Environmental Assessment
New York City Department of Parks and Recreation
Rockaway Peninsula Parks, Queens County, NY

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U.S. Department of Homeland Security
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APPENDICES

LIST OF ACRONYMS

APE	Area of Potential Effect
BMPs	Best Management Practices
CBRA	Coastal Barrier Resources Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CRIS	Cultural Resources Information System
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
CZMP	Coastal Zone Management Plan
dB	Decibels
dBA	Decibels (A-weighted)
DHSES	New York State Division of Homeland Security and Emergency Services
EA	Environmental Assessment
ECL	Environmental Conservation Law of New York
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
Leq	Equivalent noise level
Ldn	Day night noise level
LWRP	Local Waterfront Revitalization Program
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOx	Nitrogen Oxides
NO_2	Nitrogen Dioxide
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
NYC	New York City
NYCDPR	New York City Department of Parks and Recreation
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOS	New York State Department of State
NYSHPO	New York State Historic Preservation Officer
O_3	Ozone

OPA	Otherwise Protected Area
PAAP	Public Assistance Alternative Procedures
Pb	Lead
$PM_{2.5}$	Particulate Matter equal to or less than 2.5 micrometers in aerodynamic diameter
PM_{10}	Particulate Matter equal to or less than 10 micrograms per cubic meter of air
SO_2	Sulfur Dioxide
SPDES	State Pollution Discharge Elimination System
SPL	Sound pressure level
SWPPP	Stormwater Pollution Prevention Plan
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USFWS	United States Fish and Wildlife Service
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION

On October 29, 2012, heavy rain, wind, and storm surge from Hurricane Sandy caused damage throughout the New York City (NYC) area including properties owned and operated by the New York City Department of Parks and Recreation (NYCDPR). President Barack Obama declared a major disaster for affected New York counties on October 30, 2012. NYCDPR has applied for Federal Emergency Management Agency (FEMA) financial assistance under both the Public Assistance Program and the Hazard Mitigation Grant Program as subrecipient in accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) of 1974, as amended, (42 United States Code [U.S.C.] §§ 5121-5207); the Sandy Recovery Improvement Act of 2013; and the accompanying Disaster Relief Appropriations Act, 2013. The Sandy Recovery Improvement Act amended the Stafford Act, adding Section 428 Public Assistance Alternative Procedures (PAAP), which authorizes alternative procedures for permanent work funding under the FEMA's Public Assistance Program. The New York State Division of Homeland Security and Emergency Services (DHSES) is the recipient partner for this action.

FEMA prepared this Environmental Assessment (EA) in accordance with Section 102 of the National Environmental Policy Act (NEPA) of 1969, as amended; and the Regulations for Implementation of the National Environmental Policy Act (40 Code of Federal Regulations [CFR] §§1500 to 1508). The purpose of the EA is to analyze the potential environmental impacts of alternatives, including a No Action Alternative, and to determine whether to prepare an Environmental Impact Statement or a Finding of No Significant Impact (FONSI). In accordance with the above referenced regulations and FEMA Directive 108-1 and FEMA Instruction 108-1-1, FEMA evaluates and consider the environmental consequences of actions it funds or undertakes.

2.0 PURPOSE AND NEED

FEMA's Public Assistance Program fosters the protection of health, safety, and welfare of citizens, assists communities in recovering from damages caused by disasters and reduces future losses resulting from natural disasters. The purpose of this project is to reduce damages from storm surge flooding caused by coastal storms such as nor'easters, tropical storms, and hurricanes at NYCDPR parks properties and shorelines on the Rockaway Peninsula. NYCDPR completed projects approved under FEMA's Section 428 PAAP under budget and is considering using the excess funds for other resiliency projects. NYCDPR identified resiliency opportunities on the Rockaway Peninsula at NYCDPR-owned properties. The need for the proposed projects is to enhance resiliency of parks on the Rockaway Peninsula against future storm surge and flooding events as well as to provide recreational opportunities by incorporating such measures into park design features.

3.0 BACKGROUND

Approximately five miles of the Rockaway Beach Boardwalk was damaged during Hurricane Sandy. NYCDPR used funding from FEMA Section 428 PAAP and the Department of Housing and Urban Development to restore the boardwalk from Beach 20th to Beach 126th Streets making it more resilient to future storm events. NYCDPR completed that project under budget and has identified facilities in the area where the excess funds could be used for further resiliency work; Bayswater Park, Rockaway Community Park, Beach 88th St / Bay Breeze Park, and Thursby Basin Park.

The U.S. Army Corps of Engineers (USACE) is preparing restoration and resiliency work along Rockaway Beach and the Rockaway Peninsula, for which USACE completed an Environmental Impact Statement. On the Jamaica Bay side of the Rockaway Peninsula, this work consists of a combination of flood and erosion protection measures including bulkheads, berms, stormwater drainage and pump systems, and features including stone toe protection, and grading and seeding shorelines for development of wetland habitats. Some areas of the proposed USACE work approach the Parks properties examined in this EA.

4.0 ALTERNATIVES

This section discusses the No Action Alternative as a basis for analysis and those alternatives that were considered but eliminated from further analysis. The proposed action is in Queens County at various locations on the Rockaway Peninsula, specifically along the bayside shoreline (Appendix B, Figure 1).

4.1 Alternative 1: No Action Alternative

The No Action Alternative is defined as maintaining the status quo with no FEMA involvement. The existing parks and NYCDPR properties identified would remain in their current state and additional resiliency measures would not be implemented. These coastal parks would remain vulnerable to storm events. Routine maintenance undertaken by NYCDPR, as well as USACE work along the bay, are not part of the proposed project and would still occur under the No Action Alternative.

4.2 Alternative 2 - Proposed Action: Parks Development and Resiliency Measures

The proposed project consists of updates to Bayswater Park, Rockaway Community Park, and Beach 88th St / Bay Breeze Park, and construction of the proposed new Thursby Basin Park. Appurtenances at the four parks may include active and passive recreation areas, benches, tables, fencing and water drainage or water retention features. Proposed work at the 40-acre Bayswater Park includes construction of a planted berm and trail starting at approximately Beach 35th Street and Norton Avenue, adjoining to the USACE proposed berm. In addition to park appurtenances, the proposal at this location includes construction of a new park office and storage building for park equipment. The proposal at the approximately 66-acre Rockaway Community Park consists of predominantly wetland enhancement, slope stabilization, and pedestrian circulation improvements on both the Sommerville and Conch Basins sides of the proposed

USACE berms. Proposed work at the 2.3-acre Beach 88th St / Bay Breeze Park is east of the terminus of the USACE proposed berm ending by or about Old Beach 88th Street and entails primarily improvements to park appurtenances. It also includes new shoreline armoring landward of the mean high-water line and to protect beach access and the kayak ramp. Proposed work at Thursby Basin will convert a vacant 2-acre parcel into a park landward of the USACE proposed bulkhead at that location. See Appendix B for the relative location of each site and conceptual drawings of each park.

