ALL NEW STEEL FACED CONCRETE CURB WITH RADIUS LESS THAN OR EQUAL TO 100 FEET WILL BE PAID FOR AS CORNER CURB.

3.03 ALL NEW CORNERS ARE TO BE STEEL FACED CONCRETE CURB AND TURNED TO A 12 FT. RADIUS, UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER. ALL CORNER STEEL FACING IS TO BE SHOP FABRICATED.

3.04 WHEN NEW CURBING IS TO BE EXTENDED INTO CROSS STREETS, IT SHALL BE STEEL FACED CONCRETE CURB, UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER. WHERE CURB BEYOND THE CORNER IS NOT STEEL FACED CONCRETE CURB, STEEL CURB IS TO BE EXTENDED TO CLEAR PEDESTRIAN RAMPS AND/OR TO THE NEW CATCH BASINS AS CONSTRUCTED, CLEAR OF THE PEDESTRIAN CROSSWALK AS DIRECTED BY THE ENGINEER, THE COST OF THE ADDITIONAL TANGENT LENGTH OF STEEL FACED CONCRETE CURB WILL BE PAID FOR UNDER ITEM STEEL FACED CONCRETE CURB, ITEM NO. XXXX

3.05 WHERE NEW CURBING IS REQUIRED ADJACENT TO EXISTING CONCRETE SIDEWALK, WHICH IS NOT TO BE REPLACED, A CONCRETE SAW-CUT SHALL BE MADE ALONG A LINE PARALLEL TO AND TWO (2) FEET BACK FROM THE NEW CURB. THE COST OF THE SAW-CUT IS INCLUDED IN THE PRICES BID FOR THE CURB ITEMS.

3.06 WHERE THE PROPOSED TOP OF CURB LINE PROFILE VARIES FROM THE EXISTING PROFILE ALONG THE TOP OF SUBWAY/SIDEWALK VENTILATORS BY MORE THAN 1", THE ENGINEER WILL DIRECT THE CONTRACTOR TO ADJUST THE TOP OF THE NEW CURB, DURING CONSTRUCTION, TO CONFORM WITH THE PROFILE OF EACH VENTILATOR AND WITH THE PROPOSED GRADES AT THE POINTS OF TANGENCY AND CURVATURE IN EACH BLOCK. THE GUTTER LINE PROFILE SHALL BE 7" BELOW PROPOSED TOP OF CURB PROFILE.

3.07 TOP OF CURB ELEVATIONS AT CORNER PEDESTRIAN RAMPS SHALL BE ESTABLISHED IN CONJUNCTION WITH ROADWAY PAVEMENT CONSTRUCTION SO AS TO PROVIDE POSITIVE SURFACE DRAINAGE FROM THE APEX TOWARDS THE CATCH BASINS, WHERE APPLICABLE.

4. SIDEWALK WORK

4.01 SIDEWALK PEDESTRIAN RAMPS WITH EMBEDDED PREFORMED DETECABLE WARNING UNITS ARE TO BE INSTALLED AT ALL CORNERS, UNLESS OTHERWISE DIRECTED. THE COST FOR INSTALLATION OF PEDESTRIAN RAMPS SHALL BE PAID FOR UNDER THE SIDEWALK AND CURB ITEMS, AS APPLICABLE. THE COST FOR THE EMBEDDED PREFORMED DETECTABLE WARNING UNITS SHALL BE PAID UNDER ITEM NUMBER 4.13 DE.

4.02 THE LOCATION AND THE EXTENT OF NEW SIDEWALK TO BE CONSTRUCTED IS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

4.03 THE CONTRACTOR IS HEREBY ADVISED THAT UNDER-SIDEWALK BUILDING VAULTS ARE PRESENT IN THE SIDEWALK AREA WITHIN THE PROJECT LIMITS.

4.04 PRIOR TO ANY SIDEWALK EXCAVATION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE EXISTENCE OF UNDER-SIDEWALK VAULTS.

4.05 THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE TO THE UNDER- SIDEWALK BUILDING VAULTS AND/OR ITS CONTENTS AND/OR OCCUPANTS DUE TO HIS FAILURE TO VERIFY THE PRE-EXISTING VAULT CONDITION.

4.06 VAULT INFORMATION MAY BE AVAILABLE FROM THE FOLLOWING SOURCES:

A. NEW YORK CITY DEPARTMENT OF BUILDINGS

B. FOIL / RECORDS ACCESS
OFFICE OF LITIGATION SERVICES AND RECORDS MANAGEMENT
NYC DEPARTMENT OF TRANSPORTATION
55 WATER STREET, 4TH FLOOR
NEW YORK, NY 10041

C. NEW YORK CITY DEPARTMENT OF FINANCE

4.07 THE CONTRACTOR SHALL RESET/ADJUST ANCHORAGE FOR SECURITY GATES WITHIN SIDEWALK AREAS, AS NECESSARY OR AS DIRECTED BY THE ENGINEER. COST OF THIS WORK SHALL BE DEEMED INCLUDED IN PRICES BID FOR SIDEWALK WORK.

4.08 AT ALL PROPOSED BUS PADS NEW CONTINUOUS SIDEWALK SHALL BE CONSTRUCTED FOR THE ENTIRE LENGTH OF THE BUS PAD, FROM THE CURBLINE TO THE PROPERTY LINE/FENCE LINE OR AS DIRECTED BY THE ENGINEER.

5. DRAINAGE WORK

5.01 ALL PROPOSED DRAINAGE WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST STANDARDS OF THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION (N.Y.C.D.E.P.) BUREAU OF SEWERS.

5.02 ALL EXISTING SEWER MANHOLES WITHIN THE CONTRACT LIMITS SHALL BE ADJUSTED, AS NECESSARY, SO THAT THEY WILL BE FLUSH WITH THE FINISHED GRADES AFTER COMPLETION OF THE WORK. ANY MANHOLES WHICH HAVE DAMAGED, WORN OR NON-STANDARD FRAMES AND COVERS SHALL BE PROVIDED WITH NEW TWENTY-SEVEN (27) INCH CASTINGS IN ACCORDANCE WITH THE LATEST STANDARDS OF N.Y.C.D.E.P. BUREAU OF SEWERS.

5.03 ANY DAMAGE TO EXISTING SEWERS, MANHOLES, BASINS AND CONNECTIONS CAUSED BY THE CONTRACTOR'S WORK SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER, AT NO COST TO THE CITY.

5.04 WHERE THE HEIGHT OF AN EXISTING MANHOLE PERMITS MORE THAN ONE BASIN CONNECTION TO BE MADE ON THE SAME WALL, SPECIAL PRECAUTION SHALL BE TAKEN TO PROTECT THE STRUCTURAL INTEGRITY OF THE MANHOLE. THE MINIMUM CLEARANCE BETWEEN THE OUTSIDE WALLS OF ANY TWO BASIN CONNECTIONS OR BETWEEN A BASIN CONNECTION AND SEWER, VERTICALLY OR HORIZONTALLY, SHALL BE 12 INCHES.

5.05 THE COST OF RAISING OR LOWERING CITY OWNED MANHOLE, BASIN, AND INLET HEADS TO PROPOSED GRADES WILL BE DEEMED INCLUDED IN THE PRICES BID FOR ALL THE SCHEDULED ITEMS WHEN THE VERTICAL UPWARD MOVEMENT OF ALL HEADS IS TWENTY FOUR (24) INCHES OR LESS, WHEN THE VERTICAL DOWNWARD MOVEMENT OF MANHOLE HEADS IS SIX (6) INCHES OR LESS, AND WHEN THE VERTICAL DOWNWARD MOVEMENT OF BASIN HEADS IS THREE (3) INCHES OR LESS, UNLESS OTHERWISE PROVIDED OR DIRECTED, AND WHERE THE ADJUSTMENT IS WITHIN THE BRICK WORK LIMIT. WHEN THE EXISTING STRUCTURE CONSISTS OF A BRICK CHIMNEY OR A CONCRETE ROOF SLAB OR BRICK ON CONCRETE WALLS, THE MAXIMUM ALLOWABLE HEIGHT OF BRICK, AFTER ADJUSTMENT, SHALL BE TWENTY-FOUR (24) INCHES. ALL OTHER ADJUSTMENTS WILL BE PAID FOR UNDER THE APPROPRIATE MANHOLE, BASIN, OR INLET MODIFICATION ITEMS.

5.06 ALL EXISTING SEWERS, MANHOLES, BASINS, AND CONNECTIONS WITHIN THE LIMITS OF THIS CONTRACT AND CONTIGUOUS THERETO ARE TO BE REPAIRED, IF DAMAGED.

5.07 ALL EXISTING BASINS AND CONNECTIONS WITHIN THE LIMITS OF THIS CONTRACT AND CONTIGUOUS THERETO ARE TO BE CLEANED, FLUSHED AND OTHERWISE MADE OPERABLE TO THE SATISFACTION OF THE ENGINEER, ITEM NO. 6.50. WHERE THE EXISTING BASIN CONNECTIONS ARE FOUND TO BE DAMAGED OR IN DETERIORATING CONDITION THEY SHOULD BE REPLACED WITH NEW 12" DIAMETER DUCTILE IRON PIPE IN ACCORDANCE WITH THE N.Y.C.D.E.P. BUREAU OF SEWERS STANDARDS (ITEM NO. 52.11D12).

5.08 CATCH BASINS SHALL NOT, UNDER ANY CIRCUMSTANCES, BE CONNECTED TO A SANITARY SEWER. CATCH BASINS SHALL NOT BE LOCATED WITHIN PEDESTRIAN CROSSWALKS.

5.09 ALL NEW CATCH BASIN CONNECTIONS SHALL BE MADE TO EXISTING SEWERS AT MANHOLES, WITH 12" DIAMETER DUCTILE IRON PIPE, CLASS 56, WITH INTERNALLY LOCKED "PUSH-ON" JOINTS LAID ON 6" OF BROKEN STONE FOR THE ENTIRE WIDTH OF THE TRENCH AND FOR ONE-HALF THE PIPE DIAMETER. THE BROKEN STONE SHALL BE HARD, UN-WEATHERED STONE, UNIFORMLY GRADED FROM 1/4" TO 3/4" IN DIAMETER. IT SHALL CONFORM TO COMMERCIAL 1/4" TO 3/4" STONE. ALL NEW CATCH BASINS SHALL HAVE A HOOD ON THE OUTLET PIPE.

5.10 ALL CATCH BASINS SHALL BE TYPE 1 UNLESS OTHERWISE INDICATED ON THE DRAWINGS. ALL CATCH BASIN SHALL BE INSTALLED 8" BELOW TOP OF CURB.

5.11 SLOPE ON ALL NEW CATCH BASIN CONNECTIONS SHALL BE A MINIMUM OF 1/2% AND A MAXIMUM OF 4%, PROVIDED THE TOTAL DROP BETWEEN BASIN AND BASIN/ MANHOLE SHALL BE AT LEAST SIX (6) INCHES.

5.12 WHERE THE CONTRACT DRAWINGS SPECIFY A NEW CATCH BASIN IN THE SAME LOCATION AS THE EXISTING CATCH BASIN AND THE CONTRACTOR ELECTS, FOR HIS OWN CONVENIENCE, TO RELOCATE THE NEW CATCH BASIN ADJACENT TO THE PRE-EXISTING LOCATION WHILE MAINTAINING BASIN AND PIPE CONNECTION, THE CONTRACTOR SHALL PERFORM ALL WORK ASSOCIATED WITH ABANDONING THE EXISTING BASIN, AS PER SECTION 55.11 OF THE STANDARD SEWER SPECIFICATIONS, AND THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST BID FOR NEW BASINS, AND MANHOLES UNLESS OTHERWISE NOTED ON THE PLANS.

5.13 ALL EXISTING SEWER HOUSE CONNECTIONS SHOULD BE CONTINUOUSLY MAINTAINED DURING ALL STAGES OF CONSTRUCTION. IF ANY HOUSE CONNECTION MUST BE DISCONNECTED FOR CONSTRUCTION PURPOSES, FLOW MUST BE MAINTAINED BY FLUMING OR OTHER SUITABLE MEANS AS DIRECTED BY THE ENGINEER AND IN SUCH A MANNER THAT NO BACK-UPS OCCUR. ANY AND ALL EXISTING SEWERS, HOUSE CONNECTIONS OR OTHER SEWER APPURTENANCES WHICH ARE TO REMAIN, AND WHICH MUST BE DISTURBED FOR CONSTRUCTION PURPOSES, SHALL BE RESTORED TO THEIR PRESENT CONDITION AFTER COMPLETION OF THE WORK, AND ANY DAMAGE DONE AS A RESULT OF THE WORK SHALL BE REPAIRED AT NO COST TO THE CITY.

5.14 CATCH BASINS IN THE PROJECT AREA SHALL BE MAINTAINED OPERABLE AT ALL TIMES. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO AVOID CLOGGING CATCH BASINS WITH DEBRIS DURING THE CONTRACTOR'S OPERATIONS. IF, AS A RESULT OF CONSTRUCTION, A FLOODING CONDITION OCCURS OR IN THE EVENT THE CONTRACTOR'S OPERATIONS DAMAGE OR BLOCK THE DRAINAGE SYSTEM, THE CONTRACTOR SHALL AT HIS/HER OWN EXPENSE IMMEDIATELY REPAIR OR RESTORE THE DRAINAGE SYSTEM AS DIRECTED BY THE ENGINEER AT NO EXTRA COST TO THE CITY.

5.15 ALL SOIL DENSITY TESTING, CONSISTING OF BOTH PROCTOR ANALYSIS OF SOIL SAMPLES AND IN-PLACE SOIL DENSITY TESTS, TO BE PERFORMED DURING THE BACKFILLING OF SEWER TRENCHES SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 4.06.3 AND 4.06.4 OF THE STANDARD SEWER SPECIFICATIONS. THE COST OF THIS WORK SHALL BE DEEMED INCLUDED IN THE UNIT PRICES BID FOR LAYING THE VARIOUS SEWER PIPES. NO SEPARATE OR ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.

5.16 PRIOR TO FABRICATION OF NEW TYPE 3 CATCH BASIN WITH CURB PIECE, CONTRACTOR SHALL BE REQUIRED TO SUBMIT SHOP DRAWING OF ITS DETAILS TO THE ENGINEER FOR REVIEW AND APPROVAL. SHOP DRAWING SHALL NOTE ALL THE REQUIRED CONFIGURATION OF THE TYPE 3 CATCH BASIN WITH THE CURB PIECE, INCLUDING BUT NOT LIMITED TO, REINFORCEMENT DETAILS, LOCATION OF CURB, LOCATION AND ANGLE OF BASIN CONNECTS RELATION TO THE BASIN, CURB AND SIDEWALK, SETTING OF FRAMES, GRATES AND COVERS, ETC.

6. WATER MAIN WORK

6.01 THE CONTRACTOR SHALL LOCATE ALL EXISTING WATER MAINS VALVE BOX HEADS, AND SHALL INDICATE THEM IN THE FIELD TO THE SATISFACTION OF THE ENGINEER. FURTHERMORE, THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT HE/SHE WILL BE RESPONSIBLE FOR THE REPLACEMENT AND RESETTING OF ALL VALVE BOXES WHICH ARE DAMAGED OR DISTURBED AS A RESULT OF HIS/HER OPERATIONS.

6.02 EXISTING WATER HYDRANTS ARE TO BE RELOCATED AS SHOWN ON THE PLANS, AS DIRECTED BY THE ENGINEER, AND IN ACCORDANCE WITH THE SPECIFICATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF WATER SUPPLY.

6.03 ALL NEW WATER MAIN WORK IS TO BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF THE N.Y.C.D.E.P. BUREAU OF WATER & SEWER OPERATIONS.

6.04 EXCEPT WHERE NOTED OTHERWISE, NEW WATER MAINS ARE BEING REPLACED IN THE SAME LOCATION AS THE EXISTING ONES.

6.05 FOR WATER MAINS CROSSING EXISTING SEWERS:

WHEREVER THE CLEARANCE BETWEEN THE TOP OF AN EXISTING SEWER AND THE BOTTOM OF THE PROPOSED WATER MAIN, AT THEIR CROSSING, IS LESS THAN 1.0', THE WATER MAIN IS TO BE SUPPORTED BY A TRUSS ARRANGEMENT AND THE CLEARANCE SPACE IS TO BE FILLED WITH LAYERS OF COMPRESSIBLE MATERIAL TO AVOID EXCESSIVE BEARING PRESSURE ON THE SEWER PIPE. IN NO CASE, HOWEVER, SHOULD THIS CLEARANCE BE LESS THAN 6".

6.06 ALL HORIZONTAL CLEARANCE BETWEEN NEW WATER MAINS INSTALLED PARALLEL TO EXISTING SEWERS ARE TO CONFORM TO THE FOLLOWING:

A. HORIZONTAL CLEARANCE BETWEEN THE OUTSIDE OF NEW WATER MAINS AND CENTER LINE OF SEWER SHALL NOT BE LESS THAN 6 FEET PLUS ONE HALF SEWER DIAMETER, WHERE THE DEPTH TO THE BOTTOM OF THE SEWER CRADLE IS LESS THAN 10 FEET.

B. WHERE THE DEPTH TO THE BOTTOM OF SEWER CRADLE IS 10 FEET OR MORE, THE HORIZONTAL CLEARANCE SHALL BE INCREASED BY 1 FOOT FOR EACH ADDITIONAL 5 FEET OF DEPTH OVER THE 10 FEET, OR PORTION THEREOF.

6.07 WHERE A HYDRANT TO BE RELOCATED OR RESET IS NOT OF A BREAKAWAY TYPE, IT SHALL BE REPLACED WITH A BREAKAWAY TYPE HYDRANT.

6.08 THE CONTRACTOR SHALL ADJUST ALL HYDRANT VALVE BOXES AND MAIN LINE VALVE BOXES TO THE NEW GRADE.

6.09 THE CONTRACTOR SHALL PROVIDE AND INSTALL HYDRANT FENDERS AT ALL HYDRANTS WITHIN THE PROJECT LIMITS IN ACCORDANCE WITH THE BUREAU OF WATER SUPPLY STANDARDS.

6.10 THE CONTRACTOR SHALL NOTIFY THE N.Y.C.D.E.P. BUREAU OF WATER & SEWER OPERATIONS 72 HOURS PRIOR TO THE START OF HYDRANT WORK.

6.11 (NO TEXT)
6.12 (NO TEXT)
6.13 (NO TEXT)
6.14 ALL SOIL DENSITY TESTING, CONSISTING OF BOTH PROCTOR ANALYSIS OF SOIL SAMPLES AND IN-PLACE SOIL DENSITY TESTS, TO BE PERFORMED DURING THE BACKFILLING OF WATER MAIN TRENCHES SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 4.06.3 AND 4.06.4 OF THE STANDARD WATERMAIN SPECIFICATIONS. THE COST OF THIS WORK SHALL BE DEEMED INCLUDED IN THE UNIT PRICES BID FOR LAYING THE VARIOUS WATER MAIN PIPES. NO SEPARATE OR ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.

"IT IS A VIOLATION OF THE PROFESSIONAL LICENSE LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER/ARCHITECT AS APPLICABLE. THE ALTERING ENGINEER/ARCHITECT SHALL AFFIX HIS/HER SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS/HER SIGNATURE AND DATE OF ALTERATION."

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

TOPOGRAPHIC SURVEY PREPARED BY:
NYCDDC
LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry
NAME OF CONSULTANT
SIGNATURE

DRAWN BY SL
CADD FILE SANDR04-GN

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

GENERAL NOTES - 1

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04 | DATE: 8/17/2018 | SHEET ---- OF ---- | GN1 / GN3

CONSULTANT DESIGN

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Date/Time: Aug 17, 2018, 10:20am

7. TRAFFIC WORK

7.01 "REGULATORY" AND/OR "NO PARKING-CONSTRUCTION" SIGNS USED DURING THE CONSTRUCTION PERIOD ARE TO BE FURNISHED BY THE CONTRACTOR, AS REQUIRED. THE CONTRACTOR SHALL INSTALL THESE SIGNS WHERE DIRECTED BY THE ENGINEER, AND, WHEN NO LONGER REQUIRED, SHALL CAREFULLY REMOVE THESE SIGNS AND DELIVER THEM TO THE BUREAU OF TRAFFIC. THESE SIGNS WILL BE MEASURED FOR PAYMENT UNDER ITEM 6.25 RS. THE COST OF SAID REMOVING AND DELIVERING SHALL BE DEEMED INCLUDED IN THE PRICE BID FOR ITEM 6.25 RS. A CREDIT OF $50 WILL BE TAKEN FOR EACH SIGN NOT SO DELIVERED. RELOCATION OF SIGNS SHALL NOT ENTITLE THE CONTRACTOR TO ADDITIONAL PAYMENT.

7.02 THE ENGINEER SHALL NOTIFY THE NEW YORK CITY DIVISION OF TRANSPORTATION PLANNING AND MANAGEMENT AT 646-892-1125 TO VERIFY ALL THERMOPLASTIC PAVEMENT MARKINGS DETAIL DRAWINGS SEVEN (7) CALENDAR DAYS PRIOR TO THE START OF WORK ON PAVEMENT MARKINGS.

7.03 THE CONTRACTOR SHALL NOTIFY NYCDOT 48 HOURS PRIOR TO THE START OF WORK TO HAVE PARKING METERS AND/OR MUNI-METERS REMOVED. CONTRACTOR SHALL CONTACT MR. JOHN PREMUS, ADMINISTRATIVE TRANSPORTATION COORDINATOR, NYC DEPARTMENT OF TRANSPORTATION, DIVISION OF TRAFFIC OPERATIONS, 58-50 57TH ROAD, 2ND FLOOR, MASPETH, NY 11378, PHONE NUMBER (718) 894-1835, FAX NUMBER (718) 894-8397, E-MAIL jpremus@dot.nyc.gov. THE FOLLOWING INFORMATION MUST BE GIVEN TO NYCDOT. (1) PARKING/MUNI METER NUMBERS, (2) LOCATION OF METERS, AND (3) DATE WHEN METERS CAN BE RE-INSTALLED.

7.04 ALL REGULATORY AND WARNING TRAFFIC SIGNS SHALL CONFORM WITH THE NEW YORK CITY BUREAU OF TRAFFIC OPERATIONS STANDARD DRAWINGS AND THEIR STANDARD SIGN LIST.

7.05 MUNI METERS SHALL NOT BE REMOVED OR RELOCATED BY THE CONTRACTOR. ANY WORK RELATED TO MUNI METERS MUST BE PERFORMED BY THE DEPARTMENT OF TRANSPORTATION, BUREAU OF PARKING. CONTRACTOR SHALL INFORM DOT VIA PHONE AT (718) 894-8327 OR (718) 894-1835 AND SUBMIT VIA E-MAIL ALL PERTINENT DRAWINGS, AND PROPOSALS THAT REQUIRE THE REMOVAL/RELOCATION OR RE-INSTALLATION OF MUNI METERS IN THE PROJECT AREA AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT DATE. IN ADDITION, UPON COMPLETION OF THE CONTRACTED WORK, A REQUEST FOR RE-INSTALLATION OF THE MUNI METER MUST ALSO BE MADE TO DOT AT THE NUMBER PROVIDED, AT LEAST A WEEK PRIOR TO THE END OF CONSTRUCTION.

7.06 FOR ADDITIONAL NOTES ON MAINTENANCE OF TRAFFIC SEE THE MAINTENANCE AND PROTECTION OF TRAFFIC DRAWINGS FOR THIS CONTRACT.

8. BIKE RACKS/ BIKE CORRALS / CITI BIKE STATIONS / CITYBENCH

8.01 THE CONTRACTOR IS HEREBY NOTIFIED THAT NYCDOT PLANS TO INSTALL NEW BIKE RACKS WITHIN THE VICINITY OF THE PROJECT SITE. FOUR (4) WEEKS PRIOR TO SUBSTANTIAL COMPLETION OF THE PROJECT, THE CONTRACTOR WILL BE REQUIRED TO NOTIFY NYCDOT, BICYCLE AND PEDESTRIAN PROGRAMS, 55 WATER STREET, 6TH FLOOR, NEW YORK, NY 10041 FOR THE COORDINATION OF THAT EFFORT.

8.02 BIKE RACKS SHALL NOT BE REMOVED OR RELOCATED BY THE CONTRACTOR. ANY WORK RELATED TO BIKE RACKS MUST BE PERFORMED BY THE DEPARTMENT OF TRANSPORTATION, BICYCLE PROGRAM. CONTRACTOR SHALL INFORM DOT VIA PHONE AT (212) 839-7205 OR (212) 839-7240 AND BY E-MAIL AT CityRacks@dot.nyc.gov. CONTRACTOR SHALL SUBMIT BY E-MAIL ALL PERTINENT DRAWINGS AND PROPOSALS THAT REQUIRE THE REMOVAL/RELOCATION OR RE-INSTALLATION OF BIKE RACKS IN THE PROJECT AREA AT LEAST THREE WEEKS PRIOR TO THE COMMENCEMENT DATE. IN ADDITION, UPON COMPLETION OF THE CONTRACTED WORK, A REQUEST FOR RE-INSTALLATION OF THE BIKE RACKS MUST ALSO BE MADE TO DOT AT THE NUMBER PROVIDED, AT LEAST TWO WEEKS PRIOR TO THE END OF CONSTRUCTION.

8.03 BIKE CORRALS SHALL NOT BE REMOVED OR RELOCATED BY THE CONTRACTOR. ANY WORK RELATED TO BIKE CORRALS MUST BE PERFORMED BY THE DEPARTMENT OF TRANSPORTATION, BICYCLE PROGRAM. CONTRACTOR SHALL INFORM DOT VIA PHONE AT (212) 839-7205 OR (212) 839-7211 AND BY E-MAIL AT BikeCorrals@dot.nyc.gov. CONTRACTOR WILL SUBMIT VIA E-MAIL ALL PERTINENT DRAWINGS AND PROPOSALS THAT REQUIRE THE REMOVAL/RELOCATION OR RE-INSTALLATION OF BIKE CORRALS IN THE PROJECT AREA, AT LEAST THREE WEEKS PRIOR TO THE COMMENCEMENT DATE. IN ADDITION, UPON COMPLETION OF THE CONTRACTED WORK, A REQUEST FOR RE-INSTALLATION OF THE BIKE CORRALS MUST ALSO BE MADE TO DOT AT THE NUMBER PROVIDED, AT LEAST TWO WEEKS PRIOR TO THE END OF CONSTRUCTION.

8.04 CITI BIKE STATIONS SHALL NOT BE REMOVED OR RELOCATED BY THE CONTRACTOR. ANY WORK RELATED TO CITI BIKE STATIONS MUST BE PERFORMED BY CITI BIKE/NYC BICYCLE SHARE. CONTRACTOR SHALL INFORM CITI BIKE VIA PHONE AT (855) 245-3311 AND SIMULTANEOUSLY CALL DOT, BIKE SHARE UNIT AT (212) 839-7235. FOR BOTH, CONTRACTOR MUST SUBMIT VIA E-MAIL ALL PERTINENT DRAWINGS, AND PROPOSALS THAT REQUIRE THE REMOVAL/RELOCATION OR RE-INSTALLATION OF A CITI BIKE STATION IN THE PROJECT AREA, AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT DATE. IN ADDITION, UPON COMPLETION OF THE CONTRACTED WORK, A REQUEST FOR RE-INSTALLATION OF THE CITI BIKE STATION MUST ALSO BE MADE TO CITI BIKE AND DOT AT THE NUMBERS PROVIDED, AT LEAST A WEEK PRIOR TO THE END OF CONSTRUCTION.

8.05 CITYBENCHES SHALL NOT BE REMOVED OR RELOCATED BY THE CONTRACTOR. ANY WORK RELATED TO CITYBENCHES MUST BE PERFORMED BY THE DEPARTMENT OF TRANSPORTATION (DOT), CITYBENCH PROGRAM. CONTRACTOR SHALL INFORM DOT VIA PHONE AT (212) 839-6569 OR (212) 839-6692 AND BY EMAIL AT citybench@dot.nyc.gov. CONTRACTOR SHALL SUBMIT BY EMAIL ALL PERTINENT DRAWINGS AND PROPOSALS THAT REQUIRE THE REMOVAL, RELOCATION OR RE-INSTALLATION OF CITYBENCHES IN THE PROJECT AREA, AT LEAST THREE WEEKS PRIOR TO THE COMMENCEMENT DATE. IN ADDITION, UPON COMPLETION OF THE CONSTRUCTED WORK, A REQUEST FOR RE-INSTALLATION OF THE CITYBENCHES MUST ALSO BE MADE TO DOT AT THE NUMBER AND EMAIL PROVIDED, AT LEAST TWO WEEKS PRIOR TO THE END OF CONSTRUCTION.

9 FIRE ALARM WORK

9.01 THE CONTRACTOR SHALL NOTIFY THE FIRE DEPARTMENT'S BUREAU OF FACILITIES MANAGEMENT, PLANT OPERATIONS ENGINEERING UNIT, TELEPHONE (718) 281-3846 OR (718) 281-3933, AT LEAST ONE (1) MONTH IN ADVANCE OF STARTING CONSTRUCTION AND TO MAKE AN APPOINTMENT TO PICK UP FDNY BASE MAPS AT 316 Sgt. BEERS AVENUE, FORT TOTTEN, BAYSIDE, QUEENS 11359.

9.02 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 ACCESSIBLE. IF, DUE TO THE CONTRACTOR'S OPERATION, 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 HIS/HER OWN EXPENSE AND IN ACCORDANCE WITH FIRE DEPARTMENT REQUIREMENTS.

9.03 TO REQUEST STREET MARKOUTS OF FIRE COMMUNICATIONS UNDERGROUND FACILITIES, THE CONTRACTOR MUST CONTACT PLANT OPERATIONS ENGINEERING AT (718) 281-3846 OR (718) 281-3933 AT LEAST ONE (1) MONTH PRIOR TO COMMENCEMENT OF WORK.

9.04 ALL FIRE DEPARTMENT WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST REGULATIONS, SPECIFICATIONS AND STANDARDS OF THE NEW YORK CITY FIRE DEPARTMENT, UNDER THE DIRECTION OF THE FIRE DEPARTMENT ENGINEER AND THE SUPERVISION OF THE RESIDENT ENGINEER.

9.05 THE CONTRACTOR SHALL BE REQUIRED TO FURNISH AND INSTALL ALL NECESSARY FIRE DEPARTMENT FACILITIES, CONDUITS, CABLES, ETC., UNDER THE APPROPRIATELY SCHEDULED ITEMS. ANY OBSTRUCTION ENCOUNTERED IN PULLING THE CABLE SHALL BE CLEARED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. THE F.D.N.Y. COMMUNICATIONS ELECTRICIANS WILL PERFORM THE LIVE SPLICING OPERATIONS IN MANHOLES AND MAKE ALL TRANSFERS OF ALARM BOXES AND/OR AERIAL CABLES.

9.06 THE CONTRACTOR MUST CONTACT EMPIRE CITY SUBWAY OR VERIZON FOR ANY POINT OF ENTRIES (P.O.E.'S) INTO THEIR MANHOLES AND OBTAIN WALL MARKOUTS BY THEM. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL P.O.E. AND ECS/VERIZON INSPECTIONS.

9.07 ANY REQUIRED FIRE ALARM POST, SUBBASE AND HARDWARE, WIRE TERMINAL BOXES AND FIRE ALARM CABLES MUST BE PURCHASED AND PICKED UP FROM THE FIRE DEPARTMENT STOREHOUSE, 87 UNION STREET, BROOKLYN, N.Y. 11231-1416. PRIOR TO BIDDING, THE CONTRACTOR SHALL CONTACT PLANT OPERATIONS ENGINEERING AT (718) 281-3846 OR (718) 281-3933 FOR THE LATEST MATERIAL COST OF FIRE COMMUNICATIONS ITEMS. THE CONTRACTOR SHALL ALSO NOTIFY THE FIRE DEPARTMENT'S PLANT OPERATIONS ENGINEERING UNIT, TELEPHONE (718) 281-3846 OR (718) 281-3933, AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE TO ARRANGE FOR PICKUP OF MATERIALS PURCHASED FROM THE FIRE DEPARTMENT. PICK UP HOURS ARE BETWEEN 08:30AM AND 12:30PM.

9.08 THE ELECTRICAL SUBCONTRACTOR MUST MAKE AN APPOINTMENT WITH PLANT OPERATIONS ENGINEERING TO ATTEND A BRIEF TUTORIAL ON TERMINATING FIRE ALARM CABLES TO TERMINAL BOXES.

9.09 OLD DEACTIVATED FIRE ALARM POSTS AND UNUSED CABLE REELS SHALL BE RETURNED TO THE FIRE DEPARTMENT STOREHOUSE BY THE CONTRACTOR AFTER MAKING AN APPOINTMENT WITH THE FD PLANT OPERATIONS ENGINEERING OFFICE.

9.10 AT THE CLOSE OF ANY PROJECT INVOLVING CONSTRUCTION OR ALTERATIONS TO FIRE ALARM FACILITIES, ONE HARD COPY AND ONE ELECTRONIC COPY (PDF FORMAT) OF PROPOSED UTILITY PLAN SHEETS AND/OR SKETCHES OF "AS-BUILT" CHANGES MUST BE PROVIDED TO THE BUREAU OF FACILITIES MANAGEMENT, PLANT OPERATIONS ENGINEERING OFFICE AT 316 Sgt. BEERS AVENUE, FORT TOTTEN, BAYSIDE, QUEENS 11359.

10. OTHER UTILITIES WORK

10.01 THE CONTRACTOR IS ALERTED TO THE RULES AND REGULATIONS OF INDUSTRIAL CODE RULE 53 AND IS DIRECTED TO COMPLY. THE CITY SHALL NOT BE LIABLE FOR ANY COSTS INCURRED BY THE CONTRACTOR AS A RESULT OF THE COMPLIANCE, NON-COMPLIANCE, OR IMPROPER COMPLIANCE BY THE FRANCHISED OPERATORS OF UNDERGROUND FACILITIES, WITH SUB- PART 53-3 OF RULE 53 OF THE INDUSTRIAL CODE.

10.02 CON EDISON, NATIONAL GRID, CABLEVISION, TIME WARNER, AT&T, RCN, AND VERIZON FACILITIES ARE LOCATED WITHIN THE PROJECT LIMITS. AS A RESULT OF THIS PROJECT, THESE PRIVATE UTILITIES WILL BE REQUIRED TO PROTECT, REMOVE, REPLACE OR RELOCATE SOME OR ALL OF THEIR FACILITIES. THIS WORK WILL BE PERFORMED BY THEM OR THEIR AGENTS AT THEIR EXPENSE. CONTRACTOR TO COORDINATE ACTIVITIES WITH THEM.

10.03 ALL UTILITY POLES WILL BE REMOVED AND/OR RELOCATED BY OTHERS.

10.04 THE ENGINEER WILL CONTACT THE SPECIAL PROJECT UNIT COMMUNICATIONS DIVISION OF THE POLICE DEPARTMENT (212-374-5900) IF ANY RELOCATION OR DISCONNECTION OF POLICE DEPARTMENT FACILITIES IS REQUIRED.

11. PAVEMENT WORK

11.01 ALL HEADERS ABUTTING NEW PAVEMENT SHALL BE REMOVED WHERE DIRECTED BY THE ENGINEER; THE PRICE OF WHICH SHALL BE INCLUDED IN THE PRICE BID FOR EXCAVATION.

11.02 ASPHALTIC CONCRETE MIXTURE IS TO BE USED IN THE AREAS OF ADJUSTMENT, AND AS DIRECTED BY THE ENGINEER (SEE ITEM NO. 4.02 CB).

11.03 FINISHED ROADWAY PAVEMENT AT THE APEX OF ALL CORNERS SHALL BE CONSTRUCTED TO ELEVATIONS SO AS TO PROVIDE POSITIVE SURFACE DRAINAGE FROM THE APEX TOWARDS THE CATCH BASINS, WHERE APPLICABLE.

12. LANDSCAPING WORK

12.01 REPLACEMENT TREES SHALL BE PLANTED WITHIN THE PROJECT AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH SECTION 4.16 OF STANDARD HIGHWAY SPECIFICATIONS.

12.02 THE CONTRACTOR SHALL OBTAIN THE NECESSARY TREE PLANTING PERMIT FROM THE NYC DEPARTMENT OF PARKS AND RECREATION (DPR) PRIOR TO THE START OF WORK. ALL NECESSARY TREE PLANTING SHALL BE PERFORMED BY QUALIFIED ARBORISTS.

12.03 NO TREE SHALL BE REMOVED BY THE CONTRACTOR UNTIL HE IS SPECIFICALLY ORDERED IN WRITING TO DO SO BY THE ENGINEER. EVERY CONSCIONABLE EFFORT IS TO BE MADE TO SAVE TREES BY THE USE OF: THE CURB DETAIL AT EXISTING TREES, BY SLIGHT MODIFICATION IN CURB ALIGNMENT, OR BY OTHER METHODS SO ORDERED BY THE ENGINEER, IN ACCORDANCE WITH ACCEPTABLE ENGINEERING PRACTICES.

12.04 TREE STAKES ARE TO BE REMOVED BY THE CONTRACTOR NOT LESS THAN ONE YEAR AFTER PLANTING OF SAID TREES AND PRIOR TO THE FINAL ACCEPTANCE OF THE WORK.

12.05 TREE PITS SHALL BE PROVIDED FOR ALL NEW TREES AND FOR EXISTING TREES IN AREAS OF FULL WIDTH SIDEWALK. PITS SHALL BE FIVE (5) FEET x FOUR (4) FEET AND SHALL BE CONSTRUCTED WITH NEW GRANITE BLOCK WITH GROUTED JOINTS (ITEM NO. 6.06 AB), UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER IN CONSULTATION WITH THE TREE CONSULTANT/ARBORIST.

12.06 THE CONTRACTOR SHALL NOT BE PERMITTED TO OPERATE AUXILIARY EQUIPMENT WHICH GENERATES EXHAUST OR OTHER HEAT UPWARD (E.G., GENERATORS AND COMPRESSORS), UNDER THE BRANCHES OF TREES WHERE THE BRANCHES ARE LESS THAN 25' ABOVE THE GROUND, UNLESS APPROVED BY THE ENGINEER IN CONSULTATION WITH THE TREE CONSULTANT.

12.07 THE CONTRACTOR SHALL NOT BE PERMITTED TO STORE, STOCKPILE, OR LAY DOWN, ANY CONSTRUCTION MATERIAL INCLUDING, BUT NOT LIMITED TO, LUMBER, FUEL, AND OIL CONTAINERS, PIPES, AND/OR PIPE FITTINGS, BARRICADES, HAND TOOLS, HOSES, TRASH RECEPTACLES, AND ASPHALT WITHIN ANY EXISTING TREE PIT.

13. BUS STOP SHELTER WORK

13.01 (NO TEXT)
13.02 (NO TEXT)
13.03 (NO TEXT)
13.04 (NO TEXT)
13.05 (NO TEXT)
13.06 (NO TEXT)
13.07 (NO TEXT)
13.08 (NO TEXT)

14. STREET LIGHTING WORK

14.01 THE CONTRACTOR SHALL FURNISH, INSTALL, AND REMOVE ALL NECESSARY STREET LIGHTING EQUIPMENT PRIOR TO NEW PAVING.

14.02 NEW INSTALLATION SHALL BE ENERGIZED BEFORE THE REMOVAL OF EXISTING POLES.

14.03 THE CONTRACTOR SHALL NOTIFY NYC DEPARTMENT OF TRANSPORTATION THE BUREAU OF TRAFFIC OPERATIONS, AT LEAST 72 HOURS PRIOR TO THE START OF WORK: (718) 786-5822.

14.04 ANY DAMAGE TO THE EXISTING STREET LIGHTING EQUIPMENT, AS A RESULT OF THE CONTRACTORS WORK AND/OR WORK FORCE, SHALL BE REPLACED OR REPAIRED BY THE CONTRACTOR AT NO COST TO THE CITY.

"IT IS A VIOLATION OF THE PROFESSIONAL LICENSE LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER/ARCHITECT AS APPLICABLE. THE ALTERING ENGINEER/ARCHITECT SHALL AFFIX HIS/HER SEAL AND THE NOTATION 'ALTERED BY' FOLLOWED BY HIS/HER SIGNATURE AND DATE OF ALTERATION."

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY:
NYCDDC
LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry
NAME OF CONSULTANT
SIGNATURE

DRAWN BY SL
CADD FILE SANDR04-GN

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

GENERAL NOTES - 2

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04 | DATE: 8/17/2018 | SHEET ---- OF ---- | GN2 / GN3

CONSULTANT DESIGN

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Date/Time: Aug 17, 2018, 10:20am

15. NYC TRANSIT GENERAL NOTES

15.01 THE TRANSIT AUTHORITY RESERVES THE RIGHT TO PLACE INSPECTORS, FLAGMEN OR OTHER PERSONNEL IN THE SUBWAY STRUCTURES DURING CONSTRUCTION OF THE PROJECT LINKED BY A TELEPHONE SYSTEM, IF DEEMED NECESSARY, TO OBSERVE THE EFFECTS OF THE CONSTRUCTION ON THE TRANSIT FACILITIES. IT IS EXPECTED THAT SUCH PERSONNEL WILL BE NECESSARY WHEN THE CONSTRUCTION COMES WITHIN TWENTY-FIVE FEET OF THE SUBWAY STRUCTURE. HOWEVER, THE TRANSIT AUTHORITY FURTHER RESERVES THE RIGHT TO PLACE SUCH PERSONNEL WHENEVER, IN ITS OPINION, THE PROJECT CONDITIONS WARRANT SUCH PLACEMENT, REGARDLESS OF DISTANCE. THE COST OF SUCH PERSONNEL, TELEPHONE INSTALLATION AND ANY RE-ROUTES, DIVERSIONS OF SERVICE, WORK TRAINS, ETC., MADE NECESSARY BY THE PROJECT, WILL BE PAID FOR BY THE CITY DIRECTLY TO THE TRANSIT AUTHORITY, AT NO COST TO THE CONTRACTOR. IT IS AGREED THAT THE FURNISHING OF ANY TRANSIT AUTHORITY PERSONNEL SHALL NOT RELIEVE THE CONTRACTOR FROM ANY LIABILITY OF PAYMENT FOR DAMAGE CAUSED BY HIS OPERATIONS.

15.02 ALL ROCK EXCAVATION ADJACENT TO THE TRANSIT STRUCTURE IS TO BE CHANNEL DRILLED TWO FEET BELOW SUBGRADE.

15.03 IF TOP OF ROCK IS FOUND BELOW SUBWAY STRUCTURE, THE SUBWAY STRUCTURE MUST BE UNDERPINNED IN ACCORDANCE WITH DRAWINGS TO BE SUBMITTED TO NYCT FOR APPROVAL.

15.04 IF ROCK IS SOFT OR SEAMY, LATERAL SUPPORTS MUST BE PROVIDED BELOW THE SUBWAY STRUCTURE IN ACCORDANCE WITH DRAWINGS TO BE SUBMITTED TO NYCT FOR APPROVAL.

15.05 BLASTING WILL BE PERMITTED ONLY WITH LIGHT CHARGES SUBJECT TO THE APPROVAL OF NYCT'S ENGINEER AND IN ACCORDANCE WITH THE REGULATIONS OF THE FIRE DEPARTMENT. THE CONTRACTOR SHALL PROVIDE A DETAILED MONITORING PLAN, PROVIDING FOR MEASUREMENTS OF BOTH PARTICLE VELOCITY AND DISPLACEMENTS AT CRITICAL LOCATIONS OF THE NYCT STRUCTURE. THE MONITORING PLAN SHALL INCLUDE THRESHOLD AND UPSET LEVELS OF BOTH PARTICLE VELOCITY AND SETTLEMENT TOGETHER WITH AN ACTION PLAN FOR THEIR IMPLEMENTATION. THE CONTRACTOR SHALL SECURE AN APPROVED SEISMOLOGIST TO INSTALL AND OPERATE SUITABLE VELOCITY GAUGES TO CONTINUOUSLY MONITOR PARTICLE VELOCITY AND AN INDEPENDENT LICENSED SURVEYOR TO MONITOR DISPLACEMENTS. THE PRESENCE OF A QUALIFIED TECHNICIAN FROM MONITORING COMPANY IS NECESSARY TO PROVIDE THE VIBRATION READING UPON REQUEST OF NYCT ENGINEER. THE THRESHOLD MAXIMUM PARTICLE VELOCITY ABOVE AMBIENT CAUSED BY THE BLASTING WILL BE 0.5 INCH PER SECOND. VALUES EXCEEDING THIS LEVEL WILL BE REVIEWED AND EVALUATED BY NYCT'S ENGINEER. IN NO CASE WILL PARTICLE VELOCITIES EXCEED THE UPSET LEVEL OF 2.0 INCHES PER SECOND.

15.06 BEFORE PLACING CONCRETE, THE SUBGRADE OF THE FOUNDATIONS IN THE VICINITY OF THE SUBWAY STRUCTURE IS TO BE INSPECTED AND APPROVED BY NYCT'S ENGINEER.

15.07 IF ANY PORTION OF THE SUBWAY STRUCTURE OR FINISH IS DAMAGED, AS A RESULT OF THE CONTRACTOR'S OPERATIONS, IT SHALL BE REPAIRED OR REPLACED WITH THE SAME MATERIALS IN PLACE, SUBJECT TO THE APPROVAL OF NYCT'S ENGINEER AND AT THE EXPENSE OF THE CONTRACTOR.

15.08 EXCAVATION EMBANKMENTS ARE TO BE SHORED AND BRACED. DRAWINGS INDICATING A SUGGESTED METHOD OF CONSTRUCTION ARE TO BE SUBMITTED TO NYCT FOR APPROVAL IN CONJUNCTION WITH THE PROJECT'S CONTRACT DRAWINGS. IN CASE OF EXCAVATION UNDERMINING THE SUBWAY STRUCTURE, UNDERPINNING MAY BE REQUIRED. DRAWINGS FOR UNDERPINNING ARE TO BE SUBMITTED TO NYCT FOR APPROVAL.

15.09 TEMPORARY SHORING MAY BE PLACED IN DIRECT CONTACT WITH NYCT STRUCTURES ONLY IF THE NYCT STRUCTURE IS SHOWN TO BE ABLE TO SUPPORT ALL ANTICIPATED LOADS THAT CAN BE TRANSFERRED THROUGH THE TEMPORARY STRUCTURES WITHOUT DAMAGING THE EXISTING STRUCTURE. AT THE COMPLETION OF THE PROJECT, THESE TEMPORARY SHORING AND BRACING SYSTEMS ARE TO BE REMOVED AS APPROVED BY NYCT.

15.10 WHEN PILES ARE TO BE DRIVEN OR DRILLED ADJACENT TO THE SUBWAY STRUCTURE, BORING DATA, PILE LAYOUTS, SPECIFICATIONS AND INSTALLATION PROCEDURES ARE TO BE SUBMITTED TO NYCT FOR APPROVAL. VELOCITY METERS ARE TO BE INSTALLED IN THE SUBWAY TUNNEL AT CRITICAL LOCATIONS TO MONITOR INDUCED VIBRATIONS. INDUCED DISPLACEMENTS ALONG THE TUNNEL STRUCTURE AND TRACK INVERT ARE TO BE MONITORED DURING DRIVING OR DRILLING. THE THRESHOLD MAXIMUM PARTICLE VELOCITY ABOVE AMBIENT CAUSED BY THE DRIVING OR DRILLING WILL BE 0.5 INCH PER SECOND. VALUES EXCEEDING THIS LEVEL WILL BE REVIEWED AND EVALUATED BY NYCT'S ENGINEER. IN NO CASE WILL PARTICLE VELOCITIES EXCEED THE UPSET LEVEL OF 2.0 INCHES PER SECOND.

15.11 NO PILES ARE PERMITTED TO BE INSTALLED BY ANY METHOD WITHIN THREE FEET OF SUBWAY STRUCTURE, MEASURED FROM THE EDGE OF THE PILE OR CASING TO THE WALL. CLOSED-END PILES WILL NOT BE PERMITTED TO BE DRIVEN WITHIN TEN FEET OF THE SUBWAY STRUCTURE.

15.12 ALL PILES ARE TO BE PLACED WITHIN A PREAUGERED CASED HOLE TO THE INFLUENCE LINE. THE CASING SHALL BE CLEANED WITHOUT DISTURBING THE SOIL OUTSIDE THE CASING AND THE PILE TO BE PLACED WITHIN THE CASING FOR INSTALLATION. THE PILES MAY THEN BE DRIVEN BEYOND THE INFLUENCE LINE WITHIN THE CASING.

15.13 THE INFLUENCE LINE SHALL START AT THE BOTTOM OF THE SUBWAY STRUCTURE AND EXTEND AT A 1H:1V TO 2H:1V SLOPE DEPENDING ON THE SOIL PROPERTIES AND GROUNDWATER TABLE. FOR PILES INSTALLED WITHIN TEN FEET OF THE SUBWAY STRUCTURE, THE CASING SHALL BE EXTENDED UP TO THE BOTTOM OF THE SUBWAY STRUCTURE.

15.14 ALL PILES ARE TO BE DRIVEN A MINIMUM OF TEN FEET BELOW THE INTERSECTION OF THE PILE CENTER LINE AND THE INFLUENCE LINE OF THE SUBWAY STRUCTURE. THE USE OF MACHINE UTILIZING AIR FOR SOIL REMOVAL WILL NOT BE ALLOWED.

15.15 THE USE OF "DOWN-THE-HOLE -HAMMERS" FOR INSTALLATION OF PILES THROUGH OVERBURDEN AND FILL WILL BE PERMITTED ONLY TO REMOVE BOULDERS. IT WILL NOT BE PERMITTED AS A MATTER OF COURSE TO ADVANCE THE HOLE. THEIR USE TO CONSTRUCT ROCK SOCKETS WILL NOT BE ALLOWED WITHIN 5 FEET OF THE NYCT STRUCTURE.

15.16 VIBRATORY HAMMERS WILL NOT BE PERMITTED WITHIN 75 FEET OF SUBWAY STRUCTURES. HOERAMS WILL NOT BE PERMITTED WITHIN 25 FEET OF SUBWAY STRUCTURES.

15.17 DYNAMIC COMPACTION METHODS USING DROPPED HEAVY WEIGHTS CANNOT BE CONDUCTED WITHIN 1000 FEET OF ANY NYCT STRUCTURE UNLESS IT IS SHOWN THAT INDUCED SETTLEMENTS AND VIBRATIONS WILL NOT DAMAGE THESE STRUCTURES. A SUITABLE MONITORING PLAN INCLUDING SETTLEMENT AND VIBRATION MEASUREMENTS MUST BE APPROVED BY NYCT'S ENGINEER FOR ALL SUCH OPERATIONS WITHIN THESE DISTANCES.

15.18 THERE SHALL BE NO MACHINE EXCAVATION WITHIN 3 FEET OF NYCT STRUCTURES, POWER DUCT LINES, OR ANY OTHER FACILITIES UNTIL THEY HAVE BEEN CAREFULLY EXPOSED BY HAND EXCAVATION.

15.19 ALL DEWATERING OPERATIONS CONDUCTED WITHIN 500 FEET OF THE NYCT STRUCTURE MUST BE PERFORMED IN ACCORDANCE WITH DRAWINGS AND PROCEDURES SUBMITTED TO NYCT FOR APPROVAL. THE DISTANCE FROM THE STRUCTURE TO THE DEWATERING OPERATION CAN BE REDUCED PROVIDED THAT SOIL CONDITIONS AT THE SITE INDICATE THAT THE RADIUS OF INFLUENCE OF THE DEWATERING IS LESS THAN 500 FEET. FOR DEWATERING WITHIN THE RADIUS OF INFLUENCE, THE DEWATERING PROGRAM MUST BE SHOWN TO HAVE NEGLIGIBLE INFLUENCE ON SETTLEMENTS OF THE NYCT STRUCTURE.

15.20 SUBWAY ENTRANCES (VENTILATORS, ETC.) ARE TO BE UNDERPINNED OR SHORED AND BRACED IF DIRECTED BY NYCT'S ENGINEER.

15.21 NYCT, AT ITS DISCRETION, RESERVES THE RIGHT TO REQUIRE THE PROJECT TO CLOSE OR MAINTAIN AND PROTECT EXISTING SUBWAY ENTRANCES, VENTILATORS, ETC. ADJACENT TO THE PROJECT DURING CONSTRUCTION. SUCH CONSTRUCTION MAY INCLUDE UNDERPINNING, SHORING, BRACING AND ERECTION OF SUITABLE BARRICADES AND/OR CANOPIES AND SHIELDS. SUCH PROTECTION SHALL BE IN ACCORDANCE WITH DRAWINGS SUBMITTED TO NYCT FOR APPROVAL.

15.22 IF SHIELDS ARE TO BE INSTALLED TO PROTECT NYCT FACILITIES AND/OR THE PUBLIC, PLANS SHOWING THE LOCATION, TYPE AND METHOD OF ATTACHMENT TO THE TRANSIT STRUCTURE MUST BE SUBMITTED TO NYCT FOR APPROVAL.

15.23 ALL LUMBER AND PLYWOOD USED FOR PROTECTION OF SUBWAY FACILITIES MUST BE FIRE RETARDANT.

15.24 SUBWAY EMERGENCY EXITS MUST BE KEPT CLEAR AT ALL TIMES.

15.25 IN EXCAVATING OVER OR NEAR THE SUBWAY ROOF, SPECIAL CARE SHALL BE EXERCISED SO THAT THE THIN CONCRETE PROTECTION OF THE SUBWAY WATERPROOFING IS NOT DAMAGED.

15.26 BURNING OF, WELDING TO OR DRILLING THROUGH EXISTING STEEL STRUCTURES WILL NOT BE PERMITTED EXCEPT AS SHOWN ON DRAWINGS APPROVED BY NYCT.

15.27 HORIZONTAL AND VERTICAL CONTROL SURVEY DATA OF THE EXISTING NYCT STRUCTURE IS TO BE TAKEN BY A LICENSED LAND SURVEYOR TO MONITOR ANY MOVEMENTS THAT OCCUR DURING CONSTRUCTION AND TO SHOW THAT THE INDUCED MOVEMENTS ARE WITHIN ALLOWABLES PROVIDED AND APPROVED BY NYCT'S ENGINEER. IF ANY MOVEMENTS EXCEED ALLOWABLES, REMEDIATION AS APPROVED BY NYCT SHALL BE PERFORMED.

STRUCTURE	NOTIFY NYCT ENGINEER	STOP WORK
ELEVATED	1/8 INCH	1/4 INCH
SUBWAY	1/4 INCH	1/2 INCH

15.28 BUS ROUTES AFFECTED BY THE PROJECT WILL OR MAY REQUIRE BUS DIVERSIONS. THESE ARRANGEMENTS SHALL BE MADE THROUGH:

MS. SARAH WYSS
DIRECTOR, SHORT RANGE BUS SERVICE PLANNING
MTA NEW YORK CITY TRANSIT
2 BROADWAY, ROOM A17.50
NEW YORK, NY 10004
TEL: (646) 252-5517
FAX: (646) 252-5815
Sarah.Wyss@NYCT.com

WHEN IMPACTING ANY BUS STOP, SPECIAL OPERATIONS MUST BE NOTIFIED TWO WEEKS IN ADVANCE.

15.29 DUCT LINES MUST BE MAINTAINED AND PROTECTED DURING CONSTRUCTION. ANY INTERFERENCE WITH DUCT LINES SHOULD BE REPORTED TO NYCT INSPECTOR. WHEN A DUCT LINE CONTAINING CABLES IS TO BE REMOVED, OR WHEN MASONRY ADJACENT THERETO IS TO BE REMOVED, PENETRATED, OR DRILLED, THE WORK SHALL BE DONE WITH HAND LABOR ENTIRELY, USING HAMMER AND CHISEL. JACKHAMMERS, BULL POINTS OR OTHER POWER EQUIPMENT SHALL NOT BE USED.