5.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

This section discusses the potential impacts of the No Action Alternative and the Proposed Action on environmental resources. When possible, quantitative information is provided to establish potential impacts that are evaluated based on the criteria listed in the Table below.

Impact Significance and Context Evaluation Criteria for Potential Impacts

Impact Scale	Criteria
No impact	The resource area would not be affected and there would be no impact.
Negligible	Changes would either be non-detectable or, if detected, would have effects that would be slight and local. Adverse impacts would be well below regulatory standards, as applicable.
Minor	Changes to the resource would be measurable, but the changes would be small and localized. Adverse impacts would be within or below regulatory standards, as applicable. Mitigation measures would reduce any potential adverse effects.
Moderate	Changes to the resource would be measurable and have either localized or regional scale impacts. Adverse impacts would be within or below regulatory standards, but historical conditions would be altered on a short-term basis. Mitigation measures would be necessary, and the measures would reduce any potential adverse effects.
Major	Changes to the resource would be readily measurable and would have substantial consequences on regional levels. Adverse impacts would exceed regulatory standards. Mitigation measures to offset the adverse effects would be required to reduce impacts, though long-term changes to the resource would be expected.

The following resource topics are omitted because FEMA anticipates no substantive impacts for the project considered in this EA:

- Essential Fish Habitat
- Migratory Birds
- Hazardous Materials
- Land Use and Planning

5.1 Geology, Soils, and Topography

Geologic and topographic characteristics such as depth to bedrock, slopes, or soil erodibility may affect project design and construction methods. The regulatory implications of geology, topography, and soils for a project are generally established through structural codes specified in local building and zoning regulations.

5.1.1 Existing Conditions

5.1.1.1 Geology and Topography

In Queens, the bedrock is buried under a significant depth of deposits of sediment comprised mostly of alluvium, clay, mud, glacial deposits, and silt. The dominating landscape features include a low, flat plain that slopes gently southward towards the south shore of Long Island and a series of narrow beaches and dunes that run along the south shore.

5.1.1.2 Soils

According to the U.S. Department of Agriculture's Web Soil Survey operated by the Natural Resources Conservation Service, the majority of soils present within the project areas consist of "Urban Land," which are areas with highly disturbed soils and impervious cover. In addition to fill, other disturbances within and adjacent to the project areas consist of previous cutting and grading associated with parking lots, roads, and underground utility construction.

5.1.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action Alternative

Under the No Action Alternative, there would be no ground disturbing activities. Therefore, there would be no effect on geology, topography, or soils.

Alternative 2: Proposed Action - Parks Development and Resiliency Measures

Under the Proposed Action, there would be no impacts on geological features as the projects would not extend beyond the unconsolidated material well above the surface of the bedrock. Short-term minor impacts on soils would occur during construction of new structures from machinery and potential use of unpaved staging areas at each site. In these areas, disturbance of the surface soils from construction activities could result in erosion and sedimentation. Minor, long-term impacts would occur at each proposed project site due to any clearing, grubbing, grading, or excavation required for construction that would permanently alter the characteristics of the surface soils. Long-term permanent effects would also occur where new impervious surfaces would be created. However, because the project sites are all located within highly urbanized areas, these effects will be minor and localized.

Erosion and sedimentation impacts would be minimized through the implementation of an approved erosion and sediment control plan for construction activities. The subrecipient will use location-appropriate best management practices (BMPs). BMPs for soil erosion and sediment control may include, but are not limited to, the installation of perimeter silt fences to control the migration of silt from the site and revegetation of bare soils to minimize erosion. The nature of the shoreline work at each site in this Alternative would also serve to bolster resiliency through either native plantings or man-made structures to limit wave energy that causes erosion.

5.2 Air Quality

The Environmental Protection Agency (EPA) has established primary and secondary National Ambient Air Quality Standards (NAAQS) under the provisions of the Clean Air Act of 1970 (42 U.S.C. Part 7401 *et seq*.). Primary standards define levels of air quality necessary to protect public health with an adequate margin of safety. Secondary air quality standards protect the public's welfare by promoting ecosystem health, preventing decreased visibility, and reducing impacts to vegetation and wildlife. Federal NAAQS are currently established for the following seven criteria pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), sulfur dioxide (SO_2), lead (Pb), particulate matter equal to or less than 10 micrograms per cubic meter of air (PM_{10}), and PM equal to or less than 2.5 micrometers in aerodynamic diameter ($PM_{2.5}$). NAAQS currently applicable to New York State are provided in Appendix, C Table 1.

Federally funded actions in nonattainment and maintenance areas are subject to General Conformity under Subpart B of 40 CFR Part 93 unless otherwise exempted or related to highway or transit projects regulated under Subpart A. These do not include stationary source emissions regulated under EPA's New Source Review Programs. For New York State, the applicable *de minimis* levels are as follows:

- CO < 100 tons per year
- Nitrogen oxides (NO_x – including NO_2) < 100 tons per year
- SO_2 ($PM_{2.5}$ precursor) < 100 tons per year
- Pb < 25 tons per year
- PM_{10} < 100 tons per year
- $PM_{2.5}$ < 100 tons per year
- Volatile organic compounds (VOCs) < 50 tons per year

O_3 is a photochemical oxidant that is formed in the atmosphere from VOCs and NO_x. The *de minimis* levels for NO_x and VOCs are applicable to moderate and marginal O_3 nonattainment areas inside the O_3 transport region. The *de minimis* levels for $PM_{2.5}$ and SO_2 are applicable to $PM_{2.5}$ nonattainment and maintenance areas, and the *de minimis* levels for CO are applicable to CO nonattainment and maintenance areas. The emissions from construction activities are subject to air conformity review unless they are shown to be below the applicable *de minimis* levels.

5.2.1 Existing Conditions

New York City has been designated as in maintenance for CO, $PM_{2.5}$, and lead and is currently in attainment of the annual-average NO_2 standard. Queens County is designated as a non-attainment area for 8-Hr Ozone.

5.2.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action Alternative

Under the No Action Alternative, air quality would not change as no emissions from work at these sites would occur. Therefore, the No Action Alternative would have no impact on air quality.

Alternative 2: Proposed Action - Parks Development and Resiliency Measures

This alternative would result in temporary emissions due to construction activities. $PM_{2.5}$ and PM_{10} levels would likely increase during excavation of soils and due to construction equipment operation. Emissions from construction vehicles, generators, and equipment could temporarily increase the levels of some of the criteria pollutants, including CO, NO_2, O_3, PM_{10}, and non-criteria pollutants such as VOCs. To limit emissions of these pollutants, running times for fuel-burning equipment would be kept to a minimum, and engines would be properly maintained. Ultra-low sulfur diesel fuel would also be used, as required by the Clean Air Non-road Diesel Rule. FEMA anticipates emissions would be below the *de minimis* levels; the subrecipient is required to conduct general conformity applicability analysis to confirm this. Overall, FEMA anticipates impacts on air quality will be minor with no long-term impacts as construction activity would be temporary and BMPs are implemented.