15.30 WHERE MANHOLES ARE ENCOUNTERED:

a) THEY SHALL BE PROTECTED AND RAISED OR LOWERED AS REQUIRED, TO MATCH THE NEW STREET GRADE.

b) IF MANHOLE COVERS ARE RAISED OR LOWERED, PROTECT CABLES IN MANHOLE BY WOOD SHEETING OF 2" NOMINAL THICKNESS.

c) PRIOR TO THE START OF CONSTRUCTION OPERATIONS AFFECTING MANHOLES AND DUCT LINES, SEVEN DAYS NOTICE MUST BE GIVEN TO MR. JOHN MALVASIO, P.E., ASSISTANT CHIEF ENGINEERING, MAINTENANCE OF WAY, NYC TRANSIT 130 LIVINGSTON STREET, ROOM 8044, BROOKLYN, NY 11201 AT (718) 694-1358.

15.31 CONSTRUCTION WORK DONE NEAR VENT GRATINGS AND HATCHES SHALL BE AS FOLLOWS:

a) UNLESS APPROVED BY THE NYCT'S ENGINEER, ALL VENT GRATINGS AND HATCHES SHOULD REMAIN OUTSIDE THE CONSTRUCTION SITE, SEPARATED BY A CONSTRUCTION FENCE. PROTECTIVE SHIELDS MUST BE PROVIDED OVER VENT GRATINGS AS REQUIRED BY NYCT'S ENGINEER.

b) NO BUILDING MATERIAL, VEHICLES OR CONSTRUCTION EQUIPMENT IS TO BE STORED OR RUN OVER VENT, GRATINGS, HATCHES OR EMERGENCY EXITS.

c) DETAILS OF SIDEWALK RECONSTRUCTION AROUND VENT GRATINGS, HATCHES AND EMERGENCY EXITS ARE TO BE SUBMITTED TO NYCT FOR APPROVAL.

15.32 TRACTORS, CRANES, EXCAVATORS, ETC. USED IN THE VICINITY OF THE ELEVATED STRUCTURES SHALL BE ISOLATED FROM THE GROUND. SINCE THE ELEVATED STRUCTURE IS USED AS A NEGATIVE RETURN PATH, WITH A CONSEQUENT POTENTIAL BETWEEN IT AND THE GROUND, ANY CONTACT BETWEEN THE STRUCTURE AND GROUNDED EQUIPMENT COULD RESULT IN BURNING OF THE STEEL.

15.33 TEMPORARY CONSTRUCTION SHEDS, BARRICADES OR PLYWOOD PARTITIONS MUST BE A MINIMUM OF 5'-0" FROM EDGE OF FINISHED PLATFORM.

15.34 STATION AREAS OR STAIRWAY/CLOSINGS: THE GENERAL REQUIREMENTS FOR STATION AREAS OR STAIRWAY/CLOSINGS ARE AS FOLLOWS:

a) ONLY ONE STAIRWAY AT EACH STATION WILL BE PERMITTED TO BE CLOSED AT THE SAME TIME. APPROVALS FOR CLOSING ANY STAIRWAY MUST BE OBTAINED FROM THE DIVISION OF STATION OPERATIONS AT LEAST THREE WEEKS IN ADVANCE.

b) MR. ASHOK PATEL, DIRECTOR, OFFICE OF STATION PROGRAMS; NYC TRANSIT, 130 LIVINGSTON STREET, ROOM 8044 TELEPHONE (718) 694-1695 OF THE DIVISION OF STATIONS MUST BE NOTIFIED ONE WEEK PRIOR TO THE ACTUAL CLOSING AND REOPENING OF THE ENTRANCE.

c) AMPLE SIGNAGE MUST BE SUPPLIED AND POSTED AT LEAST ONE WEEK IN ADVANCE, ADVISING THE PUBLIC OF THE PROPOSED SUBWAY STAIR CLOSING. HOWEVER, IF AN ENTIRE ENTRANCE IS CLOSING, SIGNAGE MUST BE POSTED TWO WEEKS IN ADVANCE.

d) THE STREET ENTRANCE STAIRWAY SHOULD NOT BE CLOSED UNLESS MANPOWER AND MATERIALS ARE AVAILABLE TO COMMENCE WORK ON DATES PERMITTED.

e) ONCE THE CLOSING IS EFFECTED, CONSTRUCTION SIGNS MUST BE PLACED AT APPROPRIATE LOCATIONS ON THE BARRICADES AT THE STREET AND MEZZANINE LEVELS, STATING THE CONTRACTOR'S NAME, 24 HOUR EMERGENCY TELEPHONE NUMBER, CONTRACT NUMBER, THE DURATION OF THE CLOSING, DIRECTION TO AN ALTERNATE ENTRANCE/EXIT, AND AN APOLOGY FOR THE INCONVENIENCE TO OUR CUSTOMERS.

f) EXISTING STATION SIGNAGE MUST BE ADJUSTED TO REFLECT ANY CHANGES IN ACCESS/EGRESS.

g) BARRICADES ARE TO BE PAINTED AND KEPT GRAFFITI FREE AT ALL TIMES. THE CONTRACTOR MUST MAINTAIN THE BARRICADED AREA CLEAN OF ALL DEBRIS.

h) ALL MATERIALS ARE TO BE PROPERLY STORED AND SECURED AWAY FROM PASSENGER TRAFFIC.

i) THE CONTRACTOR MUST REMOVE ALL WASTE MATERIAL AND BARRICADES FROM ALL STATION AREAS WHEN CONSTRUCTION IS COMPLETED.

j) INSPECTION OF THE AREA UNDER CONSTRUCTION BY AUTHORIZED STATION DEPARTMENT EMPLOYEES SHALL NOT BE INHIBITED.

k) IF STREET LIGHTS ON THE SIDEWALKS ARE AFFECTED, TEMPORARY LIGHTS SHALL BE PROVIDED.

15.35 IF NEW CONCRETE CONSTRUCTION IS JOINED TO EXISTING CONCRETE, DOWELS AND KEYWAYS ARE TO BE USED IN ACCORDANCE WITH NYCT STANDARDS.

15.36 IF THE PROJECT INVOLVES CONSTRUCTION OR ALTERATION OF A SUBWAY FACILITY ON PRIVATE PROPERTY, THE PROPERTY OWNERS WILL BE REQUIRED TO ENTER INTO AN AGREEMENT WITH NYCT PERTAINING TO ALL WORK AFFECTING THE TRANSIT FACILITIES AND CLEARLY DEFINING LIMITS AND RESPONSIBILITY FOR MAINTENANCE AND LIABILITY.

15.37 WHEREVER A NEW SIDEWALK IS BEING PLACED ADJACENT TO NYCT STRUCTURES THE FOLLOWING WILL BE REQUIRED:

a) THE TOP OF THE NEW SIDEWALK SHALL BE FLUSH WITH THE SUBWAY VENT GRATINGS, HATCHES AND EMERGENCY EXITS.

b) THE SLOPE OF THE NEW SIDEWALK SHALL BE SUCH THAT THE DRAINAGE BE AWAY FROM THESE STRUCTURES.

c) A 1/2" PREMOLDED FILLER SHALL BE INSTALLED BETWEEN THE NEW SIDEWALK AND NYCT STRUCTURE.

d) WHERE SIDEWALK ELEVATIONS ARE BEING CHANGED DETAILS OF PROPOSED WORK AROUND NYCT STRUCTURES ARE TO BE SUBMITTED FOR APPROVAL.

15.38 BEFORE ENTERING NYCT PROPERTY, CONTRACTOR OR SUBCONTRACTOR'S PERSONNEL SHALL HAVE ATTENDED NYCT TRACK SAFETY TRAINING AND EXPECT TO FOLLOW NYCT RULES AND REGULATIONS AS PER TRAINING AND ENGINEER INSTRUCTIONS.

15.39 BEFORE THE START OF ANY WORK, THE CONTRACTOR SHALL MAKE AN EXAMINATION, IN THE PRESENCE OF NYCT'S ENGINEER, OF THE INTERIOR AND EXTERIOR OF NYCT SUBWAY OR OTHER STRUCTURE ADJACENT TO THE PROPOSED WORK. THE PERSON OR PERSONS AUTHORIZED BY THE CONTRACTOR TO MAKE THESE EXAMINATIONS SHALL BE APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL TAKE ALL PHOTOGRAPHS AS MAY BE NECESSARY OR ORDERED TO INDICATE THE EXISTING CONDITION OF NYCT STRUCTURE. ONE COPY OF EACH PHOTOGRAPH, EIGHT INCHES BY TEN INCHES IN SIZE, AND THE NEGATIVE IS TO BE SUBMITTED TO MR. JOHN MALVASIO, P.E., ASSISTANT CHIEF ENGINEERING, DEPARTMENT OF MAINTENANCE-OF-WAY, NYC TRANSIT, 130 LIVINGSTON STREET, ROOM 8044, BROOKLYN, NEW YORK, TELEPHONE (718) 694-1358 BEFORE THE START OF CONSTRUCTION.

15.40 ALL ARCHITECTURAL DETAILS (TOKEN BOOTHS, RAILINGS, DOORS, ETC.) ARE TO CONFORM TO THE LATEST NYCT STANDARDS. THESE STANDARDS ARE AVAILABLE AT NYCT.

15.41 STANDARD NYCT INSURANCE CLAUSES ARE TO BE MADE PART OF THE PROJECT'S CONTRACT DRAWINGS. PROOF THAT THE NECESSARY INSURANCE IS IN EFFECT WILL BE REQUIRED BEFORE WORK CAN COMMENCE.

15.42 AT THE CLOSE OF ANY PROJECT INVOLVING CONSTRUCTION OR ALTERATIONS TO TRANSIT FACILITIES, ONE SET OF VELLUMS OR MYLARS, FIVE SETS OF 35MM MICROFILM, AND ELECTRONIC COPIES COMPLYING TO MICROSTATION.DGN FORMAT OF "APPROVED AS-BUILTS" MUST BE PROVIDED TO NYCT FOR ITS RECORDS. FOR DETAILS OF SPECIFIC REQUIREMENTS CONTACT NYCT OUTSIDE PROJECTS.

15.43 AT LEAST SEVEN WORKING DAYS PRIOR TO THE START OF CONSTRUCTION OPERATIONS, NOTIFICATION MUST BE GIVEN TO MR. JOHN MALVASIO, P.E., ASSISTANT CHIEF ENGINEER, DEPARTMENT OF MAINTENANCE-OF-WAY, NYC TRANSIT AT TELEPHONE (718) 694-1358. THE CONTRACTOR TO PROVIDE TEMPORARY QUARTERS NEAR THE JOB SITE FOR NYCT INSPECTORS CONTAINING A DESK AND TELEPHONE.

"IT IS A VIOLATION OF THE PROFESSIONAL LICENSE LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER/ARCHITECT AS APPLICABLE. THE ALTERING ENGINEER/ARCHITECT SHALL AFFIX HIS/HER SEAL AND THE NOTATION 'ALTERED BY' FOLLOWED BY HIS/HER SIGNATURE AND DATE OF ALTERATION."

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY:
NYCDDC
LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry
NAME OF CONSULTANT
SIGNATURE

DRAWN BY SL
CADD FILE SANDR04-GN

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

GENERAL NOTES - NYCT

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04 | DATE: 8/17/2018 | SHEET ---- OF ---- | GN3 / GN3

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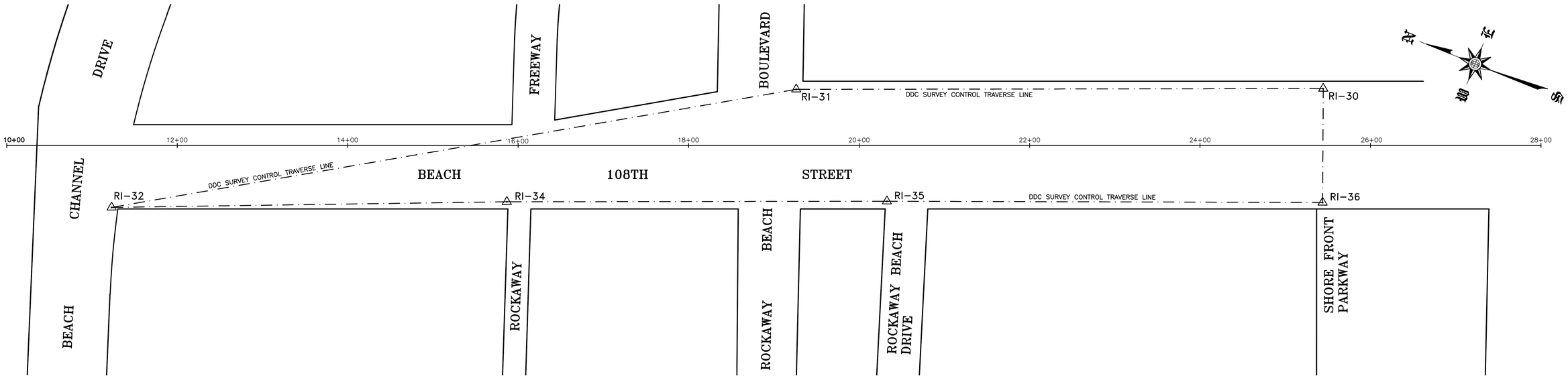
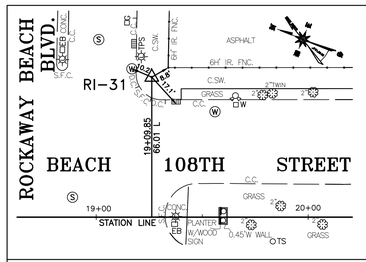


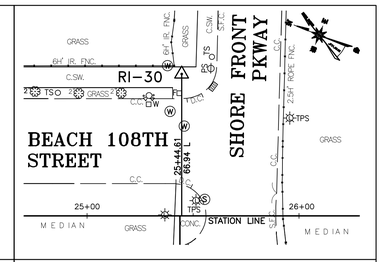
SURVEY CONTROL PLAN

SCALE: 1" = 50'



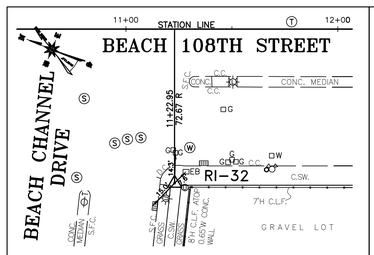
RI-31 NORTH 151319.81 EAST 1031610.47 ELEV. 7.96

X-CUT IN CONCRETE SIDEWALK AT NORTHEAST CORNER OF BEACH 108TH ST & ROCKAWAY BEACH BLVD.



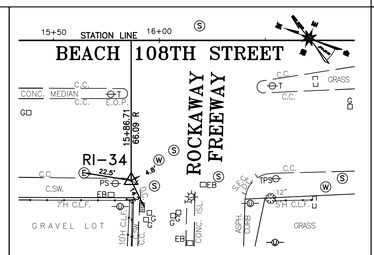
RI-30 NORTH 150747.09 EAST 1031843.71 ELEV. 11.89

X-CUT IN CONCRETE SIDEWALK AT NORTHEAST CORNER OF BEACH 108TH ST & SHORE FRONT PKWY.



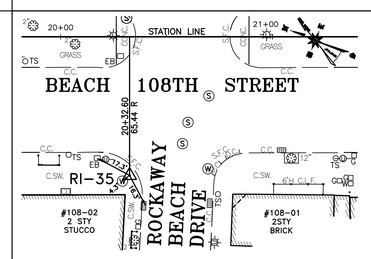
RI-32 NORTH 152012.09 EAST 1031180.10 ELEV. 6.62

X-CUT IN CONCRETE SIDEWALK AT SOUTHWEST CORNER OF BEACH 108TH ST & BEACH CHANNEL DR.



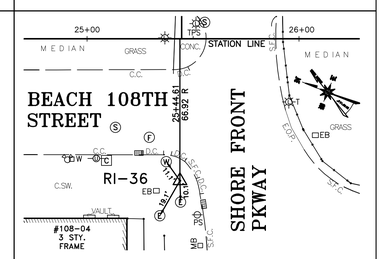
RI-34 NORTH 151584.79 EAST 1031360.47 ELEV. 6.20

X-CUT IN CONCRETE SIDEWALK AT NORTHWEST CORNER OF BEACH 108TH ST & ROCKAWAY FREEWAY.



RI-35 NORTH 151171.83 EAST 1031528.62 ELEV. 9.80

2-WING PUNCH SET IN CONCRETE SIDEWALK AT NORTHWEST CORNER OF BEACH 108TH ST & ROCKAWAY BEACH DRIVE.



RI-36 NORTH 150697.54 EAST 1031719.36 ELEV. 12.20

X-CUT IN CONCRETE SIDEWALK AT NORTHWEST CORNER OF BEACH 108TH ST & SHORE FRONT PKWY.

TRAVERSE TIES

SCALE: 1" = 30'

BENCHMARK TABLE

BENCHMARK	ELEVATION	DESCRIPTION
BM-ROCK1	18.51'	CUT AT SOUTHEAST CORNER OF 13 STY BRICK BUILDING #107-10 AT NORTH SIDE OF SHORE FRONT PARKWAY. CUT IS 0.5' WEST OF THE SOUTHEAST CORNER OF BUILDING AND 5.6' ABOVE GROUND.
BM-ROCK3	13.14'	CUT AT CENTER OF SOUTH SIDE OF 13 STY BRICK BUILDING #105-00 AT NORTH SIDE OF SHORE FRONT PARKWAY. CUT IS 0.6' WEST OF WEST EDGE OF ENTRANCE DOOR AND 5' ABOVE CONCRETE SIDEWALK.
LS-91516	7.60'	CUT SET ON CONCRETE AND METAL BASE OF PEDESTRIAN CONTROL DEVICE AT SOUTHEAST CORNER OF BEACH 108TH STREET AND BEACH CHANNEL DRIVE. CUT IS ON THE SOUTHWEST CORNER OF BASE AND 0.75' ABOVE SIDEWALK.
USCGS Q350	9.00'	DISK AT NEW YORK, IN BOROUGH OF QUEENS, AT ROCKAWAY BEACH, AT THE OVERPASS OF L.I.R.R. (NOW MTA) OVER BEACH 108TH STREET, 32' NORTH OF SOUTH CURB LINE OF WAINWRIGHT (NO LONGER EXISTS), 10' WEST OF WEST CURB LINE OF BEACH 108TH STREET AND SET VERTICALLY IN THE NORTH FACE OF CONCRETE PIER OF OVERHEAD RAILROAD AND 2.5' ABOVE GROUND.

"ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S BLUE INKED OR EMBOSSED SEAL SHALL BE CONSIDERED TO BE A TRUE VALID COPY"

"UNAUTHORIZED ALTERATIONS OR ADDITION TO A LAND SURVEYING DRAWING BEARING A LICENSED PROFESSIONAL LAND SURVEYOR'S SEAL IS A VIOLATION OF ARTICLE 145, SECTION 7209, PARAGRAPH 2 OF THE NEW YORK STATE EDUCATION LAW"

"IT IS A VIOLATION OF THE PROFESSIONAL LICENSE LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY UNLESS THEY ARE ACTING UNDER DIRECTION OF A LICENSED PROFESSIONAL ENGINEER/ARCHITECT AS APPLICABLE. THE ALTERING ENGINEER/ARCHITECT SHALL AFFIX HIS/HER SEAL AND THE NOTATION 'ALTERED BY' FOLLOWED BY HIS/HER SIGNATURE AND DATE OF ALTERATION."

LOCATIONS, EXTENT AND SIZES OF UNDERGROUND UTILITIES AND SUBSTRUCTURES HAVE BEEN DETERMINED FROM RECORD INFORMATION, SUPPLEMENTED BY DATA OBTAINED IN THE FIELD. ACCURACY OF THIS UTILITY DATA IS NOT GUARANTEED, NOR IS THERE ANY GUARANTEE THAT ALL EXISTING UTILITIES AND SUBSTRUCTURES, WHETHER FUNCTIONAL OR ABANDONED, ARE SHOWN ON THIS MAP. CONSULT WITH THE APPROPRIATE UTILITY COMPANY PRIOR TO ANY DESIGN IMPROVEMENTS.

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 "NAVD88". TO CONVERT THIS DATUM TO QUEENS HIGHWAY DATUM, SUBTRACT 1.625 FEET FROM EACH ELEVATION.
ALL COORDINATES ARE SHOWN IN THE NEW YORK STATE PLANE COORDINATE SYSTEM, NAD 83 (2011) EPOCH 2010.0 LONG ISLAND ZONE

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY:
NYCDDC
LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry®
NAME OF CONSULTANT
SIGNATURE

DRAWN BY
CADD FILE SANDR04-SCNTL

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

SURVEY CONTROLS

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04 | DATE: 8/17/2018 | SHEET --OF---- | SC1

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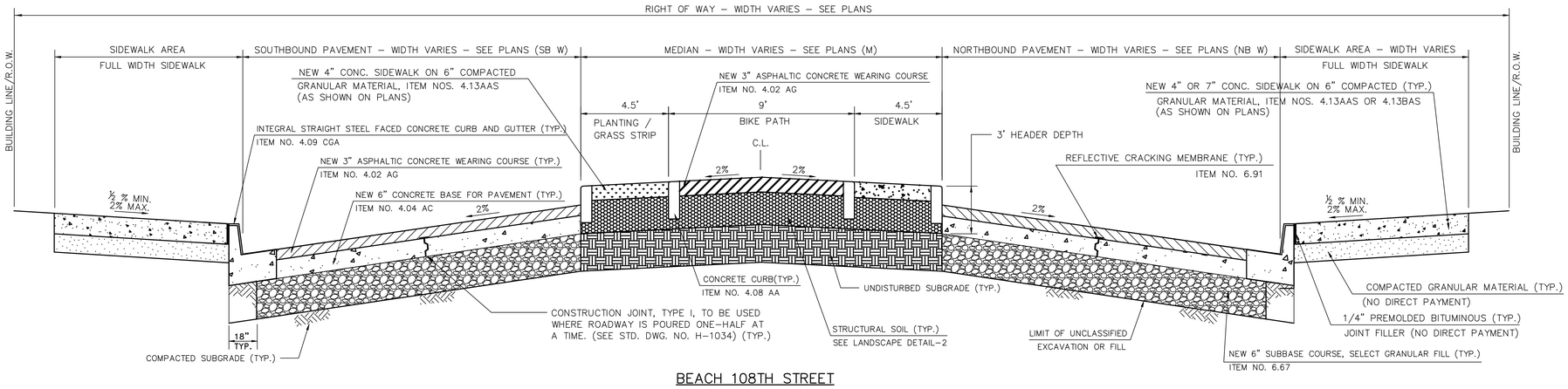
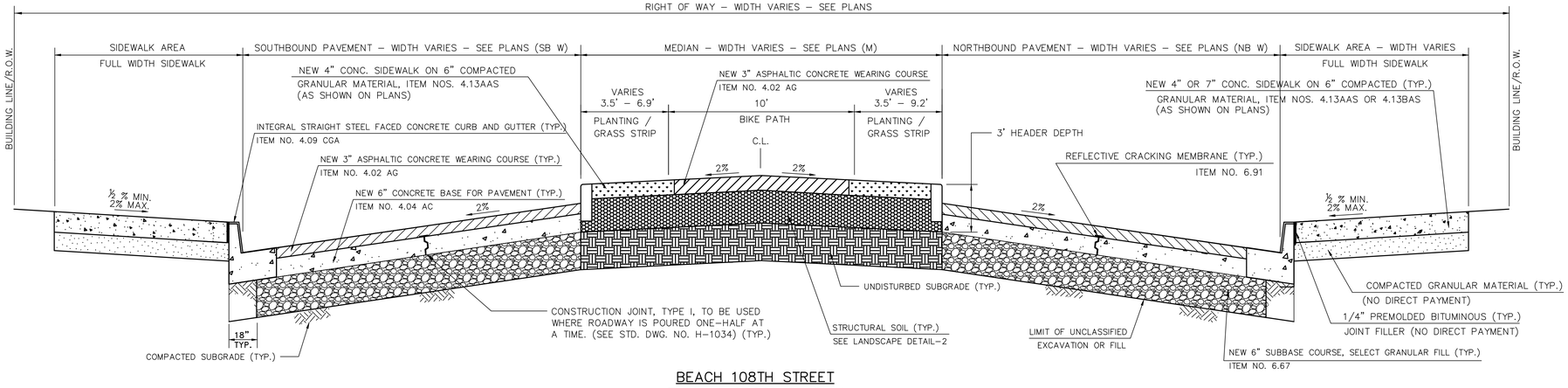


BEACH 108TH STREET
TYPICAL CROSS SECTION

BEACH CHANNEL DRIVE TO ROCKAWAY FREEWAY
NOT TO SCALE



BEACH 108TH STREET
TYPICAL CROSS SECTION

ROCKAWAY FREEWAY TO ROCKAWAY BEACH BLVD
NOT TO SCALE

"IT IS A VIOLATION OF THE PROFESSIONAL LICENSE LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER/ARCHITECT AS APPLICABLE. THE ALTERING ENGINEER/ARCHITECT SHALL AFFIX HIS/HER SEAL AND THE NOTATION 'ALTERED BY' FOLLOWED BY HIS/HER SIGNATURE AND DATE OF ALTERATION."

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		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY:
NYCDDC
LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry®
NAME OF CONSULTANT
SIGNATURE

DRAWN BY SL
CADD FILE SANDR04 – TYP 1

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TYPICAL SECTIONS - 1

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04
DATE: 8/17/2018
SHEET ---- OF ----
TS1 / TS2

CONSULTANT DESIGN

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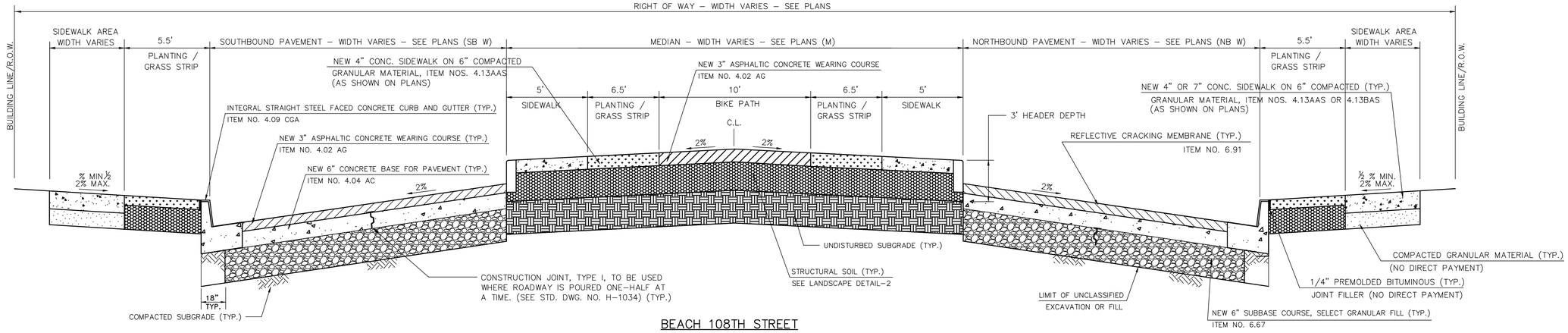

BEACH 108TH STREET
TYPICAL CROSS SECTION

ROCKAWAY BEACH BLVD TO SHORE FRONT PARKWAY
NOT TO SCALE

TABLE OF ROADWAY WIDTHS

Street	From	To	NB ROADWAY WIDTH (NB W)	SB ROADWAY WIDTH (SB W)	MEDIAN WIDTH (M)
Beach 108th Street	Beach Channel Drive	Rockaway Freeway	32'	22'	18'
Beach 108th Street	Rockaway Freeway	Rockaway Beach Blvd	32'	21'-36'	19'-25'
Beach 108th Street	Rockaway Beach Blvd	Rockaway Beach Drive	37'-50'	22'	27'
Beach 108th Street	Rockaway Beach Drive	Shore Front Parkway	44'	28'	33'

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NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

TOPOGRAPHIC SURVEY PREPARED BY:
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LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry
NAME OF CONSULTANT
SIGNATURE

DRAWN BY MV
CADD FILE SANDR04 – TYP 2

SCALE AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TYPICAL SECTIONS - 2

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04
DATE: 8/17/2018
SHEET ---- OF ----
TS2 / TS2

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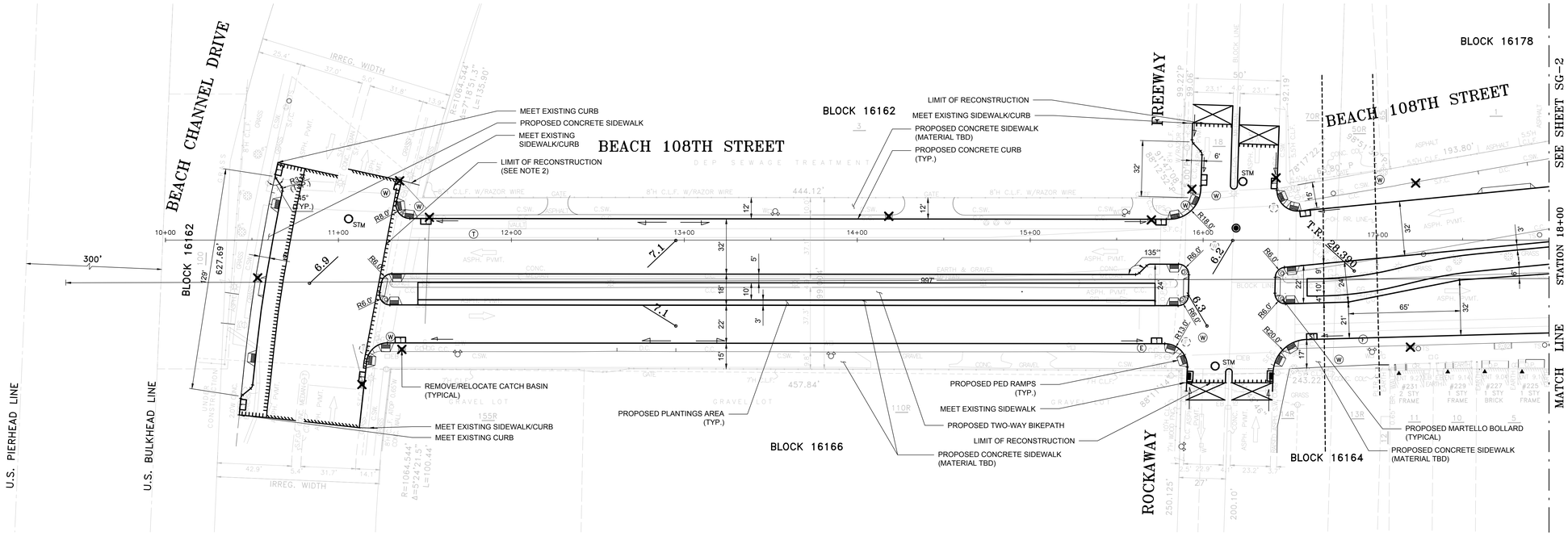
Date/Time: Aug 17, 2018, 10:20am

CONSULTANT DESIGN



PLAN

SCALE: 1" = 30'

"IT IS A VIOLATION OF THE PROFESSIONAL LICENSE LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER/ARCHITECT AS APPLICABLE. THE ALTERING ENGINEER/ARCHITECT SHALL AFFIX HIS/HER SEAL AND THE NOTATION 'ALTERED BY' FOLLOWED BY HIS/HER SIGNATURE AND DATE OF ALTERATION."

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY:
NYCDDC
LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry
NAME OF CONSULTANT
SIGNATURE

DRAWN BY SL
CADD FILE 7,8,20,21_SANDR04-CP-PMP

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

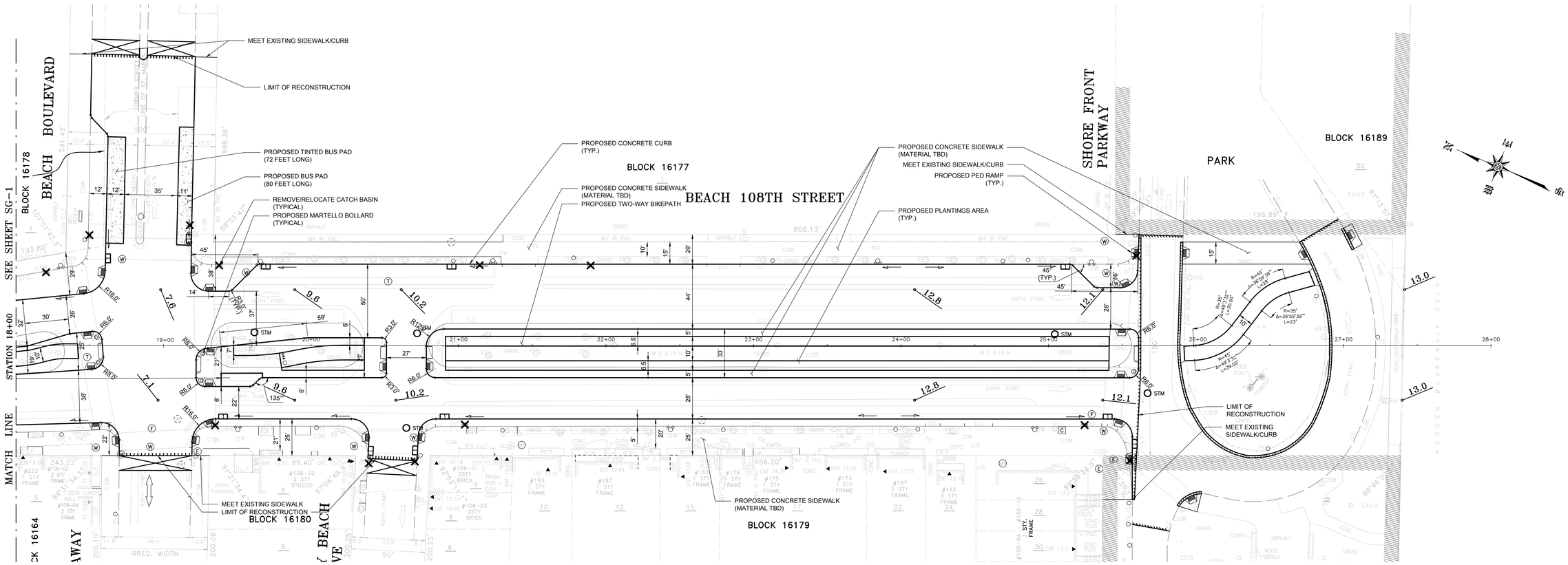
HIGHWAY CONSTRUCTION PLAN
STA. 10+00 TO STA. 18+00

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04
DATE: 8/20/2018
SHEET 06 ---- C1/C2

CONSULTANT DESIGN

Sheet File: P:\All Folders\N Ameen\SANDR04\Mass Mailing # 1\SANDR04 - MM1 (DWG + PDF)\SANDR04 - Standard\SANDR04 - Standard\7,8,20,21_SANDR04-CP-PMP.dwg
Date/Time: Aug 20, 2018, 10:54am



PLAN

SCALE: 1" = 30'

"IT IS A VIOLATION OF THE PROFESSIONAL LICENSE LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER/ARCHITECT AS APPLICABLE. THE ALTERING ENGINEER/ARCHITECT SHALL AFFIX HIS/HER SEAL AND THE NOTATION 'ALTERED BY' FOLLOWED BY HIS/HER SIGNATURE AND DATE OF ALTERATION."

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY:
NYCDDC
LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry
NAME OF CONSULTANT
SIGNATURE

DRAWN BY SL
CADD FILE 7,8,20,21_SANDR04-CP-PMP

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

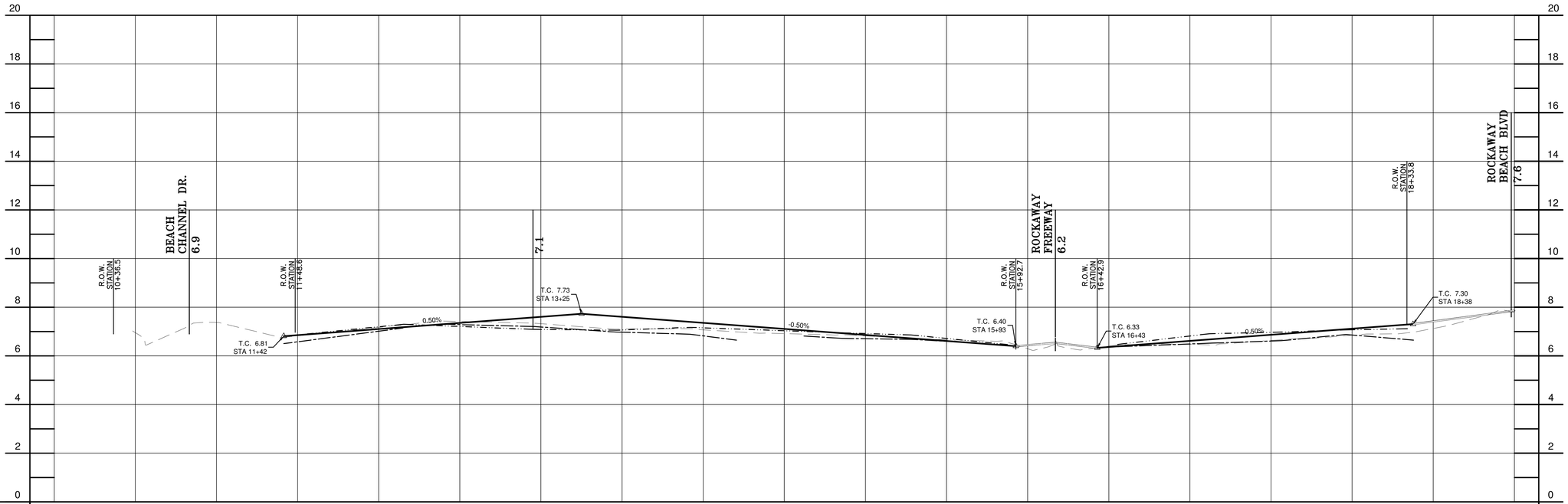
HIGHWAY CONSTRUCTION PLAN
STA. 18+00 TO STA. 28+00

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04 | DATE: 8/20/2018 | SHEET OR ---- | C2/C2

CONSULTANT DESIGN

Sheet File: P:\All Folders\N Ameen\SANDR04\Mass Mailing # 1\SANDR04 - MMT (DWG + PDF)\SANDR04 - Standard\SANDR04 - Standard\7,8,20,21_SANDR04-CP-PMP.dwg
Date/Time: Aug 20, 2018, 10:55am



STATION	10+00	10+50	11+00	11+50	12+00	12+50	13+00	13+50	14+00	14+50	15+00	15+50	16+00	16+50	17+00	17+50	18+00	18+50	19+00
PROPOSED TOP OF CURB				6.85	7.10	7.35	7.60	7.61	7.36	7.11	6.86	6.61	6.44	6.36	6.61	6.86	7.11	7.41	7.86
EXISTING BACK OF SIDEWALK				6.9	7.2	7.2	7.1	7.1	7.2	7.0	6.9	6.7			6.8	7.0	7.1		
EXISTING TOP OF CURB				6.6	7.0	7.3	7.2	7.0	6.8		6.7	6.6			6.5	6.6	6.9		
EXISTING BOT. OF CURB/E.O.P.				6.3	6.7	7.0	6.9	6.8	6.7	6.4	6.5	6.2			6.1	6.3	6.4		
EXISTING SURFACE		7.0	7.4	6.8	7.2	7.4	7.3	7.1	7.1	6.9	6.8	6.7	6.3	6.4	6.5	6.6	6.8	7.1	7.8

EAST SIDE - NORTHBOUND BEACH 108TH STREET 10+00 TO 19+00

SCALE:
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 30'

LEGEND

- EXISTING BACK OF SIDEWALK (OR ROW)
- EXISTING TOP OF CURB
- EXISTING SURFACE / ROADWAY CENTERLINE
- EXISTING TOP OF CURB (MEDIAN)
- PROPOSED TOP OF CURB
- LEGAL GRADE

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 "NAVD88". TO CONVERT THIS DATUM TO QUEENS HIGHWAY DATUM, SUBTRACT 1.625 FEET FROM EACH ELEVATION.

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		REVISIONS		

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Dewberry®
NAME OF CONSULTANT
SIGNATURE

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CADD FILE SANDR04-PR

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

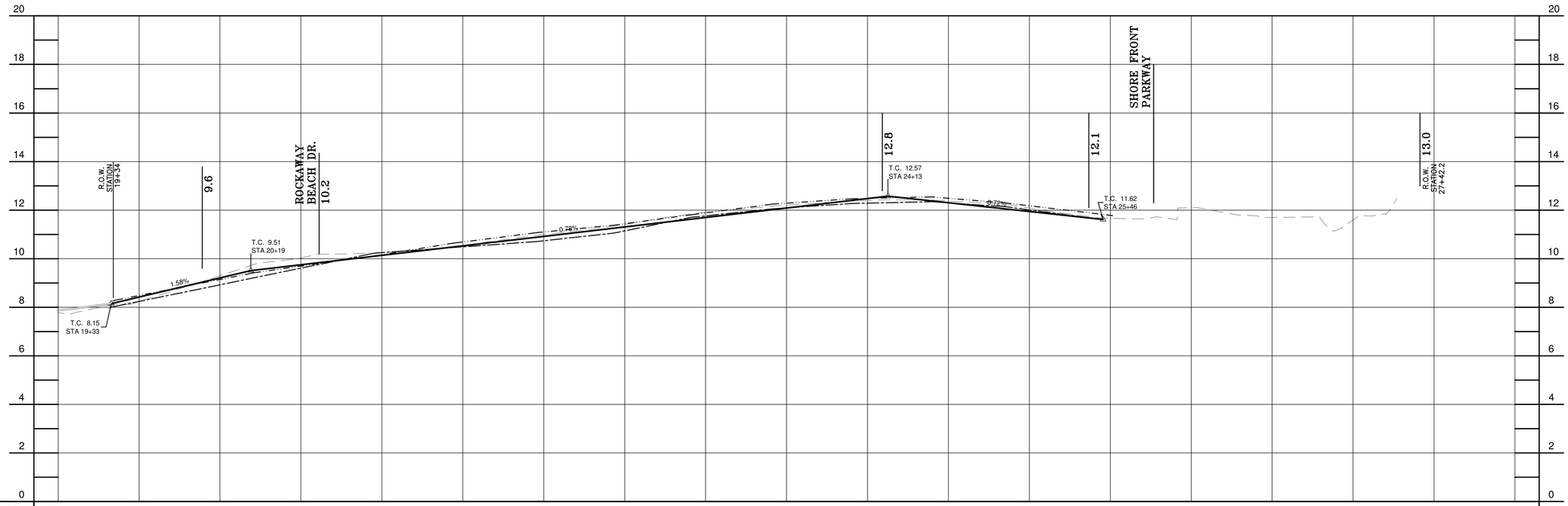
HIGHWAY PROFILE 1

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04 | DATE: 8/17/2018 | SHEET ---- OF ---- | P1 / P8

Sheet File: Q:\50064552\CAD\Civil\Final Design\Layout\SANDR04-PR.dwg
Date/Time: Aug 17, 2018, 10:21am

CONSULTANT DESIGN



PROPOSED TOP OF CURB	7.86	8.42	9.21	9.75	10.14	10.53	10.92	11.31	11.70	12.09	12.47	12.30	11.94							
EXISTING BACK OF SIDEWALK		8.5	9.1	9.7	10.2	10.7	11.1	11.4	11.9	12.3	12.5	12.5	12.2	11.8						
EXISTING TOP OF CURB		8.2	8.9	9.6	10.2	10.5	10.7	11.1	11.8	12.1	12.3	12.3	12.0							
EXISTING BOT. OF CURB/E.O.P.		7.9	8.6	9.2	9.8	10.1	10.4	10.8	11.4	11.7	12.0	11.9	11.6							
EXISTING SURFACE	7.8	8.2	9.3	10.0	10.2	10.5	11.0	11.4	11.9	12.2	12.4	12.4	12.1	11.7	12.1	11.7	11.6			
STATION	19+00	19+50	20+00	20+50	21+00	21+50	22+00	22+50	23+00	23+50	24+00	24+50	25+00	25+50	26+00	26+50	27+00	27+50	28+00	

EAST SIDE - NORTHBOUND BEACH 108TH STREET 19+00 TO 28+00

SCALE:
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 30'

LEGEND

- EXISTING BACK OF SIDEWALK (OR ROW)
- EXISTING TOP OF CURB
- EXISTING SURFACE / ROADWAY CENTERLINE
- EXISTING TOP OF CURB (MEDIAN)
- PROPOSED TOP OF CURB
- LEGAL GRADE

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 "NAVD88". TO CONVERT THIS DATUM TO QUEENS HIGHWAY DATUM, SUBTRACT 1.625 FEET FROM EACH ELEVATION.

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LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry
NAME OF CONSULTANT
SIGNATURE

DRAWN BY SL
CADD FILE SANDR04-PR

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

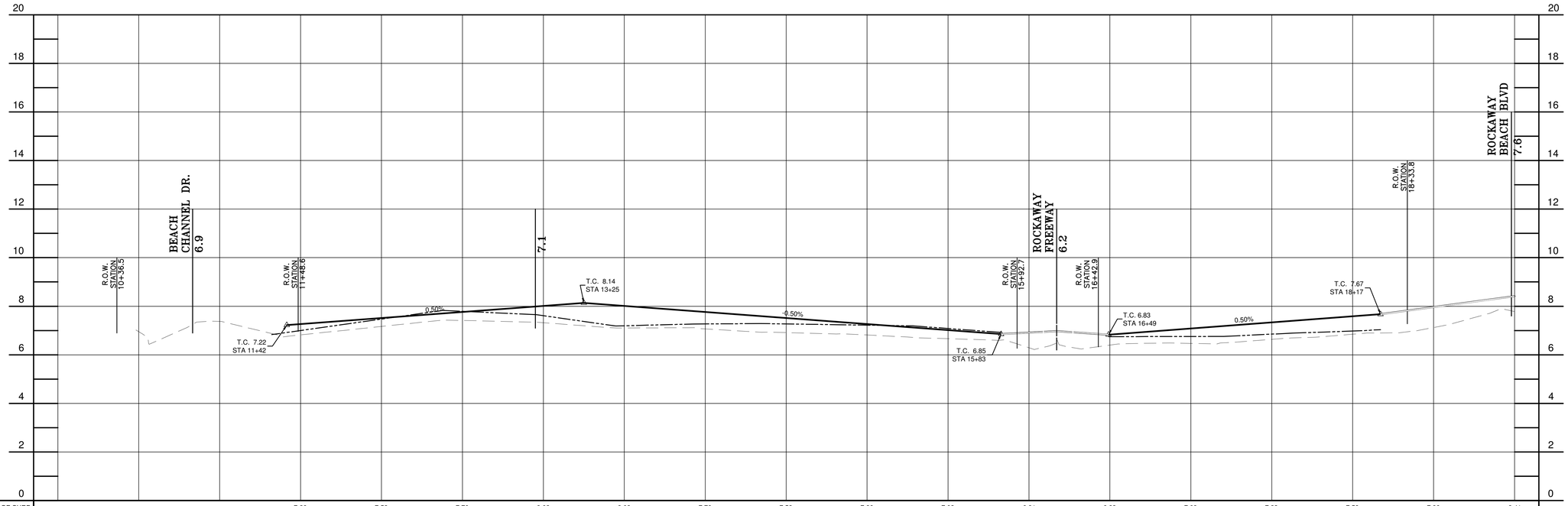
HIGHWAY PROFILE 2

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04
DATE: 8/17/2018
SHEET ---- OF ---- P2 P8

CONSULTANT DESIGN

Sheet File: Q:\50064552\CAD\Civil\Final Design\Layout\SANDR04-PR.dwg
Date/Time: Aug 17, 2018, 10:21am



PROPOSED TOP OF CURB				7.26	7.52	7.76	8.02	8.02	7.76	7.52	7.26	7.02	6.91	6.83	7.08	7.33	7.58	7.96	8.41	
EXISTING BOT. OF CURB (MEDIAN)				6.9	7.3	7.6	7.4	7.1	7.1	7.1	7.1	6.9		6.5	6.3	6.7	6.8			
EXISTING TOP OF CURB (MEDIAN)				7.0	7.5	7.8	7.6	7.2	7.3	7.3	7.2	7.1		6.7	6.8	6.9	7.0			
EXISTING SURFACE		7.0	7.4	6.8	7.2	7.4	7.3	7.1	7.1	6.9	6.8	6.7	6.3	6.4	6.5	6.6	6.8	7.1	7.8	
STATION	10+00	10+50	11+00	11+50	12+00	12+50	13+00	13+50	14+00	14+50	15+00	15+50	16+00	16+50	17+00	17+50	18+00	18+50	19+00	

WEST SIDE - NORTHBOUND BEACH 108TH STREET 10+00 TO 19+00

SCALE:
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 30'

LEGEND

- EXISTING BACK OF SIDEWALK (OR ROW)
- EXISTING TOP OF CURB
- EXISTING SURFACE / ROADWAY CENTERLINE
- EXISTING TOP OF CURB (MEDIAN)
- PROPOSED TOP OF CURB
- LEGAL GRADE

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 "NAVD88". TO CONVERT THIS DATUM TO QUEENS HIGHWAY DATUM, SUBTRACT 1.625 FEET FROM EACH ELEVATION.

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NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY:
NYCDDC
LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry®
NAME OF CONSULTANT
SIGNATURE

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CADD FILE SANDR04-PR

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

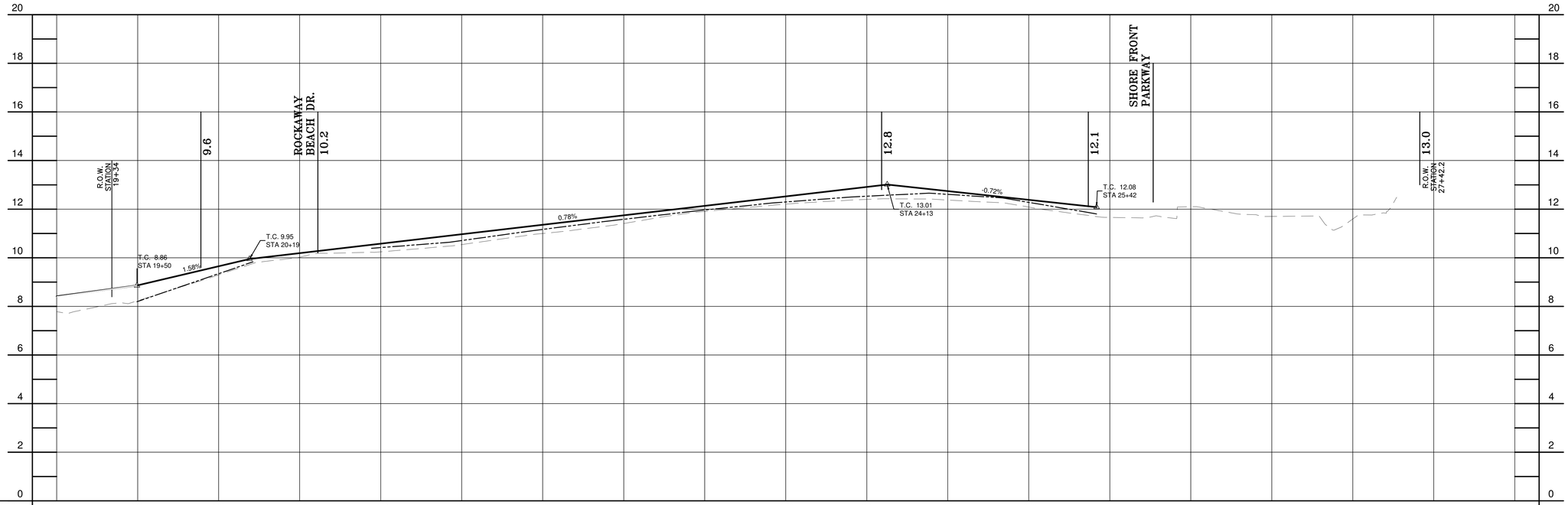
HIGHWAY PROFILE 3

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04
DATE: 8/17/2018
SHEET ---- OF ----
P3 / P8

CONSULTANT DESIGN

Sheet File: Q:\50064552\CAD\Civil\Final Design\Layout\SANDR04-PR.dwg
Date/Time: Aug 17, 2018, 10:21am



STATION	19+00	19+50	20+00	20+50	21+00	21+50	22+00	22+50	23+00	23+50	24+00	24+50	25+00	25+50	26+00	26+50	27+00	27+50	28+00
PROPOSED TOP OF CURB	8.41	8.86	9.65	10.19	10.58	10.97	11.36	11.75	12.14	12.53	12.91	12.74	12.38						
EXISTING BOT. OF CURB (MEDIAN)		8.0	9.1		10.2	10.5	11.0	11.3	11.8	12.0	12.3	12.4	12.0						
EXISTING TOP OF CURB (MEDIAN)		8.2	9.3		10.4	10.7	11.2	11.6	12.0	12.3	12.5	12.6	12.3						
EXISTING SURFACE	7.8	8.2	9.3	10.0	10.2	10.5	11.0	11.4	11.9	12.2	12.4	12.4	12.1	11.7	12.1	11.7	11.6		

WEST SIDE - NORTHBOUND BEACH 108TH STREET 19+00 TO 28+00

SCALE:
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 30'

LEGEND

- EXISTING BACK OF SIDEWALK (OR ROW)
- EXISTING TOP OF CURB
- EXISTING SURFACE / ROADWAY CENTERLINE
- EXISTING TOP OF CURB (MEDIAN)
- PROPOSED TOP OF CURB
- LEGAL GRADE

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 "NAVD88". TO CONVERT THIS DATUM TO QUEENS HIGHWAY DATUM, SUBTRACT 1.625 FEET FROM EACH ELEVATION.