5.3 Water Resources

5.3.1 Water Quality

The Clean Water Act (CWA) regulates the discharge of pollutants into waters of the U.S. with responsibility for implementation falling under the jurisdiction of USACE and EPA. Section 404 of the CWA establishes USACE permit requirements for discharging dredged or fill materials. Under Section 402 of the CWA, the National Pollution Discharge Elimination System (NPDES), EPA regulates both point and non-point pollutant sources including stormwater and stormwater runoff. In New York, EPA has delegated the authority to New York State Department of Environmental Conservation (NYSDEC) to administer the NPDES program, referred to as the State Pollution Discharge Elimination System (SPDES). Activities that disturb one acre or more of ground require an SPDES permit. The SPDES permit requires applicants to prepare a Stormwater Pollution Prevention Plan (SWPPP).

Section 1424(e) of the Safe Drinking Water Act of 1974 (Public Law 93–523) authorizes EPA to designate an aquifer for special protection under the sole-source aquifer program. EPA can make this designation if

the aquifer is the sole or principal drinking water resource for an area and if its contamination would create a significant hazard to public health. No federal financial assistance may be provided for any project that EPA determines may contaminate a sole source aquifer.

EPA has designated the project area as part of the Kings/Queens Counties Aquifer System. In Kings and southern Queens Counties, the Upper Glacial Aquifer is underlain by the Pleistocene Gardiners Clay which serves as the confining layer and the Jameco Gravel Aquifer. Below these are the much larger Magothy and Lloyd Aquifers.

5.3.2 Wetlands

Wetlands are areas where surface or groundwater inundates or saturates with a frequency and duration sufficient to support, and that under normal hydrological conditions, do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Actions that may impact wetlands require review under several regulatory programs. Executive Order (EO) 11990, Protection of Wetlands, requires that federally funded agencies avoid, minimize, and mitigate any direct or indirect impacts on wetlands. If an activity affecting a wetland cannot be avoided, the agency must demonstrate that there are no practicable alternatives. Section 404 establishes a permit system to authorize dredge or fill activities in wetlands and requires compensatory mitigation for impacts.

FEMA implements EO 11990 through 44 CFR Part 9 concurrently with EO 11988 (See Section 5.5.3) and uses the 8-step decision making process to evaluate potential effects on and mitigate impacts to wetlands and floodplains. In New York, NYSDEC administers and regulates wetlands under the Freshwater Wetlands Act (Article 24 of Environmental Conservation Law [ECL]) and the Tidal Wetlands Act (Article 25 of ECL – 6 New York Codes, Rules, and Regulations [NYCRR] Part 661). The United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) map is considered the best available information for wetland mapping.

5.3.3 Floodplain

FEMA uses the 8-step decision-making process for activities that would affect a floodplain to ensure that the proposed project is consistent with EO 11988, Floodplain Management. This process requires evaluating practicable alternatives that avoid or minimize potential adverse impacts on floodplains. If no practicable alternatives exist within or affecting the floodplain, FEMA then seeks to minimize the adverse impacts.

FEMA produces Flood Insurance Rate Maps (FIRMs) to determine if an action is located in the floodplain. FIRMs depict calculated locations of the one percent (100-year) and the 0.2 percent (500-year) floodplains, coastal high hazard areas, and base flood elevation levels. FEMA develops the FIRMs through a mapping process that takes into account topography and history of flooding in the region. In January 2015, FEMA released Preliminary FIRMs for New York City. For EO 11988, Preliminary FIRMs are considered the best available data for New York City.

5.3.4 Existing Conditions

New York City is a heavily urbanized area where excavation, filling, construction, and paving have altered surface conditions, including many areas along the Rockaway Peninsula. All four proposed sites are along the shores of Jamaica Bay, mapped as Estuarine and Marine Deepwater in the USFWS NWI map. Parks work at all proposed sites except Thursby Basin Park (where USACE is handling the shoreline protection) may require CWA Section 401/404 permits from NYSDEC and USACE.

Proposed NYCDPR development sites included in this EA are in flood zones VE and AE, per the NYC Preliminary FIRMs dated January 2015. In accordance with EO 11988, FEMA published an Initial Public Notice for the declared disaster (DR-4085 Hurricane Sandy New York) in the *New York Post* on December 14, 2012, as notification that declared counties included mapped floodplains and wetlands.

5.3.5 Potential Impacts and Proposed Mitigation

Alternative 1: No Action Alternative

Under the No Action Alternative there would be no impact on water quality or aquifers. Floodplains and wetlands would see minor adverse impacts, as floodplains would remain vulnerable to flooding and storm surge, and wetlands would remain low quality with invasive plant species and continued coastal erosion.

Alternative 2: Proposed Action - Parks Development and Resiliency Measures

The subrecipient is required to prepare a SWPPP for construction activities of one acre or greater for each site and follow the conditions of SPDES General Permit for Stormwater Discharges from Construction Activity. FEMA anticipates site- and activity-appropriate BMPs, such as silt fences and inlet protection, will minimize adverse effects on water quality during construction. Therefore, any construction-related stormwater runoff would be localized and would result in negligible short-term impacts on water quality.

The total of impervious surfaces would be increased by the construction at each site for buildings, pathways, and recreational features. Greater impervious surface coverage would increase stormwater runoff and the potential pollutant loading of that stormwater. However, because the project areas are within heavily urbanized areas, the incremental increase in stormwater runoff and pollutant loading would be negligible. FEMA anticipates no impact to aquifers as the work does not include substantive new water demand, wastewater discharges, or work to a depth that would affect the aquifer.

FEMA conducted the 8-step decision-making process for the proposed action as described in this EA (Appendix A, Document 1). The project would not encourage further development in the floodplain due to the parks' siting in heavily developed areas. Construction activities would comply with all building code requirements including those for flood-resistant structures located in the 100-year flood zone. FEMA anticipates that BMPs and permit requirements will limit construction to negligible short-term impacts to wetlands and floodplains. FEMA anticipates a long-term moderate benefit to wetlands as the removal of

invasive *Phragmites* and replacement with native plantings will improve the health of wetlands in that area. This will help diffuse storm surge and overland flooding as well as support native wildlife.

FEMA also anticipates a long-term moderate benefit to floodplains. Components such as hardened shorelines and rip rap will help reduce the impacts of storm surge and wave action, limiting damage to floodplains and nearby wetlands during storm events. Bioswales will help slow or retain flood waters. Berms will reduce the risk of flooding to adjacent properties already within floodplains and reduce debris from impacting floodplains and wetlands following storm events. Structures and appurtenances will be built in accordance with codes and local floodplain administrator requirements.

5.4 Coastal Resources

The Coastal Zone Management Act (CZMA) is administered by states with coastal shorelines to manage development with a Coastal Zone Management Plan (CZMP). Projects located within designated coastal zones or impacting coastal zones must be evaluated to ensure they are consistent with a state's CZMP. The New York State Department of State (NYSDOS) is responsible for administering the CZMP and maintaining maps of the coastal zone boundaries. The CZMP's coastal management policies seek to promote the beneficial use of coastal resources; prevent their impairment; and management of major activities that may substantially affect resources. Projects receiving federal assistance must follow the procedures outlined in 15 CFR 930 for federal coastal zone consistency determinations.