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REVISIONS

TOPOGRAPHIC SURVEY PREPARED BY:
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LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
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NAME OF CONSULTANT
SIGNATURE

DRAWN BY SL
CADD FILE SANDR04-PR

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

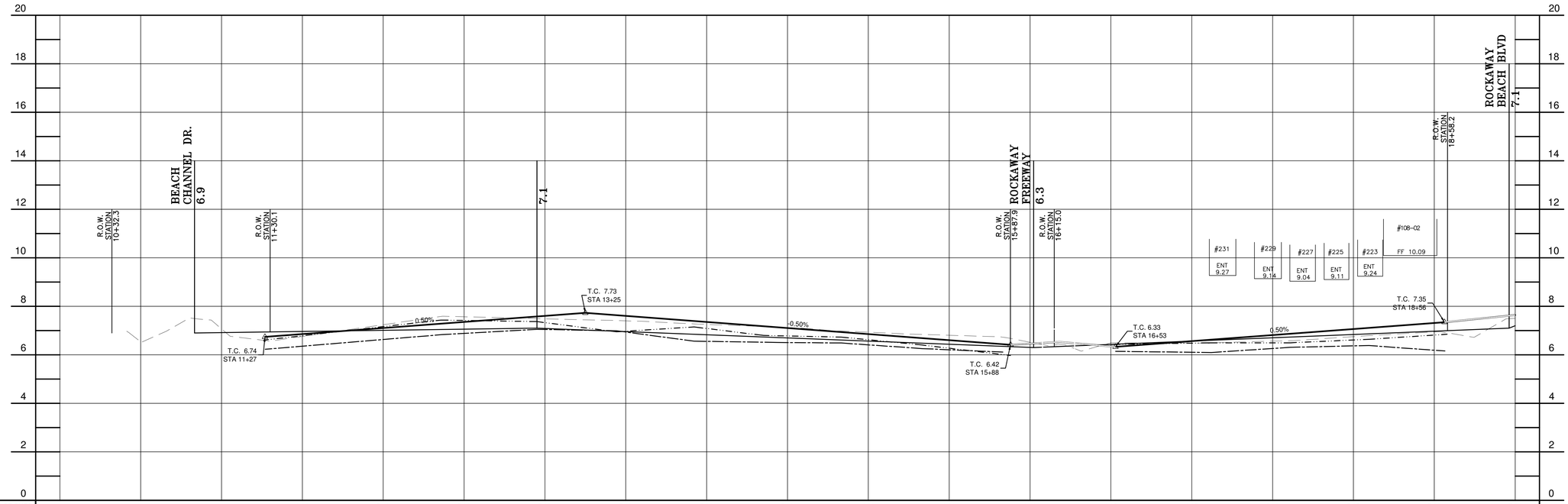
HIGHWAY PROFILE 4

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04
DATE: 8/17/2018
SHEET ---- OF ----
P4 / P8

Sheet File: Q:\50064552\CAD\Civil\Final Design\Layout\SANDR04-PR.dwg
Date/Time: Aug 17, 2018, 10:21am

CONSULTANT DESIGN



STATION	10+00	10+50	11+00	11+50	12+00	12+50	13+00	13+50	14+00	14+50	15+00	15+50	16+00	16+50	17+00	17+50	18+00	18+50	19+00
PROPOSED TOP OF CURB				6.86	7.10	7.36	7.60	7.60	7.36	7.10	6.86	6.60	6.46	6.35	6.57	6.82	7.07	7.32	7.64
EXISTING BACK OF SIDEWALK				6.8	7.2	7.4	7.3	7.0	7.1	6.8	6.6	6.3		6.4	6.5	6.5	6.6	6.8	
EXISTING TOP OF CURB				6.4	6.6	6.9	7.0	6.9	6.6	6.5	6.4	6.2			6.1	6.3	6.4	6.2	
EXISTING BOT. OF CURB/E.O.P.				6.1	6.4	6.7	6.8	6.6	6.4	6.3	6.3	6.1			5.7	6.0	6.1	6.0	
EXISTING SURFACE		6.5	7.1	6.8	7.2	7.6	7.5	7.4	7.3	7.1	6.9	6.8	6.5	6.5	6.5	6.6	6.8	6.9	7.5

WEST SIDE PROFILE - SOUTHBOUND BEACH 108TH STREET 10+00 TO 19+00

SCALE:
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 30'

LEGEND

- EXISTING BACK OF SIDEWALK (OR ROW)
- EXISTING TOP OF CURB
- EXISTING SURFACE / ROADWAY CENTERLINE
- EXISTING TOP OF CURB (MEDIAN)
- PROPOSED TOP OF CURB
- LEGAL GRADE

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 "NAVD88". TO CONVERT THIS DATUM TO QUEENS HIGHWAY DATUM, SUBTRACT 1.625 FEET FROM EACH ELEVATION.

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AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

HIGHWAY PROFILE 5

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04
DATE: 8/17/2018
SHEET ---- OF ----
PS / P8

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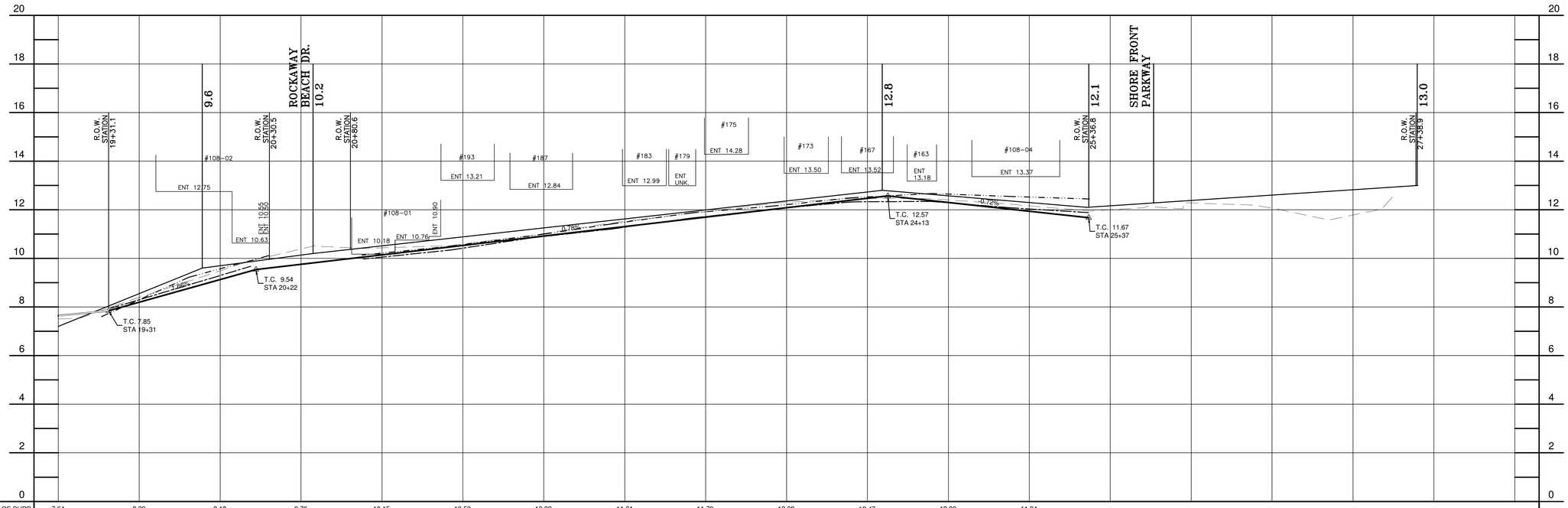
CONSULTANT DESIGN



PROPOSED TOP OF CURB	7.64	8.20	9.13	9.76	10.15	10.53	10.92	11.31	11.70	12.08	12.47	12.30	11.94							
EXISTING BACK OF SIDEWALK		8.3	9.6		10.2	10.6	11.0	11.5	11.9	12.2	12.5	12.6	12.5							
EXISTING TOP OF CURB		8.3	9.3		10.1	10.4	10.9	11.3	11.7	12.1	12.3	12.3	12.0							
EXISTING BOT. OF CURB/E.O.P.		7.9	9.0		9.8	10.0	10.6	11.0	11.4	11.8	12.0	11.9	11.7							
EXISTING SURFACE	7.5	8.4	9.5	10.4	10.4	10.6	11.0	11.5	11.9	12.3	12.5	12.4	12.2	12.0	12.3	12.1	11.8			
STATION	19+00	19+50	20+00	20+50	21+00	21+50	22+00	22+50	23+00	23+50	24+00	24+50	25+00	25+50	26+00	26+50	27+00	27+50	28+00	

WEST SIDE PROFILE - SOUTHBOUND BEACH 108TH STREET 19+00 TO 28+00

SCALE:
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 30'

LEGEND

- EXISTING BACK OF SIDEWALK (OR ROW)
- EXISTING TOP OF CURB
- EXISTING SURFACE / ROADWAY CENTERLINE
- EXISTING TOP OF CURB (MEDIAN)
- PROPOSED TOP OF CURB
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BUREAU OF DESIGN

HIGHWAY PROFILE 6

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04
DATE: 8/17/2018
SHEET ---- OF ---- P6 / P8

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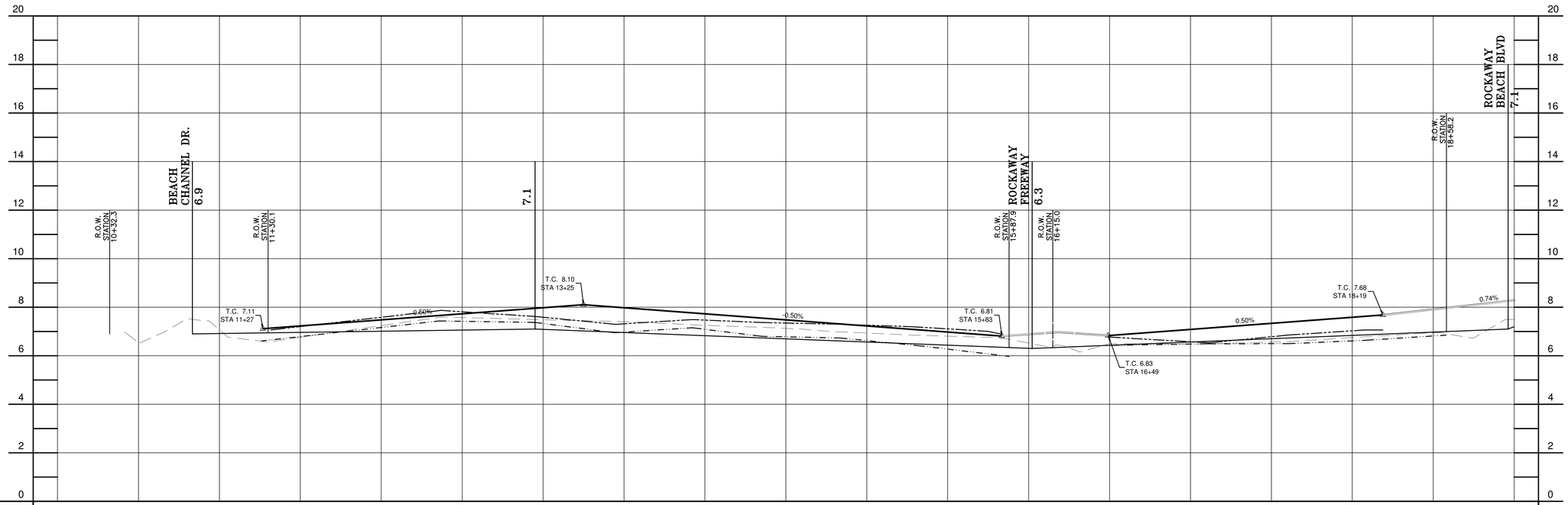
Date/Time: Aug 17, 2018, 10:21am

CONSULTANT DESIGN



STATION	10+00	10+50	11+00	11+50	12+00	12+50	13+00	13+50	14+00	14+50	15+00	15+50	16+00	16+50	17+00	17+50	18+00	18+50	19+00
PROPOSED TOP OF CURB				7.23	7.48	7.73	7.98	7.98	7.73	7.48	7.23	6.98	6.89	6.83	7.08	7.33	7.58	7.91	8.28
EXISTING BOT. OF CURB (MEDIAN)				7.1	7.4	7.6	7.4	7.1	7.2	7.1	7.1	7.0		6.6	6.4	6.5	6.8		
EXISTING TOP OF CURB (MEDIAN)				7.2	7.6	7.8	7.6	7.3	7.5	7.3	7.3	7.1		6.8	6.6	6.8	7.0		
EXISTING SURFACE		6.5	7.1	6.8	7.2	7.6	7.5	7.4	7.3	7.1	6.9	6.8	6.5	6.5	6.5	6.6	6.8	6.9	7.5

EAST SIDE PROFILE - SOUTHBOUND BEACH 108TH STREET 10+00 TO 19+00

SCALE:
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 30'

LEGEND

- EXISTING BACK OF SIDEWALK (OR ROW)
- EXISTING TOP OF CURB
- EXISTING SURFACE / ROADWAY CENTERLINE
- EXISTING TOP OF CURB (MEDIAN)
- PROPOSED TOP OF CURB
- LEGAL GRADE

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 "NAVD88". TO CONVERT THIS DATUM TO QUEENS HIGHWAY DATUM, SUBTRACT 1.625 FEET FROM EACH ELEVATION.

"IT IS A VIOLATION OF THE PROFESSIONAL LICENSE LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER/ARCHITECT AS APPLICABLE. THE ALTERING ENGINEER/ARCHITECT SHALL AFFIX HIS/HER SEAL AND THE NOTATION 'ALTERED BY' FOLLOWED BY HIS/HER SIGNATURE AND DATE OF ALTERATION."

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

TOPOGRAPHIC SURVEY PREPARED BY:
NYCDDC
LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry
NAME OF CONSULTANT
SIGNATURE

DRAWN BY SL
CADD FILE SANDR04-PR

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

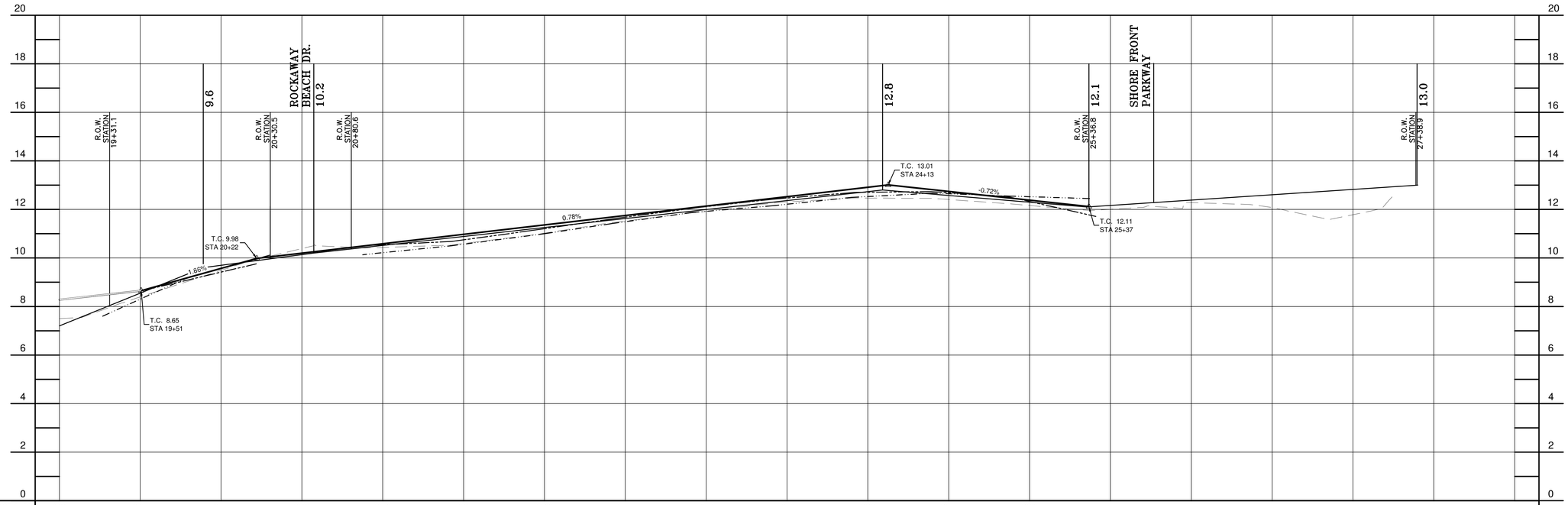
HIGHWAY PROFILE 7

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04
DATE: 8/17/2018
SHEET ---- OF ----
P7
P8

Sheet File: Q:\50064552\CAD\Civil\Final Design\Layout\SANDR04-PR.dwg
Date/Time: Aug 17, 2018, 10:21am

CONSULTANT DESIGN



PROPOSED TOP OF CURB	8.28	8.65	9.57	10.20	10.59	10.97	11.36	11.75	12.14	12.52	12.91	12.74	12.38							
EXISTING BOT. OF CURB (MEDIAN)		8.4	9.2		10.3	10.5	10.9	11.4	11.9	12.3	12.4	12.4	12.0							
EXISTING TOP OF CURB (MEDIAN)		8.6	9.4		10.5	10.7	11.2	11.7	12.1	12.5	12.7	12.7	12.3							
EXISTING SURFACE	7.5	8.4	9.5	10.4	10.4	10.6	11.0	11.5	11.9	12.3	12.5	12.4	12.2	12.0	12.3	12.1	11.8			
STATION	19+00	19+50	20+00	20+50	21+00	21+50	22+00	22+50	23+00	23+50	24+00	24+50	25+00	25+50	26+00	26+50	27+00	27+50	28+00	

EAST SIDE PROFILE - SOUTHBOUND BEACH 108TH STREET 19+00 TO 28+00

SCALE:
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 30'

LEGEND

- EXISTING BACK OF SIDEWALK (OR ROW)
- EXISTING TOP OF CURB
- EXISTING SURFACE / ROADWAY CENTERLINE
- EXISTING TOP OF CURB (MEDIAN)
- PROPOSED TOP OF CURB
- LEGAL GRADE

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 "NAVD88". TO CONVERT THIS DATUM TO QUEENS HIGHWAY DATUM, SUBTRACT 1.625 FEET FROM EACH ELEVATION.

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NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY:
NYCDDC
LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry®
NAME OF CONSULTANT
SIGNATURE

DRAWN BY SL
CADD FILE SANDR04-PR

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

HIGHWAY PROFILE 8

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04
DATE: 8/17/2018
SHEET ---- OF ---- P8 / P8

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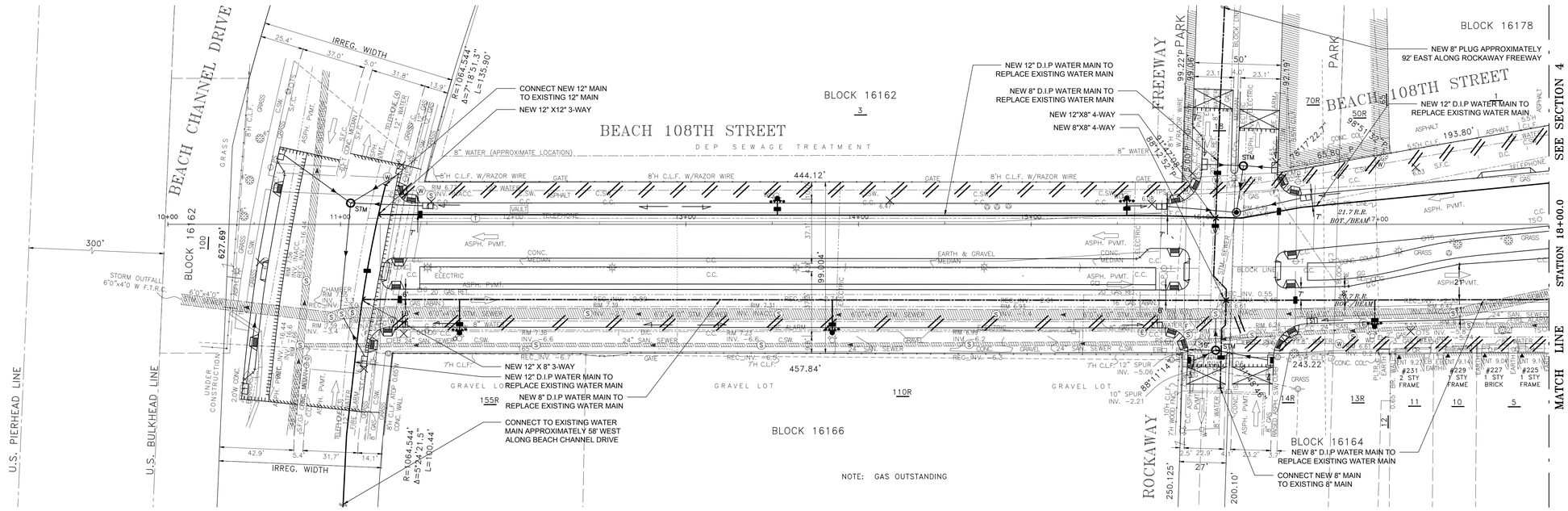
Date/Time: Aug 17, 2018, 10:22am

CONSULTANT DESIGN

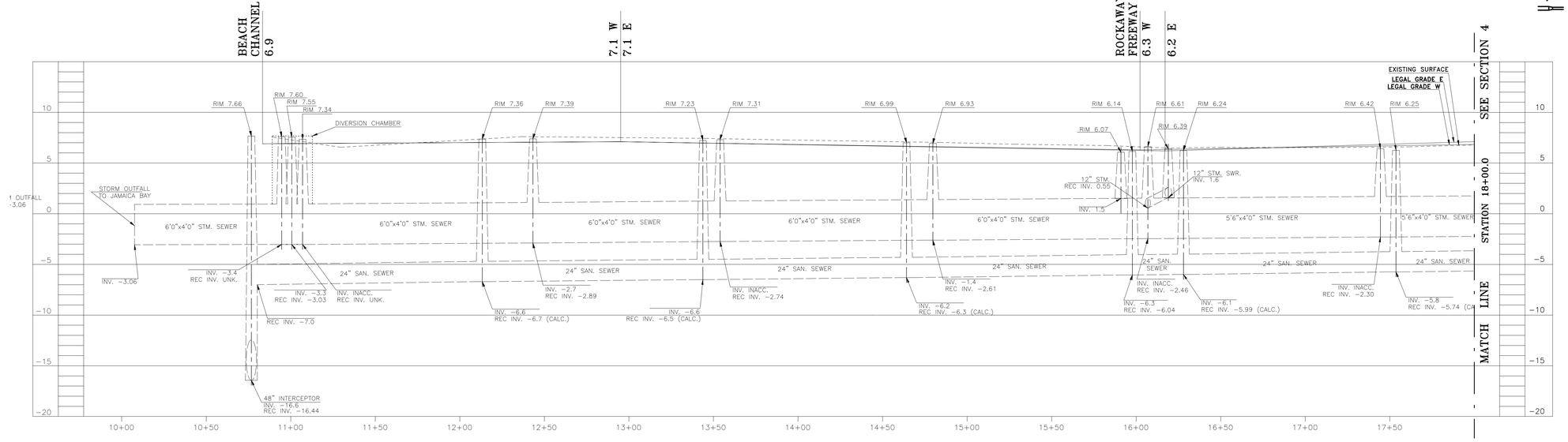


PLAN

SCALE: 1" = 30'

LEGEND

- PROPOSED 8" WATER MAIN
- PROPOSED 12" WATER MAIN
- PROPOSED 20" WATER MAIN
- PROPOSED 24" WATER MAIN
- PROPOSED VALVE
- PROPOSED HYDRANT
- WATER MAIN TO BE ABANDONED OR REMOVED AS DIRECTED BY ENGINEER
- PROPOSED REDUCER



SEWER PROFILE ALONG BEACH 108TH STREET

SCALE: VERT: 1" = 5'
HORIZ: 1" = 30'

B. THAYER ASSOCIATES

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 "NAVD88". TO CONVERT THIS DATUM TO QUEENS HIGHWAY DATUM, SUBTRACT 1.625 FEET FROM EACH ELEVATION.

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY:

LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY: B. Thayer Associates
B. THAYER ASSOCIATES
NAME OF CONSULTANT
SIGNATURE
99 SUNNYSIDE BLVD
SUITE 100
WOODBURY, NY 11797
PHONE: 516.364.0660
FAX: 516.364.0668

DRAWN BY JC
CADD FILE 17.18_SANDR04 – U1 – U2

SCALE AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

UTILITY PLAN AND PROFILE
STA. 10+00 TO STA. 18+00

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

CAPITAL PROJECT NO. SANDR04 | DATE: 8/20/2018 | SHEET -- OF -- | U01/U02

CONSULTANT DESIGN

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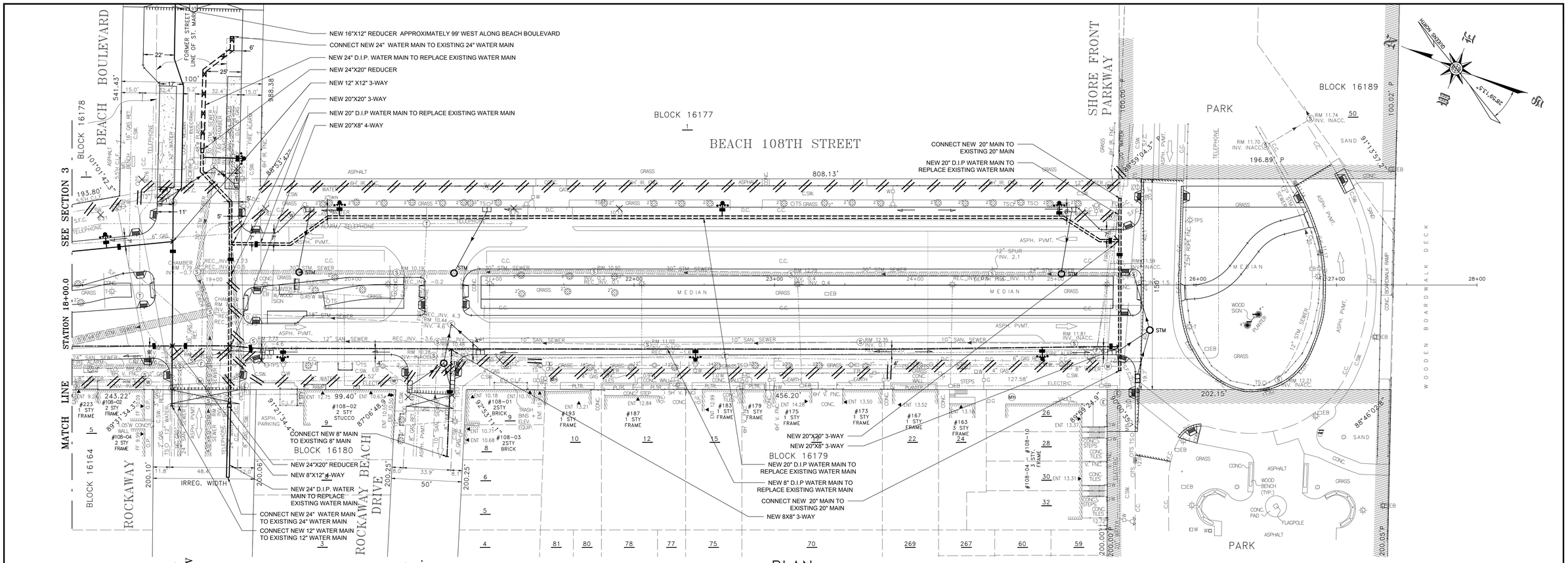

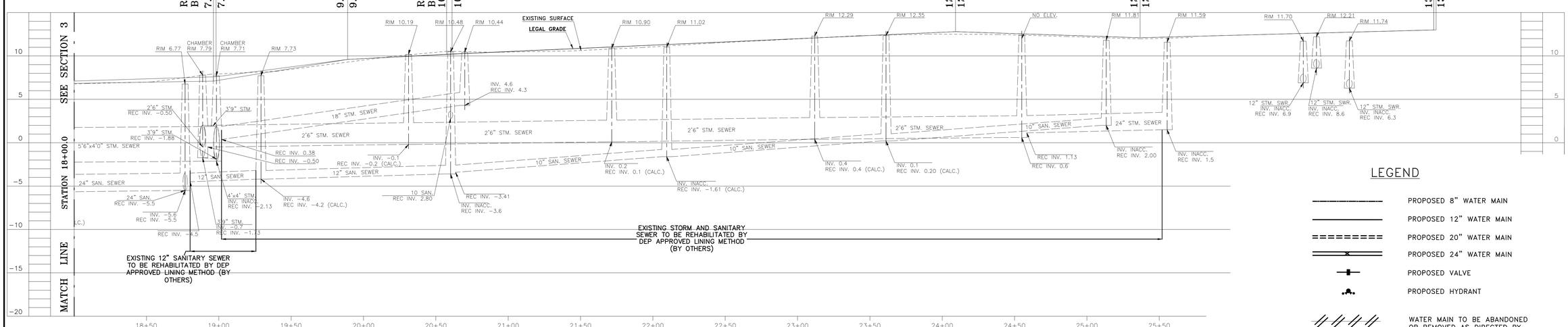

SEWER PROFILE ALONG BEACH 108TH STREET

SCALE: VERT: 1" = 5'
HORIZ: 1" = 30'

LEGEND

- PROPOSED 8" WATER MAIN
- PROPOSED 12" WATER MAIN
- PROPOSED 20" WATER MAIN
- PROPOSED 24" WATER MAIN
- PROPOSED VALVE
- PROPOSED HYDRANT
- WATER MAIN TO BE ABANDONED OR REMOVED AS DIRECTED BY ENGINEER
- PROPOSED REDUCER

B. THAYER ASSOCIATES

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 "NAVD88". TO CONVERT THIS DATUM TO QUEENS HIGHWAY DATUM, SUBTRACT 1.625 FEET FROM EACH ELEVATION.

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

TOPOGRAPHIC SURVEY PREPARED BY:

LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY: B. Thayer Associates
B. THAYER ASSOCIATES
NAME OF CONSULTANT
99 SUNNYSIDE BLVD
SUITE 100
WOODBURY, NY 11797
PHONE: 516.364.0660
FAX: 516.364.0658
SIGNATURE

DRAWN BY JC
CADD FILE 17,18_SANDR04 – U1 – U2

SCALE AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

UTILITY PLAN AND PROFILE
STA. 18+00 TO STA. 28+00

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

CAPITAL PROJECT NO. SANDR04 | DATE: 8/20/2018 | SHEET -- OF -- | U02/U02

CONSULTANT DESIGN

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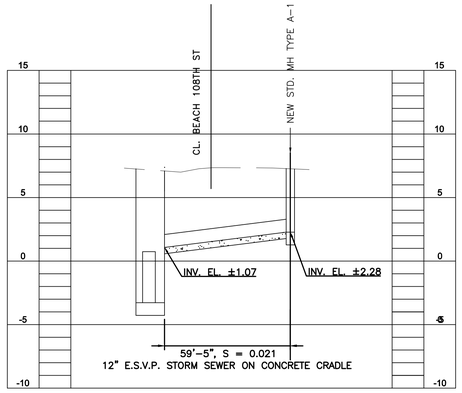


PROFILE OF 12" E.S.V.P. STORM SEWER
ON BEACH CHANNEL DRIVE

"IT IS A VIOLATION OF THE PROFESSIONAL LICENSE LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY. UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER/ARCHITECT AS APPLICABLE. THE ALTERING ENGINEER/ARCHITECT SHALL AFFIX HIS/HER SEAL AND THE NOTATION 'ALTERED BY' FOLLOWED BY HIS/HER SIGNATURE AND DATE OF ALTERATION."

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

TOPOGRAPHIC SURVEY PREPARED BY:
NYCDDC
LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry®
NAME OF CONSULTANT
SIGNATURE

DRAWN BY SL
CADD FILE U3

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

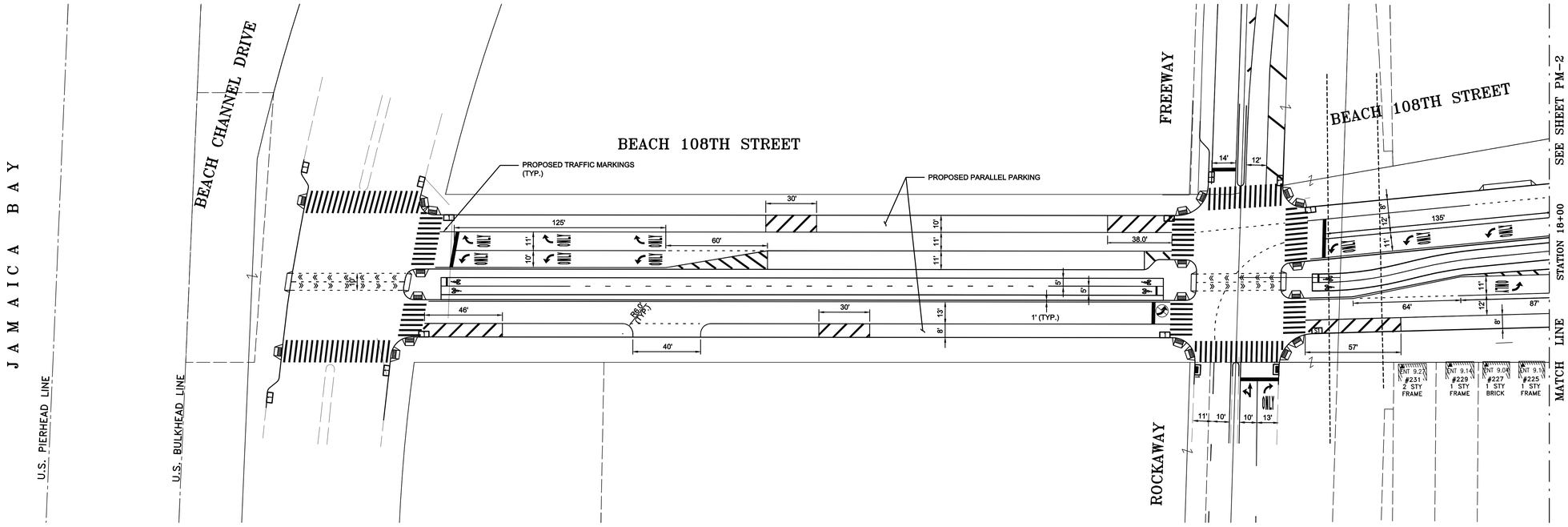
UTILITY PLAN AND PROFILE
BEACH CHANNEL DRIVE

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04
DATE: 8/17/2018
SHEET ---- OF ----
U03 / U03

CONSULTANT DESIGN

Sheet File: Q:\50064552\CAD\Civil\Final Design\Layout\U3.dwg
Date/Time: Aug 17, 2018, 10:22am



PLAN

SCALE: 1" = 30'

"IT IS A VIOLATION OF THE PROFESSIONAL LICENSE LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER/ARCHITECT AS APPLICABLE. THE ALTERING ENGINEER/ARCHITECT SHALL AFFIX HIS/HER SEAL AND THE NOTATION 'ALTERED BY' FOLLOWED BY HIS/HER SIGNATURE AND DATE OF ALTERATION."

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

TOPOGRAPHIC SURVEY PREPARED BY:
NYCDDC
LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry
NAME OF CONSULTANT
SIGNATURE

DRAWN BY SI
CADD FILE SANDR04-CP-PMP

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PAVEMENT MARKING PLAN
STA. 10+00 TO STA. 18+00

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04
DATE: 8/17/2018
SHEET 05 ---- PM1/PM2

CONSULTANT DESIGN

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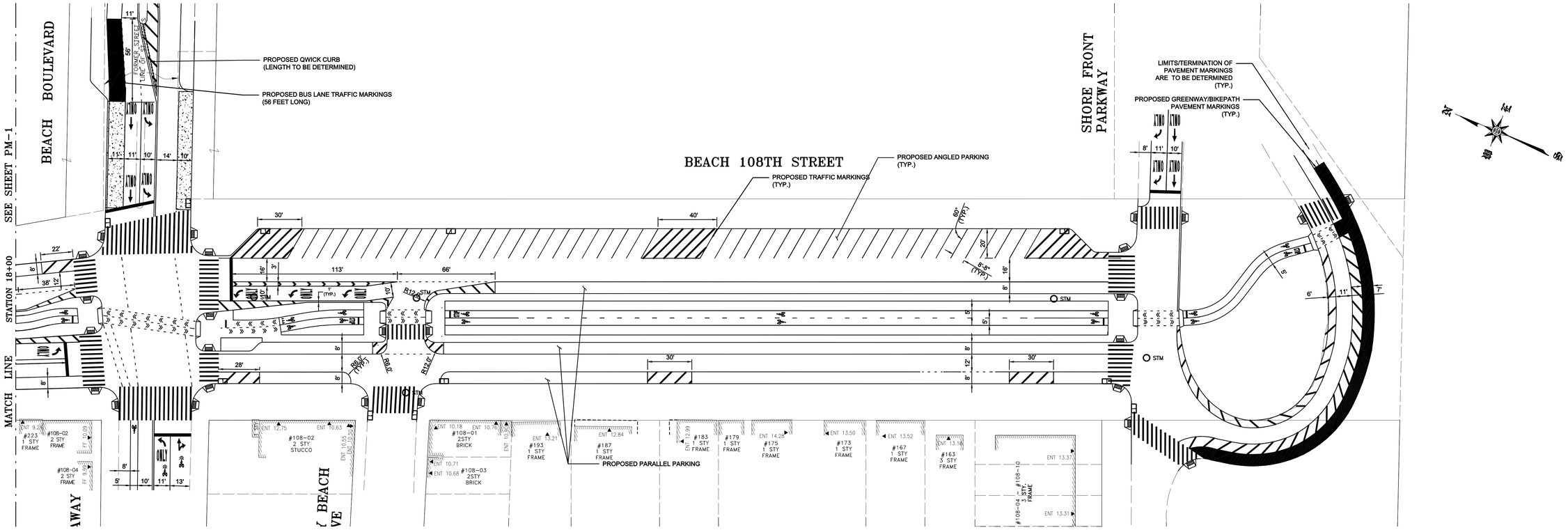

PLAN

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NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY:
NYCDDC
LICENSED LAND SURVEYOR

FINAL DESIGN PREPARED BY:
Dewberry®
NAME OF CONSULTANT
SIGNATURE

DRAWN BY SL
CADD FILE SANDR04-CP-PMP

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PAVEMENT MARKING PLAN
STA. 18+00 TO STA. 28+00

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

PROJECT ID: SANDR04 | DATE: 8/17/2018 | SHEET 015 ---- | PM2/PM2

CONSULTANT DESIGN

Sheet File: Q:\50064552\CAD\Civil\Final Design\Layout\SANDR04-CP-PMP.dwg
Date/Time: Aug 17, 2018, 10:22am

TREE PROTECTION AND MITIGATION NOTES:

1. THE CONTRACTOR SHALL RETAIN A TREE CONSULTANT/CONSULTING ARBORIST (CA) WITH A CURRENT INTERNATIONAL SOCIETY OF ARBORICULTURE CERTIFICATE FOR THE DURATION OF THE PROJECT (ITEM NO. 4.21).
2. TREE PROTECTION IS TO BE PLACED AT THE DRIPLINE OF TREES, UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT AND A TREE CONSULTANT/CONSULTING ARBORIST.
3. NO HEAVY EQUIPMENT, MACHINERY OR STOCK PILING OF MATERIAL IS PERMITTED WITHIN THE DRIPLINE OF ALL EXISTING TREES THROUGHOUT THE COURSE OF THE CONTRACT.
4. EXISTING TREES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE DURATION OF THE PROJECT WITH PROTECTIVE TREE BARRIER (SEE DETAIL 2, DWG. TM-6). THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING TREES BUT NOT LIMITED TO INSTALLING WOODEN PROTECTION AND WOOD CHIPS AT NO EXTRA COST TO THE CITY.
5. THE CONTRACTOR SHALL OBTAIN PERMIT FROM THE NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION (NYCDPR) BOROUGH FORESTRY TO ALLOW WORK NEAR EXISTING TREES PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL COMPLETE AND OBTAIN ALL NECESSARY PERMITS FROM NYCDPR BOROUGH FORESTRY BEFORE ANY WORK IS PERFORMED ON OR NEAR EXISTING TREES, TREE PRUNING, TREE REMOVALS AND NEW TREE PLANTINGS.
6. ALL PROTECTIVE TREE BARRIERS MUST BE IN PLACE AND APPROVED BY CA PRIOR TO THE START OF CONSTRUCTION. ALL TREE PITS SHOULD BE KEPT EXPOSED DURING CONSTRUCTION AND FREE OF CONSTRUCTION DEBRIS AT ALL TIMES.
7. REFER TO DW. TM-3 FOR TREE MITIGATION IMPACT TABLE AND RECOMMENDED MITIGATION DETAILS.
8. THE CONTRACTOR SHALL TAKE EXTREME CARE TO PROTECT ROOT SYSTEMS OF EXISTING TREES. HAND/PNEUMATIC EXCAVATE WITHIN THE TREE CANOPY CRITICAL ROOT ZONES OF EXISTING TREES AS INDICATED ON THE DRAWINGS.
9. PRIOR TO THE START OF CONSTRUCTION, THE CA SHALL COMPLETE A SURVEY OF ALL TREES WITHIN THE AREA TO BE CHECKED BY THE NYCDPR FOR ACCEPTABILITY AND APPROVAL.
10. CA SHALL FIELD SURVEY ALL TREE CANOPIES PRIOR TO START OF CONSTRUCTION TO VERIFY DRIPLINE/CRITICAL ROOT ZONE.
11. UNDER SUPERVISION OF THE CA, ALL DEMOLITION AND CONSTRUCTION WITHIN CRITICAL ROOT ZONE OF EXISTING TREES TO BE PERFORMED BY PNEUMATIC EXCAVATION (ITEM NO. 6.02 PA). THIS INCLUDES ALL MATERIALS AND FIXTURES, SIDEWALKS AND CURBS. PAVEMENT REMOVAL SHALL BE BY LIFTING, NOT DRAGGING.
12. SPECIAL CARE FOR EXCAVATION AND RESTORATION OF CURBS AND SIDEWALKS TO BE IMPLEMENTED WITHIN EXISTING TREE CRITICAL ROOT ZONES (ITEM NO. 8.02 A AND 8.02 B).
13. THE CONTRACTOR SHALL OBTAIN PERMIT FROM NYCDPR BOROUGH PERMIT PRIOR TO REMOVAL OF ANY EXISTING TREES. THE CONTRACTOR SHALL REMOVE NO TREE, UNLESS AUTHORIZED TO DO SO BY THE NYCDPR DIRECTOR OF FORESTRY. THE CA FOR THE PROJECT MUST MONITOR ALL REMOVAL WORK.
14. NYCDPR BOROUGH FORESTRY WILL ISSUE A PERMIT FOR PRUNING AS REQUIRED. CONTRACTOR TO COMPLETE AND SUBMIT ALL PERMITTING APPLICATIONS.
15. NO TREE PRUNING SHALL BE PERFORMED UNLESS DIRECTED BY THE CA. IF REQUESTED, PRUNING SHALL BE PERFORMED BY OR UNDER THE SUPERVISION OF AN APPROVED TREE-CARE PROFESSIONAL, CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE AND UNDER THE SUPERVISION OF THE CA.
16. THE CONTRACTOR IS NOT PERMITTED TO STORE ANY CONSTRUCTION MATERIAL WITHIN THE BOUNDARIES OF TREE PROTECTION.
17. IN AREAS WHERE HEAVY EQUIPMENT OR VEHICLES MUST OPERATE WITHIN THE CRITICAL ROOT ZONE OF A TREE, A 12" LAYER OF WOOD CHIPS AND GROUND SURFACE PROTECTION MATS MUST BE SPREAD TO PREVENT SOIL COMPACTION AND ROOT LOSS.
18. NYCDPR MANDATES THAT ALL ROOTS BE KEPT WET IF EXPOSED. TREE ROOTS WILL BE IMMEDIATELY WET DOWN AND COVERED OR WRAPPED WITH SATURATED BURLAP, UNTIL BACK FILLED AND/OR COVERED WITH SOIL.
19. TREE ROOTS 1" DIAMETER OR LESS SHALL NOT BE PRUNED WITHOUT THE APPROVAL OF THE CA. TREE ROOTS OVER 1" DIAMETER SHALL NOT BE PRUNED WITHOUT THE WRITTEN APPROVAL OF THE NYCDPR BOROUGH FORESTER.
20. CONTRACTOR SHALL TAKE EXTREME CARE TO PROTECT THE ROOT SYSTEMS OF EXISTING TREES WITHIN THE CRITICAL ROOT ZONE. MATERIAL, EQUIPMENT OR VEHICLES SHALL NOT BE STOCKPILED OR PARKED WITHIN THE CRZ OF ANY TREE COMPLETELY OR PARTIALLY WITHIN THE CONTRACT LIMIT LINE TO MINIMIZE SURFACE AND SUBSURFACE ROOT AND SOIL COMPACTION.
21. CONTRACTOR TO REFERENCE TREE MITIGATION TABLES FOR SPECIFIC GENUS, SPECIES, SIZE, AND CONDITION OF EACH EXISTING TREE.

LANDSCAPE NOTES:

1. CONTRACTOR SHALL USE EXISTING SUBSOIL AS FILL BASE MATERIAL FOR ALL NEW PAVEMENT WITHIN TREE CRITICAL ROOT ZONES.
2. REFER TO LANDSCAPE LAYOUT PLANS AND SHEET LL-3 FOR PLANTING SCHEDULES AND TREE INFORMATION.
3. PRIOR TO THE COMMENCEMENT OF WORK THE CONTRACTOR SHALL CHECK AND VERIFY ALL SITE CONDITIONS, BOTH ABOVE AND BELOW THE SURFACE. ANY DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING PRIOR TO THE COMMENCEMENT OF WORK.
4. CONTRACTOR SHALL OBTAIN NYC DEPARTMENT OF PARKS AND RECREATION NEW TREE PLANTING FORESTRY PERMIT.
5. TREES MAY ONLY BE PLANTED FROM OCTOBER 15 - DECEMBER 15 AND MARCH 15 - MAY 15. PLANTED TREES ARE SUBJECT TO A 24-MONTH GUARANTEE PERIOD, STARTING FROM DATE OF NYCDPR ACCEPTANCE.
6. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEM QUANTITIES AND ENSURE THAT ALL INSTALLATION PROCEDURES, PERMITS, AND APPROVALS ARE IN ACCORDANCE WITH AUTHORIZING AGENCY REQUIREMENTS.
7. PRIOR TO INSTALLATION, ALL TREES ARE TO BE FIELD LOCATED BY THE CONTRACTOR AND APPROVED BY THE LANDSCAPE ARCHITECT WITH THE RESIDENT ENGINEER.
8. SUBSTANDARD TREE PITS SHALL BE ENLARGED TO NYCDPR RECOMMENDED SIZE OF 5' X 10'.
9. INSTALL STRUCTURAL SOIL AROUND ALL NEW TREES, AS SHOWN ON PLAN. INSIDE TREE PIT BOUNDARIES, TOPSOIL ALONE WILL BE UTILIZED.
10. ALL TREE PITS AND PLANTING BEDS INCLUDE INSTALLATION OF TOPSOIL LEVEL TO THE TREE ROOT COLLAR AND THE PLACEMENT OF MULCH.
11. MINOR ADJUSTMENTS OF TREE LOCATIONS SHOULD BE MADE IN THE FIELD, WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT WITH THE RESIDENT ENGINEER, TO AVOID PRIVATE UTILITIES.
12. PRIOR TO THE PLACEMENT OF TOPSOIL, THE TREE PITS SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT WITH THE RESIDENT ENGINEER.
13. STRUCTURAL SOIL AND TOPSOIL TO BE PLACED DRY, COMPACTED AND IN 6" LIFTS. DO NOT WATER IN EVERY 6"; WATER WHEN FINISHED.

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

B. THAYER ASSOCIATES

FINAL DESIGN PREPARED BY:
B. THAYER ASSOCIATES
NAME OF CONSULTANT
SIGNATURE

DRAWN BY D. MAHER
CADD FILE SANDR04- LANDSCAPE NOTES

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

LANDSCAPE NOTES

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

CAPITAL PROJECT NO. SANDR04 | DATE: 8/17/2018 | SHEET __ OF __ | LN1/LN1

CONSULTANT DESIGN

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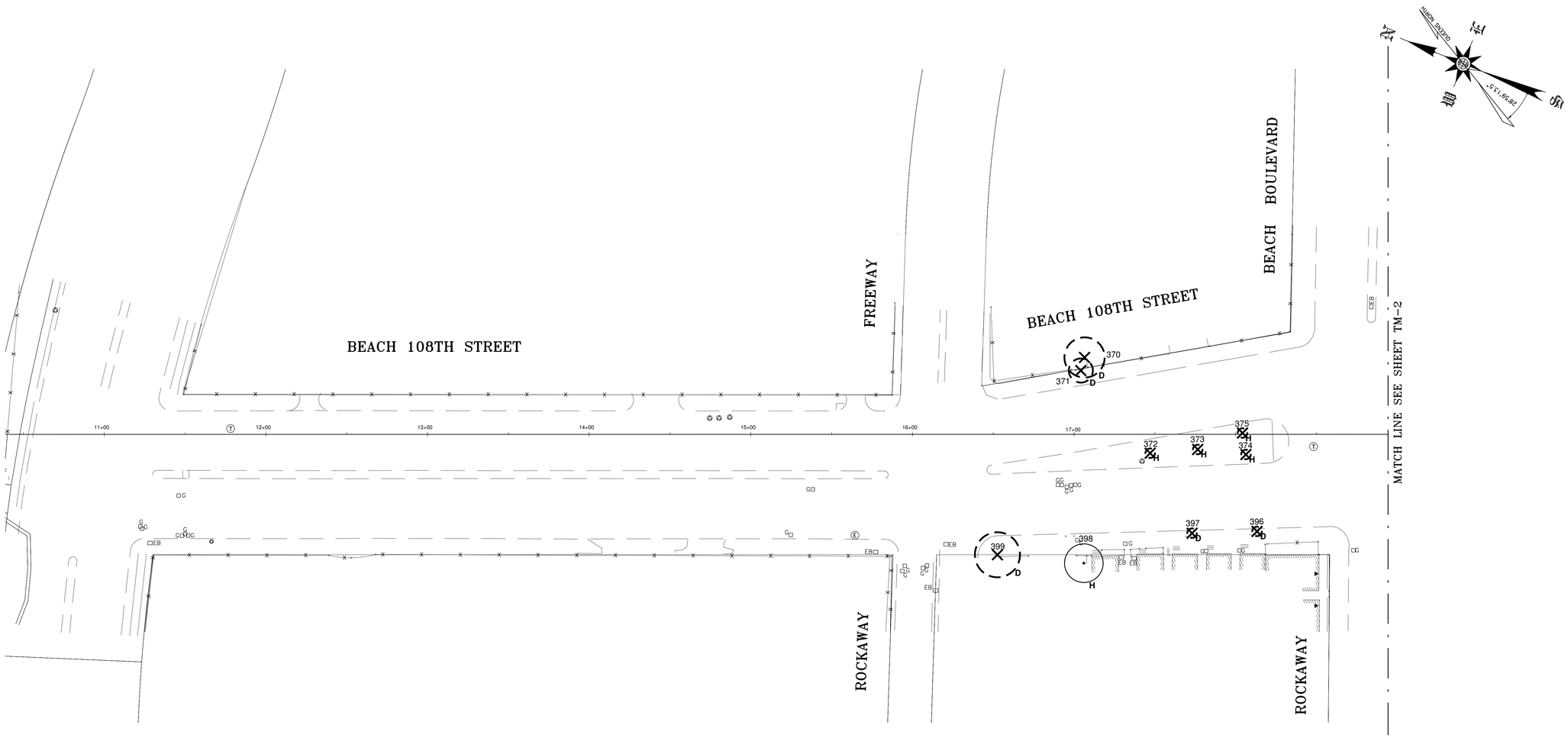
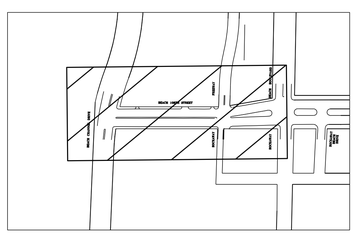
Date/Time: Aug 17, 2018, 4:55pm



PLAN

SCALE: 1" = 30'



KEY MAP

SCALE: N.T.S.

LEGEND

- EXISTING TREE CANOPY
- 349 — EXISTING TREE TAG NUMBER
- EXISTING TREE PIT
- EXISTING TREE TRUNK
- TREE REMOVAL FOR DESIGN (D)
- TREE REMOVAL PER NYCDPR (H)
- WOODEN TREE PROTECTION BARRIER
- EXISTING GRASS TREE STRIP
- IMPACTED TREE CRITICAL ROOT ZONE SEE NOTE 5

NOTES:

1. REFER TO SHEET LN-1 FOR ADDITIONAL TREE PROTECTION AND MITIGATION NOTES.
2. REFER TO SHEETS TM-3 FOR TREE MITIGATION IMPACT TABLES AND RECOMMENDED ACTIONS.
3. SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
4. THE CONTRACTOR SHALL RETAIN A TREE CONSULTANT/CONSULTING ARBORIST (CA) WITH A CURRENT INTERNATIONAL SOCIETY OF ARBORICULTURE CERTIFICATE FOR THE DURATION OF THE PROJECT (ITEM NO. 4.21).
5. SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK AND CURBS WITHIN THE CRITICAL ROOT ZONE SHALL BE PERFORMED BY HAND/PNEUMATIC EXCAVATION (ITEM NO. 8.02A & 8.02B).

0 30' 60' 90'
SCALE: 1" = 30'

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

B. THAYER ASSOCIATES

FINAL DESIGN PREPARED BY:
B. THAYER ASSOCIATES
NAME OF CONSULTANT
SIGNATURE

DRAWN BY D. MAHER
CADD FILE SANDR04- MITIGATION PLANS

SCALE AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

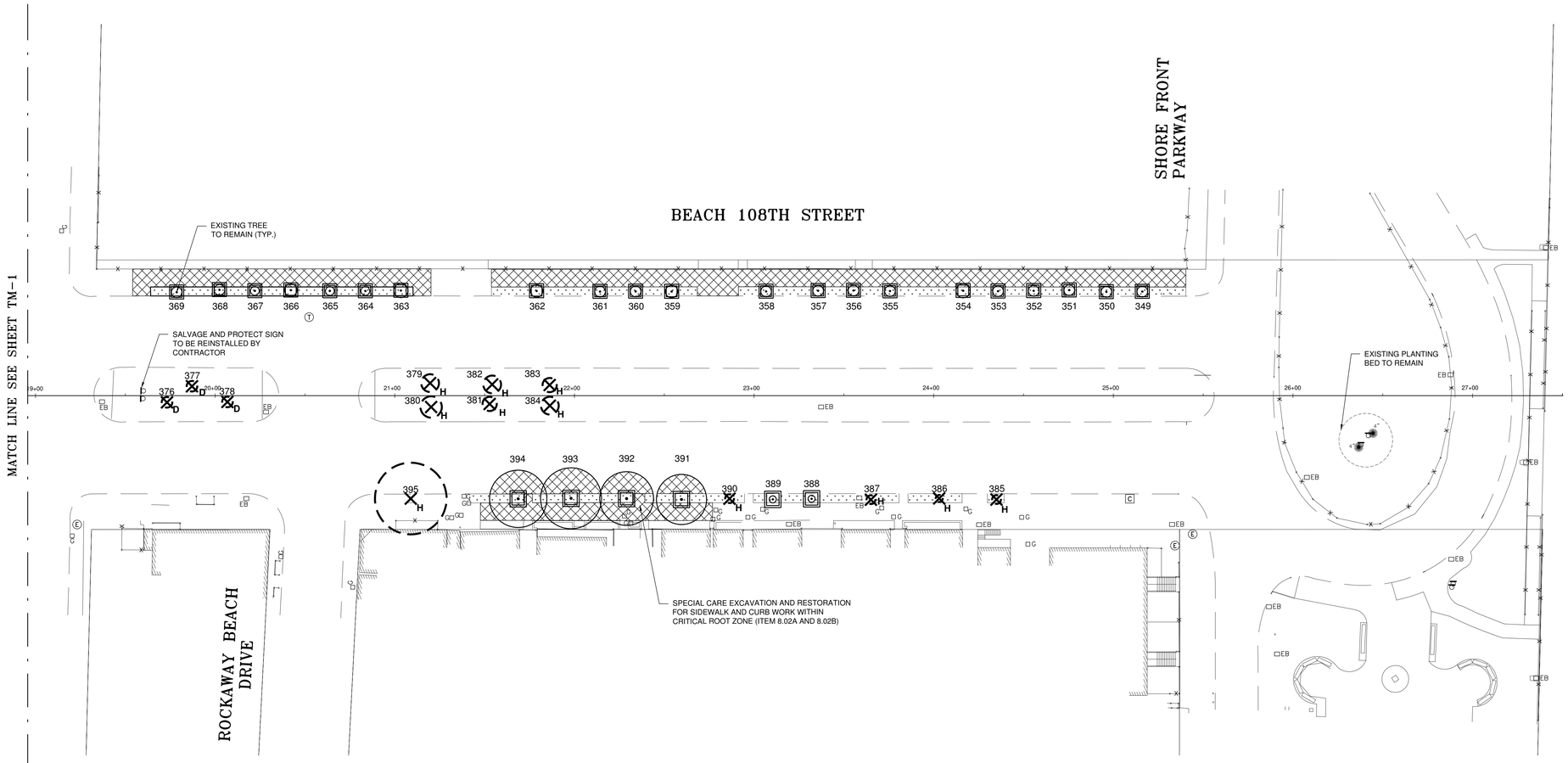
TREE MITIGATION AND REMOVAL PLAN – 1

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

CAPITAL PROJECT NO. SANDR04 | DATE: 8/17/2018 | SHEET __ OF __ | TM1/TM6

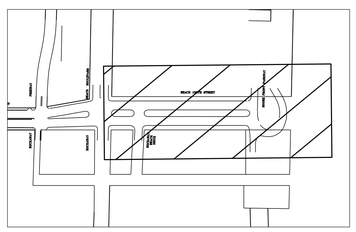
CONSULTANT DESIGN

Sheet File: O:\0783.600.02 – Beach 108St-Dewberry\12 Drawings\12C Preliminary Drawings\SANDR04– Mitigation Plans.dwg
Date/Time: Aug 17, 2018, 5:27pm



PLAN

SCALE: 1" = 30'



KEY MAP

SCALE: N.T.S.