In New York City, there are three main regulatory programs that target the protection of natural areas; the Special Natural Waterfront Areas, the Significant Coastal Fish and Wildlife Habitats, and the Coastal Erosion Hazard Areas. The Coastal Erosion Hazard Law (ECL 34) empowers NYSDEC to identify and map coastal erosion hazard areas and to adopt regulations (6 NYCRR Part 505). The Coastal Erosion Hazard Area Permit Program manages regulated activities or land disturbance on properties within the coastal erosion hazard areas.

The Coastal Barrier Resources Act (CBRA) of 1982 designated relatively undeveloped coastal barriers along the Atlantic and Gulf coasts of the United States as part of the John H. Chafee Coastal Barrier Resources System and made these areas ineligible for most new federal expenditures and financial assistance. Congress designates mapped areas called system units to reserve primarily for wildlife refuge, sanctuary, recreational, or natural resource conservation purposes. CBRA was amended by the Coastal Barrier Improvement Act (CBIA) of 1990 which added the new designation Otherwise Protected Areas (OPAs). OPAs are mapped areas where only federal flood insurance is restricted.

5.4.1 Existing Conditions

The entire Rockaway Peninsula, including all proposed project sites, are located in the coastal zone (Appendix B, Figure 4), which requires conformance with the State's adopted CZMP. New York City is a Local Waterfront Revitalization Program (LWRP) Community. The LWRP is a planning and regulatory tool that allows a community to refine Statewide coastal policies to apply to local conditions.

No NYCDPR properties examined in this EA are within Coastal Barrier Resource Zones or Otherwise Protected Areas covered under the Coastal Barrier Resource Act, though each site is on the coastline of Jamaica Bay OPA NY-60P. All four Parks facilities discussed in this EA are within the NYC Special Natural Waterfront Area and Significant Coastal Fish and Wildlife Habitat Area for Jamaica Bay as well.

5.4.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action Alternative

Under this alternative, there would be no new work at NYCDPR Parks facilities on the Rockaway Peninsula. Therefore, there would be no change in the coastal characteristic of the area and no effect on coastal resources.

Alternative 2: Proposed Action - Parks Development and Resiliency Measures

In accordance with the requirement of the CZMA, FEMA consulted with NYSDOS on May 1, 2020, and received concurrence with FEMA's Coastal Zone Consistency Determination for each project site on July 22, 2020 (Appendix D, Correspondence 1). Work at the project sites would have a negligible effect on the Coastal Zone and would not have negative impact on scenic resources or coastal erosion. There would be long-term minor beneficial impacts to providing water-based recreation and protecting coastal resources consistent with CZMA and the LWRP. While the proposed project sites are all adjacent to OPA NY-60P, FEMA anticipates no impacts to the system unit.

5.5 Biological Resources

Biological resources include plants and animals and their habitats. Sensitive biological resources are protected under various federal laws and EOs including EO 13112 on Invasive Species and the Endangered Species Act (ESA).

5.5.1 Invasive Species

Federal agencies are required under EO 13112, Invasive Species, to prevent the introduction of invasive plant and animal species and provide for their control to minimize the economic, ecological, and human health impacts that invasive species can cause. Invasive species often prefer disturbed habitats and generally possess high dispersal abilities, enabling them to out-compete native species. In addition to EO 13112, New York State Title 6 Part 575 of the NYCRR which prohibits and regulates invasive species at the state level.

5.5.2 Endangered Species Act

The ESA of 1973 provides a program for the conservation of threatened and endangered plants and animals and their habitats. USFWS is the lead federal regulatory agency for implementing the ESA for terrestrial and freshwater animal and plant species. The law requires federal agencies to ensure that actions

they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species. The law also prohibits any action that causes a "taking" of any listed species. In addition, New York State designates state-listed species that receive protection as authorized by the Environmental Conservation Law (ECL) of New York, Section 11-0535 and as specified in Section 182.2 Title 6 Part 182 of the NYCRR. The New York Natural Heritage Program tracks the status of threatened and endangered species in the state and maintains a database of rare plant and animal observations. Protection for marine and anadromous aquatic species listed under the ESA is administered by the National Oceanic and Atmospheric Administration (NOAA).

USFWS lists one plant and three animal species as federally threatened or endangered in Queens County. Seabeach amaranth (*Amaranthus pumilus*) is a plant native to Atlantic Coast beaches and barrier islands and is listed as federally threatened. The primary habitat of seabeach amaranth is overwash flats at accreting ends of islands, lower fore dunes, and upper strands of non-eroding beaches landward of the debris line. Seabeach amaranth usually grows on a nearly pure sand substrate, occasionally with shell fragments mixed in.

The federally threatened piping plover (*Charadrius melodus*) is a bird that uses open, sandy beaches close to the primary dune of barrier islands and Atlantic coastlines for breeding. They prefer sparsely vegetated open sand, gravel, or cobble for a nest site. They forage along the wrack line where the tide washes up onto the beach. The federally threatened red knot (*Calidris canutus*) is a bird that is found along coastal and bay beaches and mudflats. Federally endangered roseate terns (*Sterna dougallii dougallii*) is a bird that breeds in colonies almost exclusively on small offshore islands and only rarely on large islands. The northeastern colonies are on rocky offshore islands, barrier beaches, or salt marsh islands. Colonies are found close to shallow water fishing sites with sandy bottoms, bars, or shoals.

5.5.1 Existing Conditions

The presence or absence of wildlife within or adjacent to project areas would be largely determined by the presence of suitable habitat, which is primarily a product of soils, hydrology, vegetation, and the extent of human disturbance. The project sites at Beach 88th St / Bay Breeze Park and Thursby Basin Park relatively smaller and less densely vegetated and would be expected to only support those species that are highly adapted to living in urban conditions. Those sites have very limited areas where wildlife may be found and most wildlife using or crossing a property would be transitory in nature. Bayswater Park and Rockaway Community Park, however, are both considerably larger and have wider areas of relatively undeveloped land and wetlands. Wildlife adapted to urbanized areas may also be found in these parks, but there is also considerable shoreline habitat that may be conductive to more permanent use.

5.5.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action Alternative

Under the No Action Alternative, there would be no construction at the project sites. Therefore, there would be no effect on vegetation or wildlife habitats, including threatened and endangered species or their designated critical habitat. There would be no activities that could result in the spread of invasive Phragmites at Bayswater Park, though they would persist on the site.

Alternative 2: Proposed Action - Parks Development and Resiliency Measures

Areas of Bayswater Park have invasive Phragmites plants along the waters of Jamaica Bay, which outcompete native vegetation and create a monoculture that is inhospitable to wildlife.

Construction of new Parks facilities would result in a minor, short-term disturbance of vegetation. Vegetation would be restored or replaced to the extent practicable using native plants, including wetland and upland restorations at Bayswater Park and Rockaway Community Park. The removal of invasive Phragmites would be a minor long-term beneficial impact for the wetland ecosystem in Bayswater Park.

FEMA reviewed the USFWS Information, Planning, and Conservation System, which indicates no designated critical habitat is present within any proposed project area. FEMA determined that the activities of the Preferred Alternative would have no effect on the seabeach amaranth and roseate tern due to lack of habitat. For the piping plover, FEMA reached a determination of "*May affect, not likely to adversely affect*" for work at Bayswater Park and Rockaway Community Park, and *"no effect"* at Beach 88th St / Bay Breeze Park, and Thursby Basin Park. For the red knot, FEMA found the proposal *"May affect, not likely to adversely affect"* at Bayswater Park, Rockaway Community Park, and Beach 88th St / Bay Breeze Park and *"no effect"* at Thursby Basin Park. FEMA consulted with USFWS on May 29, 2020 and no response was received as of the writing of this EA. FEMA assumes concurrence with the findings of the consultation after 30 days allowance for review (Appendix D, Correspondence 3).

Given the FEMA finding of no effect or 'may affect, not likely to adversely affect' on ESA-listed species, Alternative 2 would have negligible to minor effect on biological resources. If ESA-listed species are discovered during the proposed work, work must stop, and the subrecipient must notify FEMA to re-initiate consultation with USFWS to review potential impacts.

5.6 Cultural Resources

Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, requires federal agencies to consider potential effects of actions on cultural resources prior to commencement of work (an "undertaking"). The NHPA defines a historic property as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on the National Register of Historic Places." Only those cultural resources determined to be potentially significant under NHPA are subject to avoidance or

minimization measures for adverse impacts resulting from an undertaking. To be considered significant, a cultural resource must meet one or more of the criteria established by the National Park Service that would make that resource eligible for inclusion on the National Register of Historic Places (NRHP), as found in 36 CFR Part 60. The term "eligible for inclusion on the NRHP" includes all properties that meet the NRHP listing criteria. Sites not yet evaluated may be considered potentially eligible for inclusion on the NRHP and, as such, are afforded the same consideration as listed properties. Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which an undertaking may directly or indirectly affect cultural resources. FEMA determines an APE based on completed research identifying potential and NRHP-listed properties. Within the APE, FEMA evaluates impacts on identified cultural resources for above ground standing structures and below ground prehistoric or historic archaeological resources.

5.6.1 Existing Conditions

The New York State Historic Preservation Officer (NYSHPO) maintains a regularly updated list of New York State's historic properties that are subject to NYSHPO and federal agency review. This list is accessible through the NYSHPO-maintained Cultural Resource Information System (CRIS). FEMA evaluated the Proposed Action's (undertaking's) potential effects on cultural resources using CRIS and in consultation with NYSHPO.

5.6.1.1 Architectural Resources

The APE for standing structures for the Proposed Action includes the four NYCDPR parcels. Prior to FEMA assuming the role of Lead Federal Agency for the proposed project, a consultant for NYCDPR submitted a project review request to NYSHPO for Bayswater Park (Appendix D, Correspondence 2). On February 10, 2020, NYSHPO determined that Bayswater Park was not eligible for listing on the NRHP. FEMA research using CRIS shows that the remaining parks had not been evaluated for NRHP eligibility. FEMA determined with NYSHPO concurrence that Beach 88th St / Bay Breeze Park, Rockaway Community and Thursby Basin Parks are not NRHP eligible (Appendix D, Correspondence 2).

5.6.1.2 Archaeological Resources

The APE for potential archaeological resources is limited to those areas where the project is expected to directly impact or disturb the ground surface as a result of excavation or other construction activities (Appendix D).

A review of CRIS shows that each of the four parks parcels are located outside archaeologically sensitive areas. The closest documented archaeology sites range in distance from greater than 1000 feet to over a mile from the APEs. Soil classifications include filled and constructed land as well as highly disturbed land from continual construction, demolition, and re-construction. Overall, the vertical and horizontal limits of disturbance for the proposed projects will be located within the limits of previously disturbed artificial landscapes.

5.6.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No Action alternative would result in no above or below ground disturbance. Therefore, it would have no impact on historic standing structures or archaeological resources.

Alternative 2: Proposed Action - Parks Development and Resiliency Measures

Beach 88th St / Bay Breeze Park, Bayswater, Rockaway Community, and Thursby Basin Parks are not eligible for NRHP listing. Therefore, the Proposed Action would have no impact to above ground historic resources and, based on lack of archaeological sites in the vicinity and the soil typology, archaeological sensitivity is assessed as low. NYSHPO consultation documentation is included in Appendix D.

5.7 Environmental Justice

Executive Order 12898, *Federal Actions to address the Environmental Justice in Minority Populations and Low-Income Populations*, requires Federal agencies to identify and address any disproportionately high and adverse human health or environmental effects its activities may have on minority or low-income populations. Under EPA Region 2's "Guidelines for Conducting Environmental Justice Analysis for New York", a community would be considered a Community of Concern if the minority population is 51.1 percent or higher or if 23.59 percent or more of the population is below the poverty line.

5.7.1 Existing Conditions

According to 2014-2018 American Community Survey 5-Year Estimates, within this area of the Rockaway Peninsula, defined as the area between the four Parks sites with a 0.5-mile buffer, of 52,991 people within the area of the project sites 43,533 or 82%, are part of a minority population. The per capita income is $21,343 annually. New York City has percentages of low-income populations that are higher than the national average.

5.7.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action Alternative, current conditions would not change, construction of resiliency measures would not occur, and additional recreational opportunities would not be provided. Parks facilities would remain at risk from future storm or flooding events. Therefore, FEMA anticipates the No Action Alternative would have a minor adverse impact on Communities of Concern.

Alternative 2: Proposed Action - Parks Development and Resiliency Measures

Alternative 2 may result in temporary short-term impacts to populations in the area due to construction work increasing traffic and noise and limiting access to the existing parks. NYCDPR would minimize

potential impacts by planning and coordinating with project teams prior to construction ensuring that construction-related disruptions are minimized. Long term, the creation of the new and improved amenities would provide more recreational opportunities such as walking and nature trails, playgrounds, and improved water access for activities such as kayaking.

With the Proposed Action, FEMA anticipates no disproportionately high and adverse impacts to Communities of Concern. Alternative 2 would have a negligible, short-term, adverse effect and a moderate, long-term, beneficial effect on the community.