LEGEND

- 349 — EXISTING TREE CANOPY; EXISTING TREE TAG NUMBER; EXISTING TREE PIT; EXISTING TREE TRUNK
- TREE REMOVAL FOR DESIGN (D)
- TREE REMOVAL PER NYCDPR (H)
- WOODEN TREE PROTECTION BARRIER
- EXISTING GRASS TREE STRIP
- IMPACTED TREE CRITICAL ROOT ZONE SEE NOTE 5

NOTES:

1. REFER TO SHEET LN-1 FOR ADDITIONAL TREE PROTECTION AND MITIGATION NOTES.
2. REFER TO SHEETS TM-3 FOR TREE MITIGATION IMPACT TABLES AND RECOMMENDED ACTIONS.
3. SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
4. THE CONTRACTOR SHALL RETAIN A TREE CONSULTANT/CONSULTING ARBORIST (CA) WITH A CURRENT INTERNATIONAL SOCIETY OF ARBORICULTURE CERTIFICATE FOR THE DURATION OF THE PROJECT (ITEM NO. 4.21).
5. SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK AND CURBS WITHIN THE CRITICAL ROOT ZONE SHALL BE PERFORMED BY HAND/PNEUMATIC EXCAVATION (ITEM NO. 8.02A & 8.02B).

0 30' 60' 90'
SCALE: 1" = 30'

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

B. THAYER ASSOCIATES

FINAL DESIGN PREPARED BY:
B. THAYER ASSOCIATES
NAME OF CONSULTANT
SIGNATURE

DRAWN BY D. MAHER
CADD FILE SANDR04- MITIGATION PLANS

SCALE AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE MITIGATION AND REMOVAL PLAN – 2

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

CAPITAL PROJECT NO. SANDR04 | DATE: 8/17/2018 | SHEET __ OF __ | TM2/TM6

CONSULTANT DESIGN

Sheet File: O:\0783.600.02 – Beach 108St-Dewberry\12 Drawings\12C Preliminary Drawings\SANDR04- Mitigation Plans.dwg
Date/Time: Aug 17, 2018, 5:27pm

SHEET NO.	TREE NO.	STREET	STATION	BLOCK #	LOT #	GENUS SPECIES	COMMON NAME	DBH (IN)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (DIA FT)	CONDITION QUALITY	TREE REMOVAL FOR CONDITION	TREE REMOVAL FOR DESIGN	PROTECTIVE TREE BARRIER	MITIGATION CASE NO.
TM-2	349	Beach 108th Street	16+52.58	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2.5	11	4	6	GOOD			4.22B	2A & 6
TM-2	350	Beach 108th Street	17+06.05	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2.5	11	4	6	GOOD			4.22B	2A & 6
TM-2	351	Beach 108th Street	17+73.03	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2.5	11	4	6	GOOD			4.22B	2A & 6
TM-2	352	Beach 108th Street	18+13.21	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	3	12	6	6	GOOD			4.22B	2A & 6
TM-2	353	Beach 108th Street	21+08.90	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2.8	10	4	6	GOOD			4.22B	2A & 6
TM-2	354	Beach 108th Street	21+68.68	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	3	13	4	8	EXCELLENT			4.22B	2A & 6
TM-2	355	Beach 108th Street	21+98.10	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2.5	12	5	6	EXCELLENT			4.22B	2A & 6
TM-2	356	Beach 108th Street	22+29.04	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2.5	11	4	6	EXCELLENT			4.22B	2A & 6
TM-2	357	Beach 108th Street	22+59.58	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2.5	12	4	6	EXCELLENT			4.22B	2A & 6
TM-2	358	Beach 108th Street	22+86.33	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	3	12	3	6	EXCELLENT			4.22B	2A & 6
TM-2	359	Beach 108th Street	23+10.42	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2.5	11	4	7	EXCELLENT			4.22B	2A & 6
TM-2	360	Beach 108th Street	23+32.01	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2.5	11	4	6	EXCELLENT			4.22B	2A & 6
TM-2	361	Beach 108th Street	23+65.05	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2.5	11	4	6	EXCELLENT			4.22B	2A & 6
TM-2	362	Beach 108th Street	24+03.07	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	3	11	4	7	EXCELLENT			4.22B	2A & 6
TM-2	363	Beach 108th Street	24+34.95	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	3	12	4	8	GOOD			4.22B	2A & 6
TM-2	364	Beach 108th Street	21+86.33	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2.5	12	5	5	GOOD			4.22B	2A & 6
TM-2	365	Beach 108th Street	21+86.21	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2.5	12	4	5	GOOD			4.22B	2A & 6
TM-2	366	Beach 108th Street	21+54.23	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2	10	4	7	EXCELLENT			4.22B	2A & 6
TM-2	367	Beach 108th Street	21+52.81	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2	11	4	5	EXCELLENT			4.22B	2A & 6
TM-2	368	Beach 108th Street	21+20.24	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	3	12	4	6	EXCELLENT			4.22B	2A & 6
TM-2	369	Beach 108th Street	21+19.67	16177	1	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2.5, 1	11	4	6	GOOD			4.22B	2A & 6
TM-1	370	Beach 108th Street	20+06.82	16178	50R	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	6.5	24	8	25	GOOD		4.16AA		
TM-1	371	Beach 108th Street	19+87.07	16178	50R	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	5	22	6	15	POOR		4.16AA		
TM-2	372	Beach 108th Street	19+73.19	N/A	N/A	*GINKGO BILOBA*	GINKGO	2	15	7	4	POOR	X			
TM-2	373	Beach 108th Street	18+04.21	N/A	N/A	*GINKGO BILOBA*	GINKGO	2	15	7	4	POOR	X			
TM-2	374	Beach 108th Street	18+06.35	N/A	N/A	*GINKGO BILOBA*	GINKGO	3	15	7	4	POOR	X			
TM-2	375	Beach 108th Street	17+76.54	N/A	N/A	*GINKGO BILOBA*	GINKGO	2	15	7	4	POOR	X			
TM-2	376	Beach 108th Street	17+47.11	N/A	N/A	*QUERCUS ROBUR*	OAK, ENGLISH	2.5	16	6	4	EXCELLENT		X		
TM-2	377	Beach 108th Street	17+04.20	N/A	N/A	*QUERCUS ROBUR*	OAK, ENGLISH	3	16	3	6	EXCELLENT		X		
TM-2	378	Beach 108th Street	17+06.49	N/A	N/A	*QUERCUS ROBUR*	OAK, ENGLISH	3	16	6	5	EXCELLENT		X		
TM-2	379	Beach 108th Street	19+78.58	N/A	N/A	*GLEDITSIA TRIACANTHOS*	HONEYLOCUST	2	20	6	10	DEAD	X			
TM-2	380	Beach 108th Street	20+02.39	N/A	N/A	*GLEDITSIA TRIACANTHOS*	HONEYLOCUST	2.5	20	6	12	POOR	X			
TM-2	381	Beach 108th Street	20+22.13	N/A	N/A	*GLEDITSIA TRIACANTHOS*	HONEYLOCUST	2	22	7	8	DEAD	X			
TM-2	382	Beach 108th Street	20+42.12	N/A	N/A	*GLEDITSIA TRIACANTHOS*	HONEYLOCUST	2	18	7	10	DEAD	X			
TM-2	383	Beach 108th Street	20+63.84	N/A	N/A	*GLEDITSIA TRIACANTHOS*	HONEYLOCUST	2	18	6	8	DEAD	X			
TM-2	384	Beach 108th Street	20+83.63	N/A	N/A	*GLEDITSIA TRIACANTHOS*	HONEYLOCUST	2	20	6	10	DEAD	X			
TM-2	385	Beach 108th Street	21+03.40	16179	22	*CORNUS FLORIDA*	DOGWOOD, FLOWERING	2	12	6	5	DEAD	X			
TM-2	386	Beach 108th Street	21+78.96	16179	17	*CORNUS FLORIDA*	DOGWOOD, FLOWERING	2	13	6	4	DEAD	X			
TM-2	387	Beach 108th Street	22+14.26	16179	17	*CORNUS FLORIDA*	DOGWOOD, FLOWERING	2	12	6	5	POOR	X			
TM-2	388	Beach 108th Street	22+34.08	16179	15	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2	9	3	4	EXCELLENT			4.22B	2A & 6
TM-2	389	Beach 108th Street	22+54.11	16179	15	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2	10	3	4	EXCELLENT			4.22B	2A & 6
TM-2	390	Beach 108th Street	23+06.69	16179	12	*CORNUS FLORIDA*	DOGWOOD, FLOWERING	2	11	5	5	POOR	X			
TM-2	391	Beach 108th Street	23+35.67	16179	12	*PLATANUS X ACERIFOLIA*	LONDON PLANETREE	16	25	12	28	FAIR			4.22B	2A & 6
TM-2	392	Beach 108th Street	23+55.33	16179	12	*PLATANUS X ACERIFOLIA*	LONDON PLANETREE	15	35	15	30	GOOD			4.22B	2A & 6
TM-2	393	Beach 108th Street	23+75.66	16179	10	*PLATANUS X ACERIFOLIA*	LONDON PLANETREE	15	30	12	34	GOOD			4.22B	2A & 6
TM-2	394	Beach 108th Street	24+16.41	16179	10	*PLATANUS X ACERIFOLIA*	LONDON PLANETREE	17	26	12	32	FAIR			4.22B	2A & 6
TM-2	395	Beach 108th Street	24+35.82	16179	9	*PLATANUS X ACERIFOLIA*	LONDON PLANETREE	17	28	15	40	FAIR	4.16AB			
TM-2	396	Beach 108th Street	24+55.65	16164	5R	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2	10	3	4	EXCELLENT		X		
TM-1	397	Beach 108th Street	24+75.44	16164	5R	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2	10	3	4	EXCELLENT		X		
TM-1	398	Beach 108th Street	24+95.88	16164	13R	*MORUS RUBRA*	MULBERRY, RED	7, 4	25	10	24	POOR				
TM-1	399	Beach 108th Street	25+16.12	16164	14R	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	14	28	15	28	POOR		4.16AB		

TREE TABLE NOTE:

1. REFER TO DWG. NO. TM-4 THROUGH TM-6 FOR TREE MITIGATION DETAILS AND NOTES.

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

B. THAYER ASSOCIATES

FINAL DESIGN PREPARED BY:
B. THAYER ASSOCIATES
NAME OF CONSULTANT
SIGNATURE

DRAWN BY D. MAHER
CADD FILE SANDR04- MITIGATION PLANS

SCALE AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

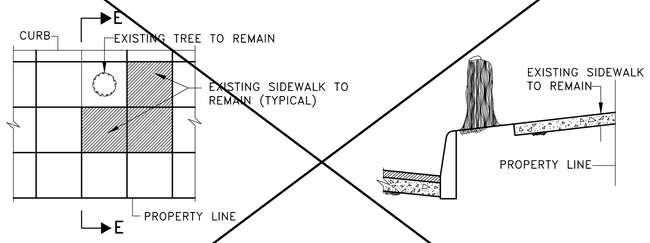
TREE MITIGATION TABLE

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

CAPITAL PROJECT NO. SANDR04 | DATE: 8/17/2018 | SHEET __ OF __ | TM3/TM6

CONSULTANT DESIGN

Sheet File: O:\0783.600.02 - Beach 108St-Dewberry\12 Drawings\12C Preliminary Drawings\SANDR04- Mitigation Plans.dwg
Date/Time: Aug 17, 2018, 5:27pm

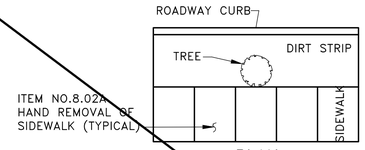


PLAN

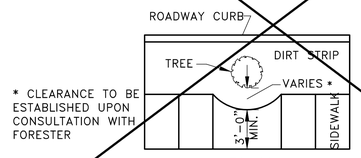
SECTION E–E

CASE NO. 1–EXISTING SIDEWALK TO REMAIN

NOT TO SCALE



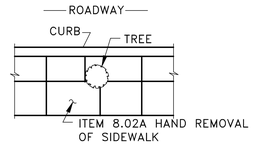
PLAN
EXISTING CONDITION



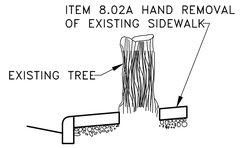
PLAN
PROPOSED TREATMENT

CASE NO. 2–ENLARGED TREE PIT AREA

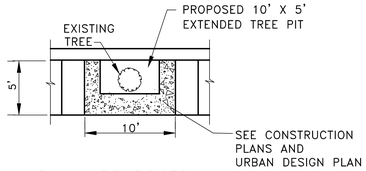
NOT TO SCALE



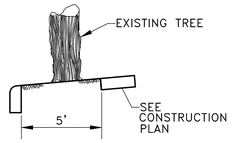
PLAN: EXISTING



SECTION: EXISTING



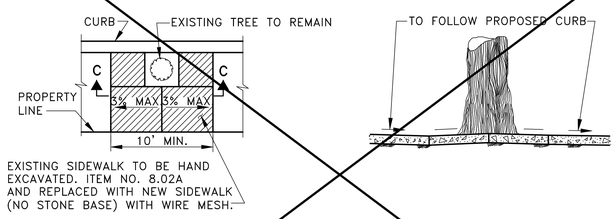
PLAN: PROPOSED



SECTION: PROPOSED

CASE NO. 2A–ENLARGED TREE PIT AREA
FOR EXISTING TREES

NOT TO SCALE

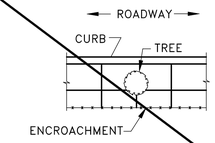


PLAN C

SECTION C–C

CASE NO. 3–RAMPING OF SIDEWALK
OVER TREE ROOT

NOT TO SCALE



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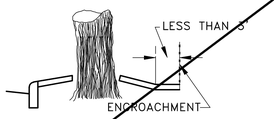
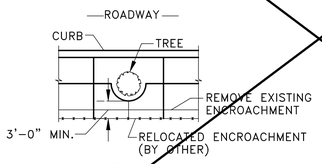


SECTION

EXISTING CONDITION



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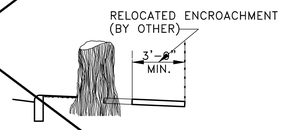

SECTION

PROPOSED TREATMENT

CASE NO. 4–RELOCATED ENCROACHMENT

NOT TO SCALE

SEE NYC DOT STANDARD
DRAWING NO. H–1047

CASE NO. 5–REINFORCED CONCRETE CURB

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

B. THAYER ASSOCIATES

FINAL DESIGN PREPARED BY:
B. THAYER ASSOCIATES
NAME OF CONSULTANT
SIGNATURE

DRAWN BY D. MAHER
CADD FILE SANDR04–TREE MITIGATION DETAILS

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE MITIGATION DETAILS – 1

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

CAPITAL PROJECT NO. SANDR04 | DATE: 8/17/2018 | SHEET __ OF __ | TM4/TM6

CONSULTANT DESIGN

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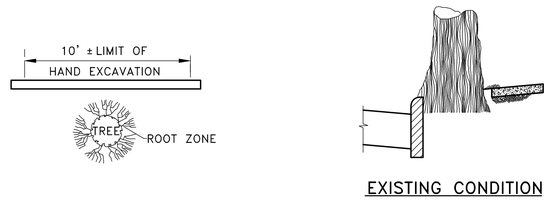
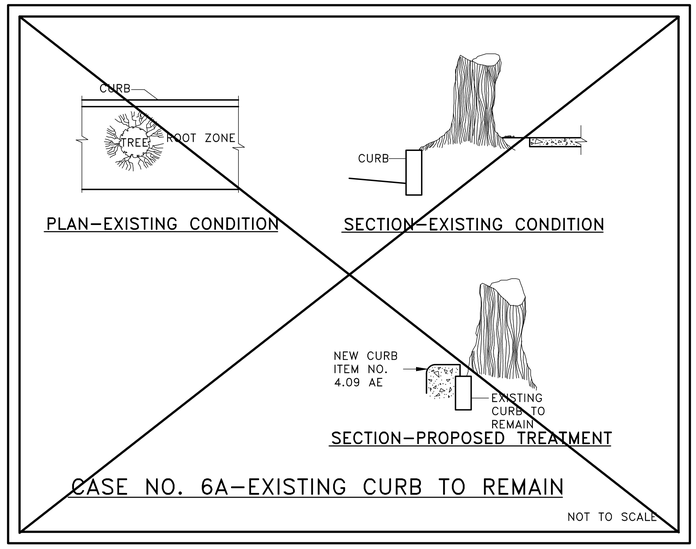
Date/Time: Aug 17, 2018, 4:59pm



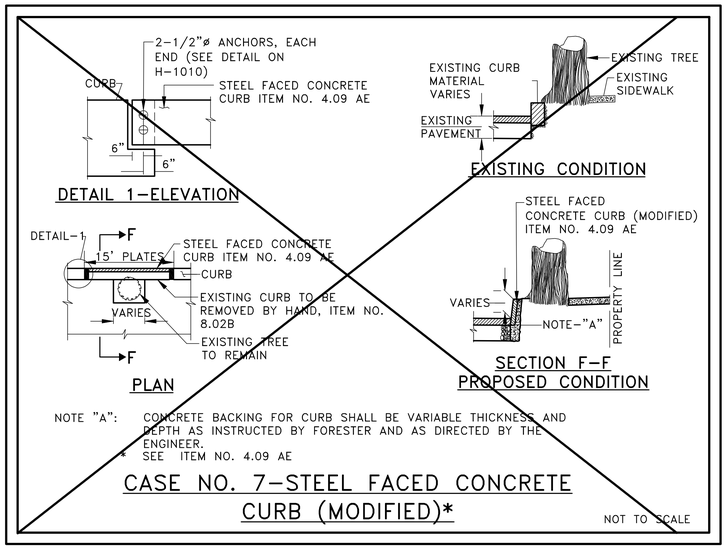
CASE NO. 6–HAND REMOVAL OF EXISTING CURB ADJACENT TO TREE(S)–ITEM NO.8.02B

NOT TO SCALE



CASE NO. 6A–EXISTING CURB TO REMAIN

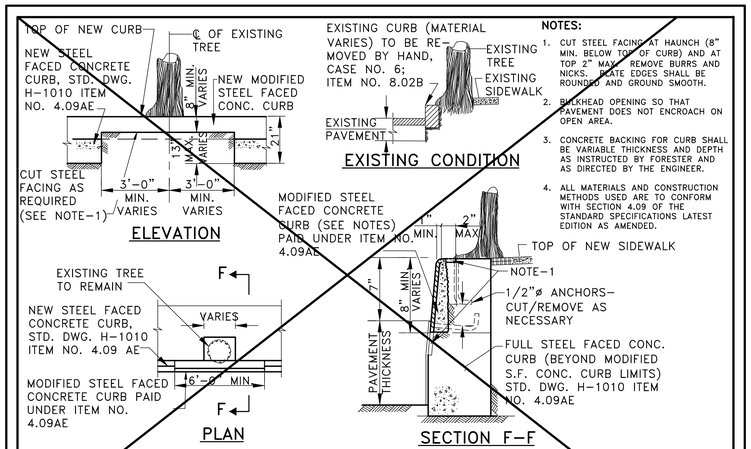
NOT TO SCALE



NOTE "A": CONCRETE BACKING FOR CURB SHALL BE VARIABLE THICKNESS AND DEPTH AS INSTRUCTED BY FORESTER AND AS DIRECTED BY THE ENGINEER.
* SEE ITEM NO. 4.09 AE

CASE NO. 7–STEEL FACED CONCRETE CURB (MODIFIED)*

NOT TO SCALE

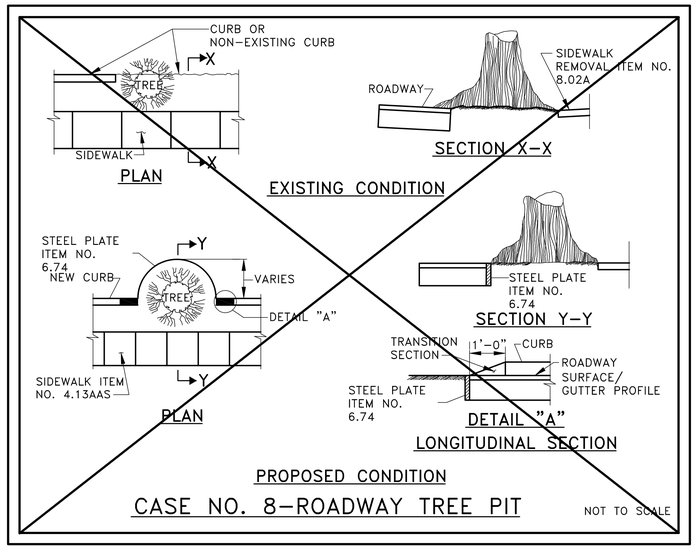


NOTES:

1. CUT STEEL FACING AT HAUNCH (8" MIN. BELOW TOP OF CURB) AND AT TOP 2" MAX. REMOVE BURRS AND NICKS. PLATE EDGES SHALL BE ROUNDED AND GROUND SMOOTH.
2. BULKHEAD OPENING SO THAT PAVEMENT DOES NOT ENCROACH ON OPEN AREA.
3. CONCRETE BACKING FOR CURB SHALL BE VARIABLE THICKNESS AND DEPTH AS INSTRUCTED BY FORESTER AND AS DIRECTED BY THE ENGINEER.
4. ALL MATERIALS AND CONSTRUCTION METHODS USED ARE TO CONFORM WITH SECTION 4.09 OF THE STANDARD SPECIFICATIONS LATEST EDITION AS AMENDED.

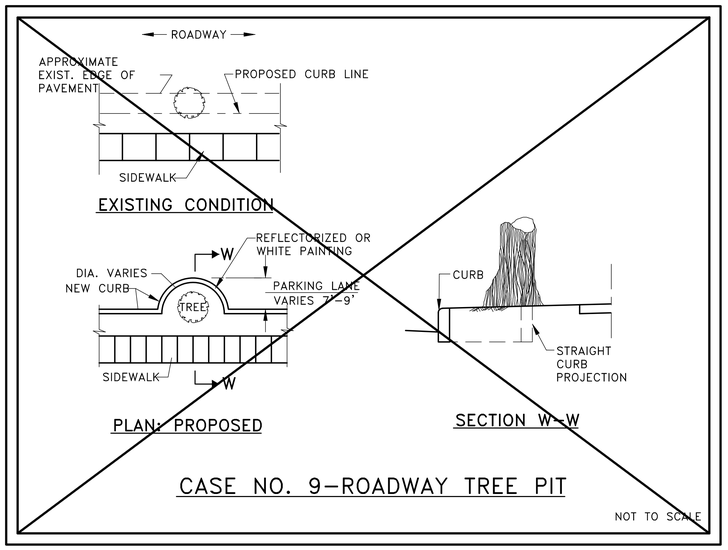
CASE NO. 7A–MODIFIED STEEL FACED CONCRETE CURB DETAIL AT EXISTING TREES

NOT TO SCALE



CASE NO. 8–ROADWAY TREE PIT

NOT TO SCALE



CASE NO. 9–ROADWAY TREE PIT

NOT TO SCALE

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REVISIONS

B. THAYER ASSOCIATES

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SIGNATURE

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TREE MITIGATION DETAILS – 2

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

CAPITAL PROJECT NO. SANDR04 | DATE: 8/17/2018 | SHEET __ OF __ | TM5/TM6

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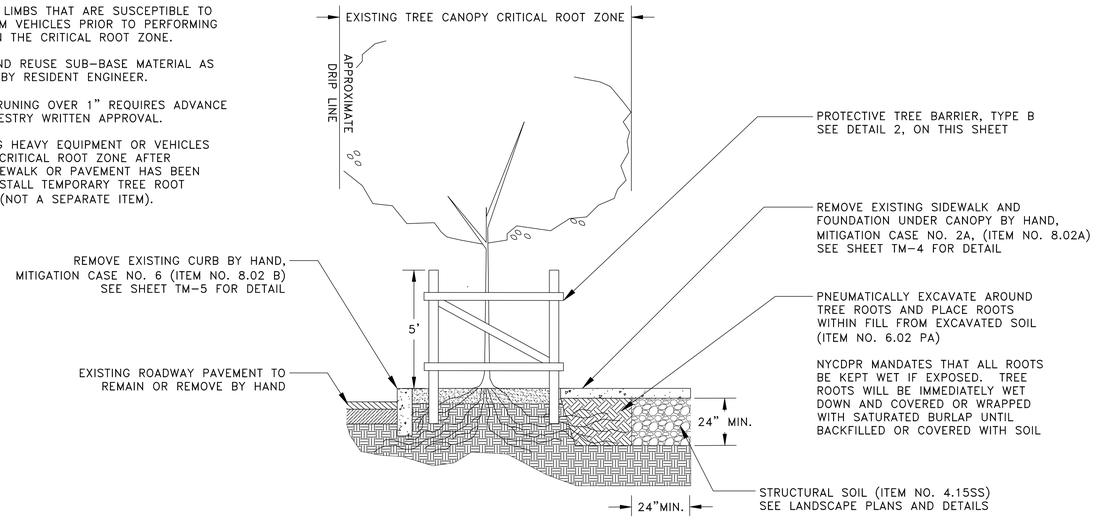
Date/Time: Aug 17, 2018, 4:59pm

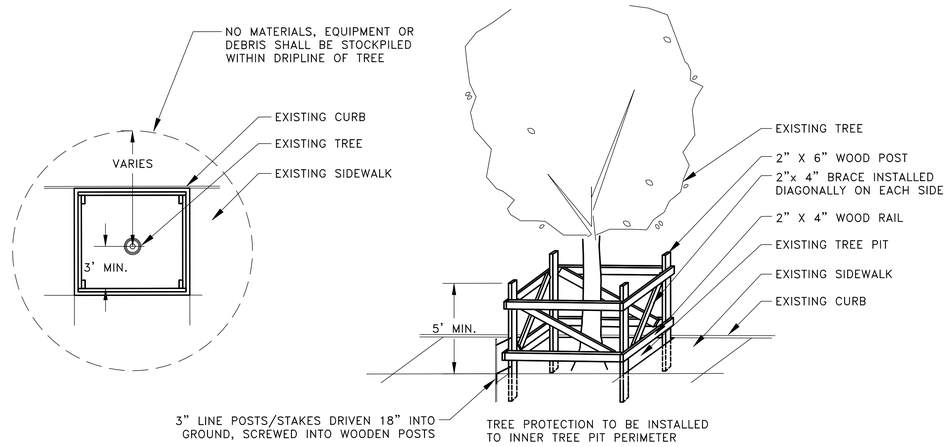
NOTES:

1. CONSULTING ARBORIST MUST SUPERVISE ALL WORK WITHIN THE EXISTING TREE CANOPY CRITICAL ROOT ZONE.
2. PRUNE TREE LIMBS THAT ARE SUSCEPTIBLE TO DAMAGE FROM VEHICLES PRIOR TO PERFORMING WORK WITHIN THE CRITICAL ROOT ZONE.
3. PRESERVE AND REUSE SUB-BASE MATERIAL AS DETERMINED BY RESIDENT ENGINEER.
4. ALL ROOT PRUNING OVER 1" REQUIRES ADVANCE NYCDPR FORESTRY WRITTEN APPROVAL.
5. IF OPERATING HEAVY EQUIPMENT OR VEHICLES WITHIN THE CRITICAL ROOT ZONE AFTER EXISTING SIDEWALK OR PAVEMENT HAS BEEN REMOVED, INSTALL TEMPORARY TREE ROOT PROTECTION (NOT A SEPARATE ITEM).



1 EXISTING TREE MITIGATION DETAIL (TYP.)

NOT TO SCALE

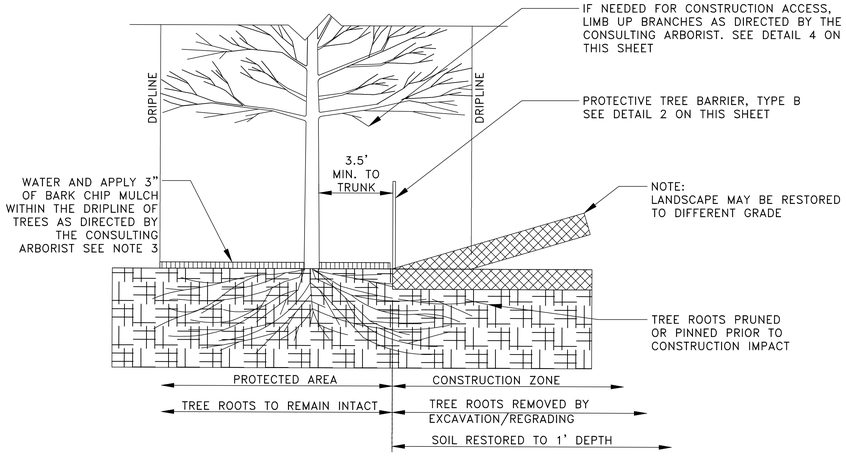


2 PROTECTIVE TREE BARRIER, TYPE B

NOT TO SCALE

NOTES:

1. CONSULTING ARBORIST WILL DIRECTLY SUPERVISE PNEUMATIC EXCAVATION ITEM 6.02PA TO EXPOSE TREE ROOTS PRIOR TO PRUNING/REMOVAL. AT THE TIME OF ROOT EXPOSURE, PARKS DEPARTMENT FORESTRY WILL BE CONSULTED TO DETERMINE THE CONSEQUENCES OF REMOVING OR PINNING THE ROOTS AND APPROVE THE WORK BEFORE IT CAN PROCEED. PNEUMATIC EXCAVATION MAY ALSO BE USED AS AN INVESTIGATIVE TOOL WHEN NEEDED BY THE E.I.C, CONSULTING ARBORIST AND PARKS DEPARTMENT TO EXPLORE THE CONDITION, SIZE AND LOCATION OF ROOTS WITHIN THE CRITICAL ROOT ZONE.
2. SOIL RESTORATION GUIDE – TYPICAL CONDITION. CONSULTING ARBORIST TO DETERMINE BEST TREATMENT FOR EACH LOCATION.
3. INSTALLATION AND MAINTENANCE OF SHREDDED BARK CHIP MULCH SHALL BE PAID FOR UNDER ITEM 8.32.
4. TREE/LANDSCAPE PROTECTION, SEE DETAIL 2 THIS SHEET, MUST BE IN PLACE PRIOR TO START OF CONSTRUCTION, AND REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED.
5. FOR REMEDIATION OF SOIL SEE LANDSCAPE RESTORATION PLANS AND DETAILS.
6. UNDER NO CIRCUMSTANCES MAY HEAVY EQUIPMENT (I.E. PAYLOADERS, BOBCATS, BULLDOZERS) BE USED TO ACCOMPLISH SITE RESTORATION WITHIN THE DRIPLINE OF TREES.



3 SPECIAL PROTECTION FOR EXISTING TREE WHERE TREE ROOTS ARE PINNED OR REMOVED WITHIN DRIPLINE

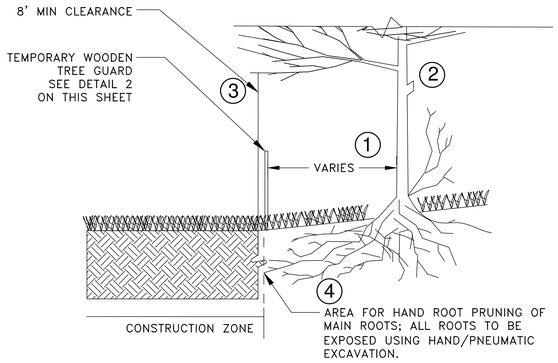
NOT TO SCALE

NOTES:

1. ALL TREE CARE WORK MUST BE PERFORMED UNDER THE SUPERVISION OF THE ENGINEER AND ISA CERTIFIED ARBORIST.
2. DO NOT CUT OR DAMAGE LEADER. PRUNE DAMAGED OR DEAD WOOD IMMEDIATELY AFTER PLANTING.

TREE CARE:

1. REMOVE SUCKER SHOOTS AT BASE OF TREE.
2. MAKE CLEAN CUTS ON OLD STUBS IF PRESENT.
3. REMOVE ONLY BRANCHES THAT OVERHANG ONTO PATHWAYS TO A MIN HEIGHT OF 8'.
4. CAREFULLY MOVE FIBROUS ROOTS ASIDE, CLEANLY PRUNE ROOTS THAT NEED TO BE REMOVED, PUSHING ASIDE ROOTS THAT REMAIN. REMOVE CUT ROOTS, ONCE PRUNING IS COMPLETE MOVE BACK REMAINING FIBROUS ROOTS. KEEP ROOTS MOIST AT ALL TIMES WITH DAMP BURLAP MATERIAL.



4 TREE CARE

NOT TO SCALE

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TREE MITIGATION DETAILS – 3

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

CAPITAL PROJECT NO. SANDR04 | DATE: 8/17/2018 | SHEET __ OF __ | TM6/TM6

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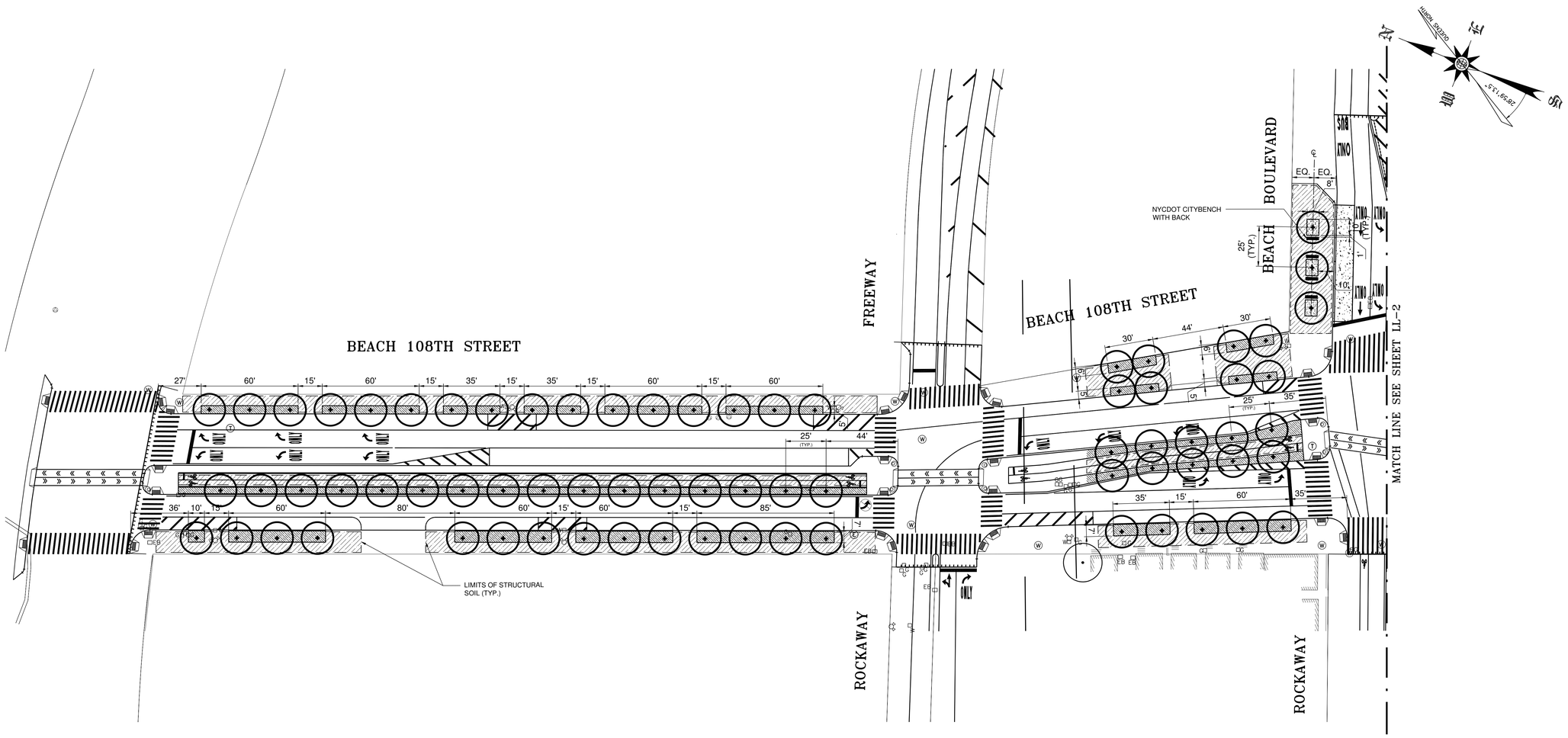
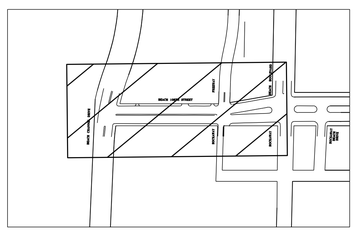


PLAN

SCALE: 1" = 30'



KEY MAP

SCALE: N.T.S.

LEGEND

- EXISTING TREE CANOPY
- EXISTING TREE TRUNK
- PROPOSED DECIDUOUS TREE SEE DETAIL 1 ON DWG LL-3
- PROPOSED EVERGREEN TREE SEE DETAIL 2 ON DWG LL-3
- GRASS TREE STRIP SODDING (ITEM NO. 4.19)
- STRUCTURAL SOIL SEE DETAIL 3 ON DWG LL-4
- NYCDOT CITYBENCH WITH BACK
- NYCDOT CITYBENCH WITHOUT BACK
- NYCDOT CITYBIKE RACK

NOTES:

1. REFER TO DWG. LN-1 FOR ADDITIONAL LANDSCAPE NOTES.
2. FOR FULL PLANTING SCHEDULE, SEE DWG. LL-3.

0 30' 60' 90'

SCALE: 1" = 30'

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B. THAYER ASSOCIATES

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B. THAYER ASSOCIATES
NAME OF CONSULTANT

SIGNATURE

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LANDSCAPE LAYOUT PLAN – 1

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

CAPITAL PROJECT NO. SANDR04 | DATE: 8/17/2018 | SHEET __ OF __ | LL1/LL4

CONSULTANT DESIGN

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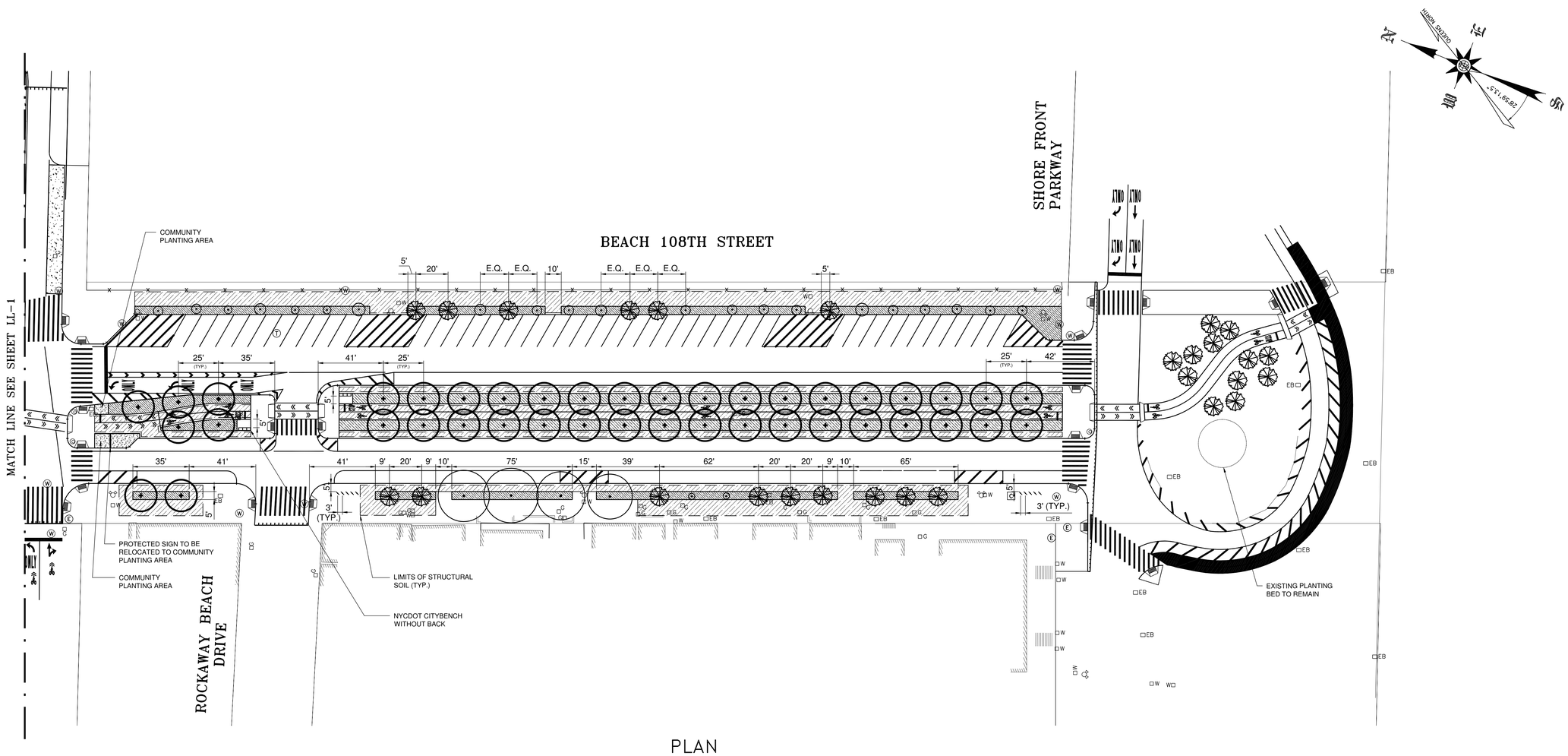
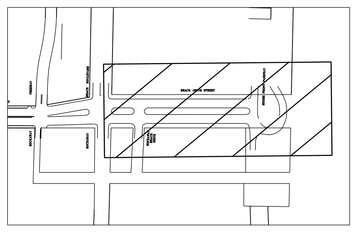


PLAN

SCALE: 1" = 30'



KEY MAP

SCALE: N.T.S.

LEGEND

- EXISTING TREE CANOPY
- EXISTING TREE TRUNK
- PROPOSED DECIDUOUS TREE SEE DETAIL 1 ON DWG LL-3
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- GRASS TREE STRIP SODDING (ITEM NO. 4.19)
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NOTES:

1. REFER TO DWG. LN-1 FOR ADDITIONAL LANDSCAPE NOTES.
2. FOR FULL PLANTING SCHEDULE, SEE DWG. LL-3.

0 30' 60' 90'

SCALE: 1" = 30'

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LANDSCAPE LAYOUT PLAN – 2

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

CAPITAL PROJECT NO. SANDR04 | DATE: 8/17/2018 | SHEET __ OF __ | LL2/LL4

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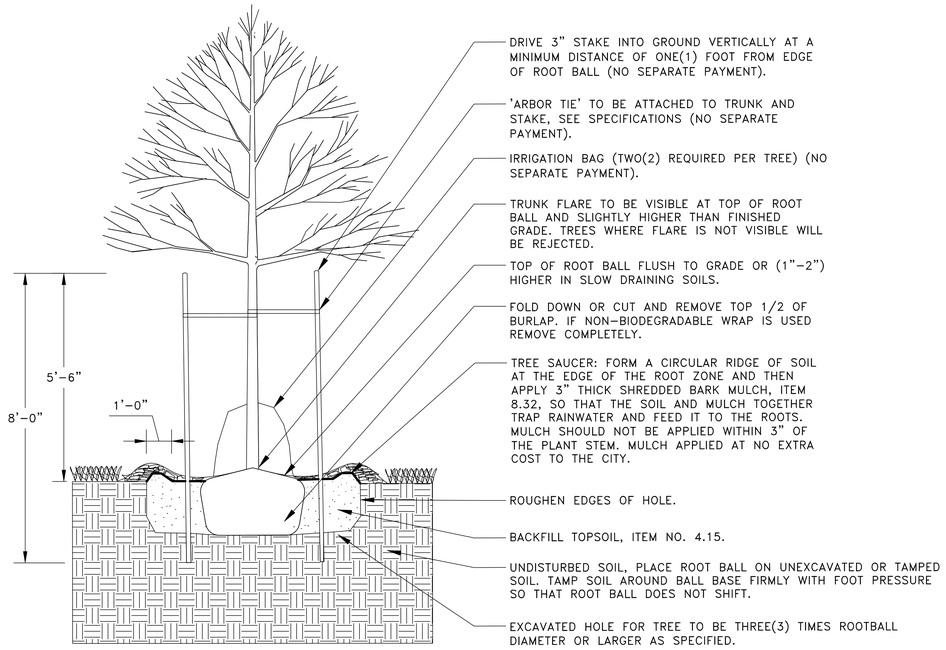
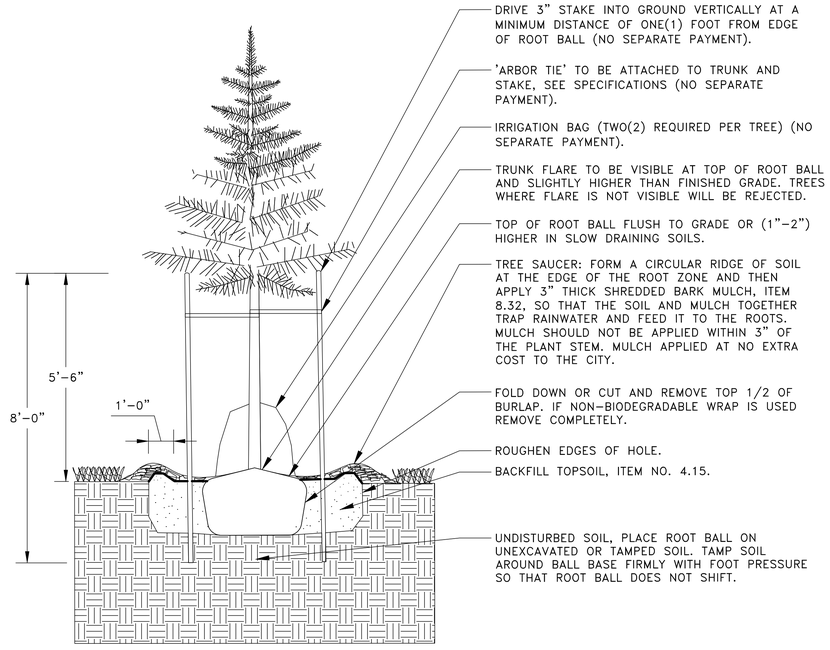


1 PLANTING – DECIDUOUS TREE (TYP.)
NOT TO SCALE



2 PLANTING – CONIFEROUS TREE (TYP.)
NOT TO SCALE

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LANDSCAPE DETAILS – 1

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

CAPITAL PROJECT NO. SANDR04 | DATE: 8/17/2018 | SHEET __ OF __ | LL3/LL4

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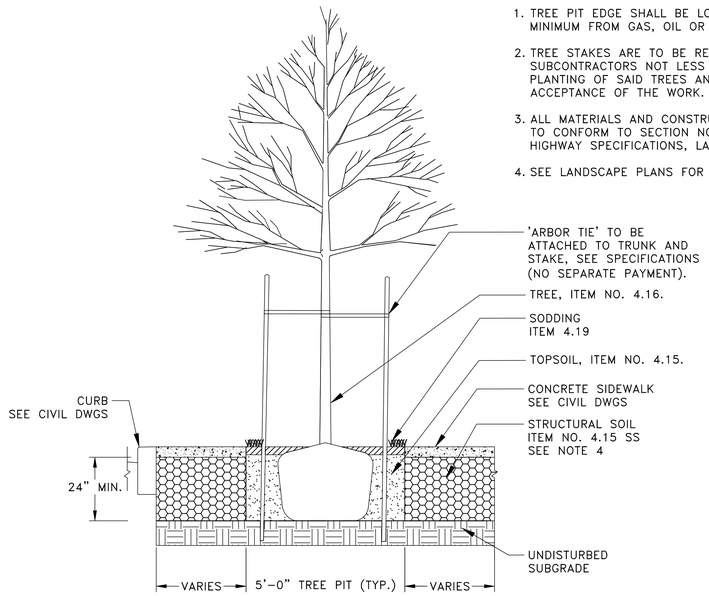
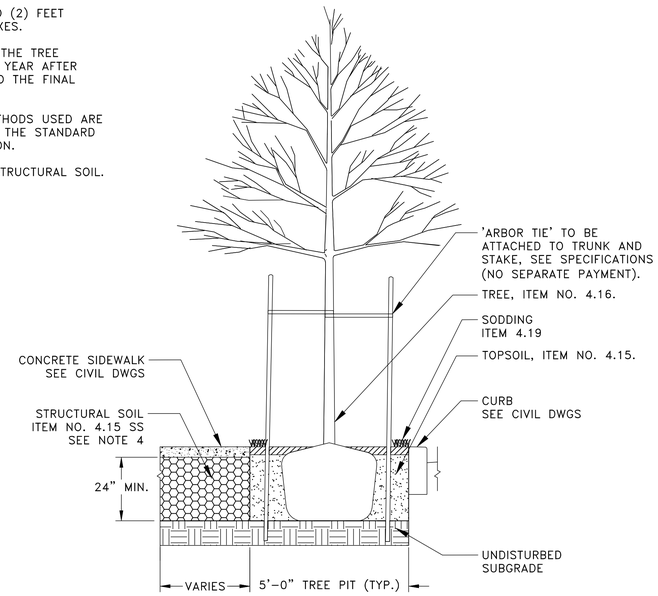
TREE PLANTING NOTES:

1. TREE PIT EDGE SHALL BE LOCATED TWO (2) FEET MINIMUM FROM GAS, OIL OR WATER BOXES.
2. TREE STAKES ARE TO BE REMOVED BY THE TREE SUBCONTRACTORS NOT LESS THAN ONE YEAR AFTER PLANTING OF SAID TREES AND PRIOR TO THE FINAL ACCEPTANCE OF THE WORK.
3. ALL MATERIALS AND CONSTRUCTION METHODS USED ARE TO CONFORM TO SECTION NO. 4.16 OF THE STANDARD HIGHWAY SPECIFICATIONS, LATEST EDITION.
4. SEE LANDSCAPE PLANS FOR LIMIT OF STRUCTURAL SOIL.



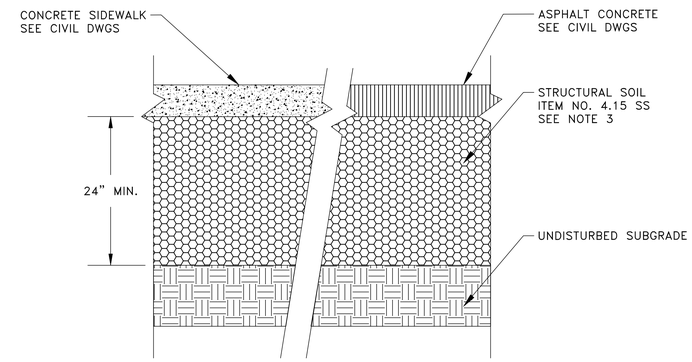
1 TREE PIT DETAIL ALONG WEST SIDEWALK
1/2" = 1'-0"



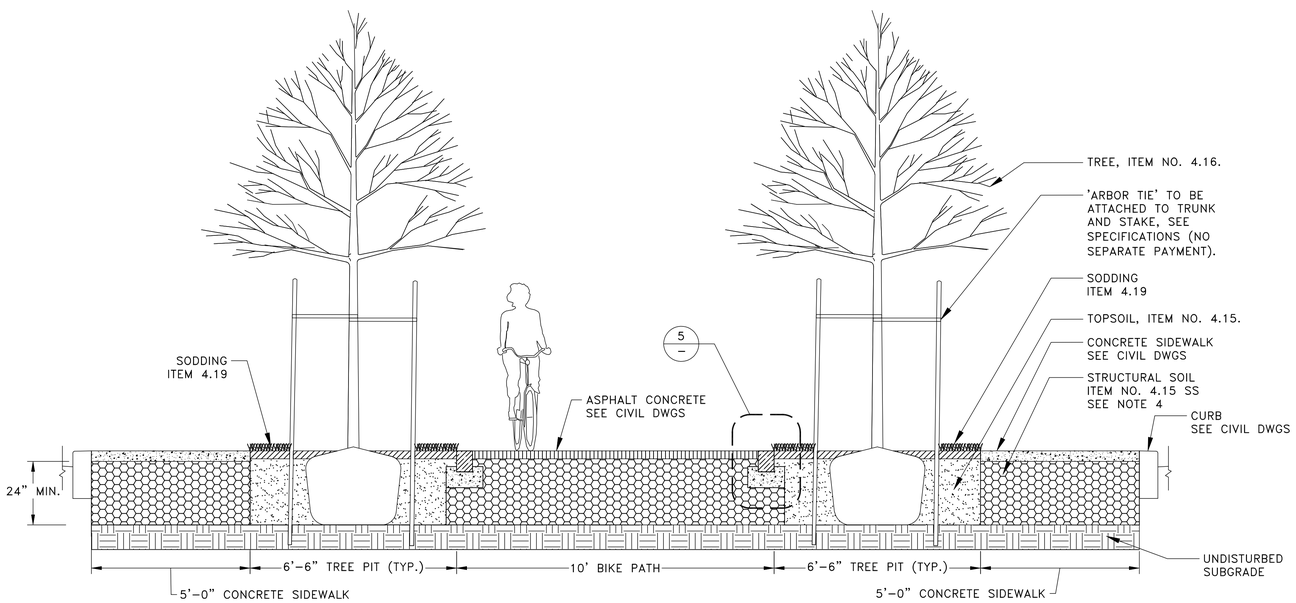
2 TREE PIT DETAIL ALONG EAST SIDEWALK
1/2" = 1'-0"

NOTES:

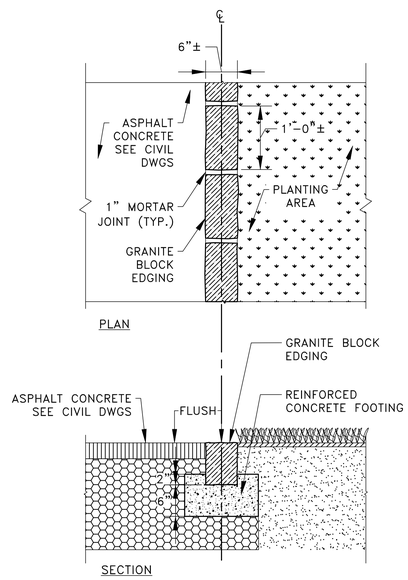
1. STRUCTURAL SOIL TO BE PLACED AT A MINIMUM DEPTH OF 24" BELOW PAVEMENT AS LOCATED ON THE LANDSCAPE RESTORATION PLANS.
2. STRUCTURAL SOIL SHALL BE PLACED IN 6-INCH LIFTS, EACH COMPACTED TO A MINIMUM OF 95% PROCTOR DENSITY.
3. SEE LANDSCAPE PLANS FOR LIMIT OF STRUCTURAL SOIL.



3 STRUCTURAL SOIL – ITEM 4.15 SS
NOT TO SCALE



4 PLANTING DETAIL FOR SOUTHERN RAISED MEDIAN ISLANDS
1/2" = 1'-0"



5 GRANITE BLOCK EDGING
1" = 1'-0"

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		REVISIONS		

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LANDSCAPE DETAILS – 2

BEACH 108TH STREET STREETSCAPE IMPROVEMENTS
FROM SHORE FRONT PARKWAY TO BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

CAPITAL PROJECT NO. SANDR04 | DATE: 8/17/2018 | SHEET __ OF __ | LL4/LL4

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