5.8 Noise

Sound pressure level (SPL) is used to measure the magnitude of sound and is expressed in decibels (dB). Noise levels are often given in dBA (A-weighted sound levels) instead of dB, with the threshold of human hearing defined as 0 dBA. A dBA is a weighted scale for judging loudness that corresponds to the hearing threshold of the human ear. The SPL increases logarithmically, so that when the intensity of a sound is increased by a factor of 10, its SPL rises by 10 dB, while a 100-fold increase in the intensity of a sound increases the SPL by 20 dB. Equivalent noise level (Leq) is the average of sound energy over time, so that one sound occurring for 2 minutes would have the same Leq of a sound twice as loud occurring for 1 minute. The day night noise level (Ldn) is based on the Leq and is used to measure the average sound impacts for the purpose of guidance for compatible land use. It weights the impact of sound as it is perceived at night against the impact of the same sound heard during the day. This is done by adding 10 dBA to all noise levels measured between 10:00 pm and 7:00 am. For instance, the sound of a car on a rural highway may have an SPL of 50 dBA when *measured* from the front porch of a house. If the measurement were taken at night, a value of 60 dBA would be recorded and incorporated into the 24-hour Ldn.

Leq and Ldn are useful measures when used to determine levels of constant or regular sounds, such as road traffic or noise from a ventilation system. However, neither represents the sound level as it is perceived during discrete events, such as emergency sirens and other impulse noises. They are averages that express the equivalent SPL over a given period of time. Because the decibel scale is logarithmic, louder sounds reflected by higher SPL are weighted more heavily; however, loud infrequent noises, such as emergency sirens, with short durations would not significantly increase Leq or Ldn over the course of a day. The Noise Control Act of 1972 required the EPA to create a set of noise criteria. In response, the EPA published *Information On Levels Of Environmental Noise Requisite To Protect Public Health and Welfare With An Adequate Margin Of Safety* in 1974 which explains the impact of noise on humans. The EPA report found that keeping the maximum 24-hour Ldn value below 70 dBA would protect the majority of people from hearing loss. The EPA recommends an outdoor Ldn of 55 dBA. According to published lists of noise sources, sound levels, and their effects, sound causes pain starting at approximately 120 to 125 dBA and can cause immediate irreparable damage at 140 dBA. Occupational Safety and Health Administration has adopted a standard of 140 dBA for maximum impulse noise exposure.

5.8.1 Existing Conditions

Existing noise levels would vary by individual project site and depend on the sound level and the observer's distance from the source. This is because all sites are located near major thoroughfares and are within urban environments. Sources of noise near the proposed project sites include automobiles, helicopters and airplanes, industrial equipment and machinery, humans, and animals.

5.8.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action Alternative

The No Action Alternative does not include any construction or site preparation. Therefore, there would be no noise impacts under the No Action Alternative.

Alternative 2: Proposed Action - Parks Development and Resiliency Measures

Construction of new Parks facilities and improvements would result in temporary noise increases near the sites. Noise levels can be minimized in accordance with New York City noise control code through BMPs such as ensuring that the manufacturer's standard noise control devices are used on construction equipment and that construction activities are conducted in conformance with local noise ordinances regulating construction hours and noise levels.

Post-construction, noise levels at each site would be the same as before the project with no net change in noise levels. Alternative 2 would have a short-term minor impact on noise during construction and no long-term impact on noise levels.

5.9 Cumulative Impacts

This EA considers the overall cumulative impact of the proposed alternatives and other actions that are related in terms of time or proximity. Cumulative impacts represent the "impact on the environment which results from the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions." In addition to NEPA, other statutes require federal agencies to consider cumulative impacts. If the alternative does not have direct or indirect effects for a particular resource, there can be no cumulative effects resulting from the project because there would be no impacts to add to past, present, or reasonably foreseeable actions.

FEMA broadly considers the potential for cumulative impacts based on the proposed action and experience with similar type projects. NYCDPR is responsible for consulting with relevant federal, state, and local planning and regulatory agencies, and determining other actions that are underway or proposed at or near each individual project site that, in combination with the proposed project, could result in

substantive cumulative effects. Included in the early consideration of flood protection are elements of stormwater detention, bioswales, and perimeter surge protection, among other possible features.

The effects of this project will incrementally increase the shoreline protection from storm surge, flooding, and erosion above the approximately four miles of USACE work along Jamaica Bay shoreline. Parks protections includes manmade features such as berms and bulkheads as well as wetland restorations and native plantings.

The proposed actions described in this EA would have minimal impact on the affected environment. Implementing BMPs and requirements identified through permitting are expected to limit individual and cumulative impacts. Mitigation measures to reduce impacts are addressed in each affected environment section and project conditions section.

6.0 PERMITS AND PROJECT CONDITIONS

NYCDPR is responsible for obtaining and adhering to all applicable federal, state, and local permits, permit conditions, regulatory compliance, and authorizations for project implementation. Any substantive change to this scope of work would require re-evaluation by FEMA for compliance with NEPA and other environmental and historic preservation laws and Executive Orders. NYCDPR must also adhere to the following conditions during project implementation. Failure to comply with grant conditions may jeopardize federal funding.

1. Any proposed construction in the floodplain must be coordinated with the local floodplain administrator and must comply with federal, state, and local floodplain laws and regulations.
2. Excavated soil and waste materials, including potentially hazardous wastes, must be managed and disposed of in accordance with applicable federal, state, and local regulations. Solid waste haulers will be required to have a NYSDEC waste hauler permit and all waste will need to be disposed of or processed at a permitted facility.
3. If any threatened or endangered species are encountered in the project area, the subrecipient must stop work and notify FEMA to continue consultation with USFWS.
4. Preparation of a SWPPP and adherence to the conditions of SPDES General Permit for Stormwater Discharges is required on project sites where the soil disturbance would be greater than or equal to one acre.
5. The subrecipient and its contractors are required to use appropriate BMPs for construction not limited to sedimentation and erosion control measures, dust control, noise abatement and restriction of work areas to limit vegetation removal and habitat impacts.
6. In the event that unmarked graves, burials, human remains, or archaeological deposits are uncovered, the subrecipient and its contractors will immediately halt construction activities in the vicinity of the discovery, secure the site, and take reasonable measures to avoid or minimize harm to the discovery. The subrecipient will immediately inform DHSES and FEMA. Work in sensitive

areas may not resume until consultations are completed or until an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards determines the extent and historic significance of the discovery.

7. Occupational Safety and Health Administration standards shall be followed during construction to avoid adverse impacts to worker health and safety.
8. BMPs will be used to limit NAAQS emissions during and after construction under EPA guidelines.

7.0 AGENCY COORDINATION AND PUBLIC INVOLVEMENT

This EA will be made available for agency and public review and comment for a period of 30 days. The public information process will include a public notice with information about the proposed project in *The City Record* (print and online). The EA will also be made available for download at https://www.fema.gov/emergency-managers/practitioners/environmental-historic/region/2 and at https://www.nycgovparks.org/facility/beaches/beach-recovery/rockaway-parks-master-plan/shorefront-parkway-projects-environmental-assessment.

This EA reflects the evaluation and assessment of the federal government, the decision-maker for the federal action. FEMA will take into consideration comments submitted during the public review period. The public is invited to submit written comments by email: <FEMAR2COMMENT@fema.dhs.gov> or by mail:

Federal Emergency Management Agency, Region II
Environmental Planning and Historic Preservation
26 Federal Plaza
New York, NY 10278

If FEMA receives no substantive comments from the public and/or agency reviewers, FEMA will adopt the EA as final and FEMA will issue a FONSI. If FEMA receives substantive comments, it will evaluate and address comments and may consider whether changes to the grant or project implementation are appropriate.

8.0 SUMMARY OF IMPACTS

Section	Area of Evaluation	No Action Alternative	Proposed Action: Short-term / Temporary Impacts	Proposed Action: Long-term / Permanent Impacts
5.1	Geology	No Impact	No Impact	No Impact
5.1	Topography and Soils	No Impact	Minor Adverse	Minor Adverse
5.2	Air Quality	No Impact	Minor Adverse	No Impact
5.3	Water Quality	No Impact	Negligible Adverse	Negligible Adverse
5.3	Aquifers	No Impact	No Impact	No Impact
5.3	Floodplain and Wetland	Minor Adverse	Negligible Adverse	Moderate Beneficial
5.4	Coastal Resources	No Impact	Negligible Adverse	Minor Beneficial
5.5	Threatened and Endangered Species	No Impact	Negligible to Minor Adverse	No Impact
5.5	Invasive Species	No Impact	Minor Adverse	Minor Beneficial
5.6	Architectural Resources	No Impact	No Impact	No Impact
5.6	Archaeological Resources	No Impact	No Impact	No Impact
5.7	Environmental Justice	Minor Adverse	Negligible Adverse	Moderate Beneficial
5.8	Noise	No Impact	Minor Adverse	No Impact

9.0 LIST OF PREPARERS

Federal Emergency Management Agency, Region II
285 Fulton Street
New York, NY 10007

10.0 REFERENCES

Brooklyn College, SUNY
2015 “Geology: The Science of Our World”
http://academic.brooklyn.cuny.edu/geology/leveson/core/linksa/nyc7.html

New York City Department of City Planning (NYC Planning)
2016 “New York City Waterfront Revitalization Program – Maps & Policies” viewed February 24th, 2021. https://www1.nyc.gov/site/planning/planning-level/waterfront/wrp/wrp-2.page

New York City Department of Parks and Recreation
2014 “Rockaway Parks Conceptual Plan”
http://www.nycgovparks.org/pagefiles/71/Conceptual-Plan-Final-Report.pdf

New York City Economic Development Corporation (NYCEDC)
2017 "Rockaway Boardwalk Reconstruction Project"
https://edc.nyc/project/rockaway-boardwalk-reconstruction-project

New York State Department of Environmental Conservation (NYSDEC)
1992 "Designated Habitat: Jamaica Bay" Accessed February 24, 2021.
https://www.dos.ny.gov/opd/programs/consistency/Habitats/nyc/Jamaica_Bay.pdf

2014a "Biodiversity and Species Conservation" http://www.dec.ny.gov/animals/279.html

2014b "Viewing bald eagles in New York State – NYSDEC Bald Eagle Program"
http://www.dec.ny.gov/animals/9378.html

2021 "Major Hydrogeologic Units of the Long Island Aquifer". Accessed March 2, 2021.
https://www.dec.ny.gov/lands/36231.html

US Army Corps of Engineers (USACE)
2019 "Integrated Hurricane Sandy General Reevaluation Report and Environmental Impact Statement: Atlantic Coast of New York, East Rockaway Inlet to Rockaway Inlet and Jamaica Bay"
https://www.nan.usace.army.mil/Portals/37/docs/civilworks/projects/ny/coast/Rockaway/2020%20Update%20Report/Rock%20Jam%20Bay%20Final%20Report.pdf?ver=2020-06-01-154654-773

US Census Bureau (USCB)
2021 "Urban and Rural Classification" https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html

2011 "Urban Area Criteria for the 2010 Census" Federal Register Vol 76 No 164

US Department of Agriculture (USDA), Natural Resources Conservation Service
2015 "Web Soil Survey" http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

US Environmental Protection Agency (EPA)
2003 "Reducing Air Pollution from Non-Road Engines. EPA420-F-03-011"
https://nepis.epa.gov/Exe/ZyNET.exe/P10001QT.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2000+Thru+2005&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C00thru05%5CTxt%5C00000013%5CP10001QT.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL

2012 "Fuels & Additives – Diesel Fuel" https://www.epa.gov/diesel-fuel-standards/about-diesel-fuels

2021 "Nonattainment and Maintenance Area Dashboard". Accessed May 17, 2021. https://edap.epa.gov/public/extensions/S4S_Public_Dashboard_1/S4S_Public_Dashboard_1.html

2021 "Interactive Map of SSAs". Accessed March 2, 2021. https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b

US Fish and Wildlife Service (USFWS)
2015a "The USFWS–Migratory Bird Program" http://www.fws.gov/birds/index.php

2015b "IPac" http://ecos.fws.gov/ipac

2013a "The Bald and Golden Eagle Protection Act. USFWS Ecological Services – Northeast Region" http://www.fws.gov/northeast/ecologicalservices/eagleact.html

US Geological Survey (USGS)
2015 "Mineral Resources On-Line Spatial Data" http://mrdata.usgs.gov/sgmc/ny.html

2021 New York Water Science Center. "Long Island Outflow from the Groundwater System". Accessed March 2, 2021. https://www.usgs.gov/centers/ny-water/science/long-island-outflow-groundwater-system?qt-science_center_objects=0#qt-science_center_objects

APPENDIX A, Document 1 – EO11988 8-Step Narrative

New York City Department of Parks and Recreation, Queens County, Rockaways Underruns Projects: Bayswater Park, Rockaway Community Park, Beach 88th St/Bay Beach Park, and Thursby Basin Park
PW4223 Section 428 PAAP Project

FEMA 4085-DR-NY

Executive Order 11988 – FLOODPLAIN MANAGEMENT
Executive Order 11990 – WETLAND PROTECTION

8-STEP PROCESS SUMMARY

Date: 06/08/2021

Prepared By: Kyle Bartowitz, Environmental Protection Specialist

Project: The New York City Department of Parks and Recreation (NYCDPR – the Subrecipient) has applied to FEMA for financial assistance. The New York State Division of Homeland Security and Emergency Services (NYSDHSES) is the Recipient partner for the Proposed Action to restore/create new recreational opportunities and improve resiliency at four sites: Bayswater Park, Rockaway Community Park, Beach 88th St / Bay Breeze Park, and Thursby Basin Park.

STEP 1 - Determine whether the proposed actions are located in a wetland and or the 100-year floodplain (500-year floodplain for critical action [44 CFR 9.4]) or whether they have the potential to affect or be affected by a floodplain or a wetland (44 CFR 9.7).

X The project site is located in relation to the floodplains as mapped by:

Site 1) Bayswater Park
Preliminary FIRM map: 3604970382G, 01/30/2015
Zone AE (El 10) NAVD88 datum
Latitude 40.598019 / Longitude -73.767490

Site 2) Rockaway Community Park
Preliminary FIRM map: 3604970381G/3604970382G, 01/30/2015
Zone VE (El 10) / Zone AE (El 11) NAVD88 datum
Latitude 40.598909 / Longitude -73.784680

Site 3) Beach 88th Street / Bay Breeze Park
Preliminary FIRM map: 3604970379G, 01/30/2015

Zone VE (El 11) /AE (El 8) NAVD88 datum
Latitude 40.590354 / Longitude -73.814400

Site 4) Thursby Basin Park
Preliminary FIRM map: 3604970381G, 01/30/2015
Zone AE (El 10) NAVD88 datum
Latitude 40.595498, / Longitude -73.791837

X The Project is located in the wetland as identified by:

A review of the National Wetlands Inventory (NWI) Map indicates that some work at the proposed project sites lies with in a NWI Designated Wetland classified as **E1UBL**. The following describes the wetland:

Description for code **E1UBL**:

E System **ESTUARINE**: The Estuarine System describes deepwater tidal habitats and adjacent tidal wetlands that are influenced by water runoff from and often semi-enclosed by land. They are located along low-energy coastlines and they have variable salinity.

1 Subsystem **SUBTIDAL**: These habitats are continuously submerged substrate, (i.e. below extreme low water).

UB Class **UNCONSOLIDATED BOTTOM**: Includes all wetlands and deepwater habitats with at least 25% cover of particles smaller than stones (less than 6-7 cm), and a vegetative cover less than 30%.

Subclass: None

Modifier(s):
L WATER REGIME **Subtidal**: The substrate is permanently flooded with tidal water.

STEP 2 - Notify the public at the earliest possible time of the intent to carry out an action in a floodplain or wetland and involve the affected and interested public in the decision-making process (see 44 CFR 9.8).

_____Not applicable - Project is not located in a floodplain or wetland.

__X__ Applicable - Notice will be or has been provided by:

A Cumulative Initial Public Notice was published in the New York Post 12/14/2012. An additional public notice will be provided in the public comment period for the Environmental Assessment for this project.

STEP 3 - Identify and evaluate practicable alternatives to locating the proposed action in a floodplain or wetland (including alternative sites, actions, and the "No Action" option) [see 44 CFR 9.9]. If a practicable alternative exists outside of the floodplain or wetland, FEMA must locate the action at the alternative site.

_____Not applicable – Project is not located in a floodplain or in a wetland.

__X__ Applicable – Alternative identified in the EA Document or as described below:

Alternative 1: No Action – The existing parks and NYCDPR properties identified would remain in their current state and additional resiliency measures would not be implemented. These coastal parks would remain vulnerable to storm events.

Alternative 2: Proposed Action - The proposed project consists of updates to Bayswater Park and Rockaway Community Park, and Beach 88th St / Bay Breeze Park, and completion of the proposed new Thursby Basin Park. Appurtenances at the four parks may include active and passive recreation areas, benches, fencing, tables, and water drainage or retention features. Proposed work at the 40-acre Bayswater Park includes construction of a planted berm and trail starting at approximately Beach 35th Street and Norton Avenue, adjoining to the USACE proposed berm. In addition to park appurtenances, the proposal includes construction of a new park office and storage building for park equipment. The proposal at the approximately 66-acre Rockaway Community Park consists of predominantly wetland enhancement, slope stabilization, and pedestrian circulation improvements on both the Sommerville and Conch Basins sides of the proposed USACE proposed berms. Proposed work at the 2.3-acre Beach 88th St / Bay Breeze Park is east of the terminus of the USACE proposed berm ending by or about Old Beach 88th Street and entails primarily improvements to park appurtenances. It also includes new shoreline armoring landward of the mean high-water line and to protect beach access and the kayak ramp. Proposed work at Thursby Basin will transform a vacant 2-acre parcel into a park landward of the USACE proposed bulkhead at that location.

STEP 4 - Identify the full range of potential direct or indirect impacts occupancy or modification of floodplains and wetlands and the potential direct and indirect support of floodplain and wetland development that could result from the proposed action (see 44 CFR 9.10).

_____Not applicable – Project is not located in a floodplain or in a wetland.

__X__Applicable – Alternative identified in the EA document or as described below:

Alternative 2: Proposed Action – The work associated with the proposed action at these locations results in the restoration and increased resiliency of Parks facilities, and eliminates the hazards of unrepaired facilities, as well as bolstering the shoreline of each Park against future storm surge and erosion. It would not support additional floodplain or wetland development beyond the existing and identified NYC Parks. Specifically, there would be negligible short-term impacts to wetlands and floodplains during construction at each site, and a long-term moderate benefit to wetlands from the native plantings at Bayswater Park and bioswales and other erosion control measures at other sites. FEMA also anticipates a long-term moderate benefit to floodplains from the berms, bioswales, native plantings, and structures and appurtenances built to in accordance with codes and local floodplain administrator requirements.

The proposed project could not serve its purpose at other locations outside of the special flood hazard area.

STEP 5 - Minimize the potential adverse impacts and support to or within floodplains and wetlands to be identified under Step # 4, restore and preserve the natural and beneficial values served by floodplains, and preserve and enhance the natural and beneficial values served by wetlands (see 44 CFR 9.11).

_____Not applicable – Project is not located in a floodplain or in a wetland.

__X__Applicable – Mitigation measures identified in the EA document or as described below:

The purpose of this project is to provide recreational opportunities and improve resiliency to future storm surge and flooding events on NYCDPR parks properties and shorelines (including wetlands) on the Rockaway Peninsula. Items that would help preserve the natural and beneficial values of wetlands and floodplains include: removal of Phragmites and replacement with native wetland plantings at Bayswater Park; berms, bioswales, riprap to limit coastal erosion and flooding; and hardened shorelines at Beach 88th Street / Bay Breeze Park will limit the potential for wave action at that location.

Replacement/repairs and construction of new facilities shall be in accordance with local floodplain ordinances and meet codes to mitigate and minimize adverse effects.

STEP 6 - Re-evaluate the proposed action to determine first, if it is still practicable in light of its exposure to flood hazards, the extent to which it will aggravate the hazards to others and its potential to disrupt floodplain and wetland values, and second, if alternatives preliminarily rejected at Step #3 are practicable in light of the information gained in Steps #4 and #5. FEMA shall not act in a floodplain or wetland unless it is the only practicable location.

_____Not applicable – Project is not located in a floodplain or in a wetland.

__X__Applicable – Action proposed is located in the only practicable location as described below:

The proposed action is the chosen practicable alternative based upon a review of possible adverse effects on the floodplain.

STEP 7 - Prepare and provide the public with a finding and public explanation of any final decision that the floodplain or wetland is the only practicable alternative (see 44 CFR 9.12).

_____Not applicable – Project is not located in a floodplain or in a wetland.

__X__Applicable – Finding is or will be prepared as described below:

A Cumulative Initial Public Notice was published in the New York Post 12/14/2012. An additional public notice will be provided in the public comment period for the Environmental Assessment for this project.

STEP 8 - Review the implementation and post-implementation phases of the proposed action to ensure the requirements of the Order are fully implemented. Oversight responsibility shall be integrated into the existing process.

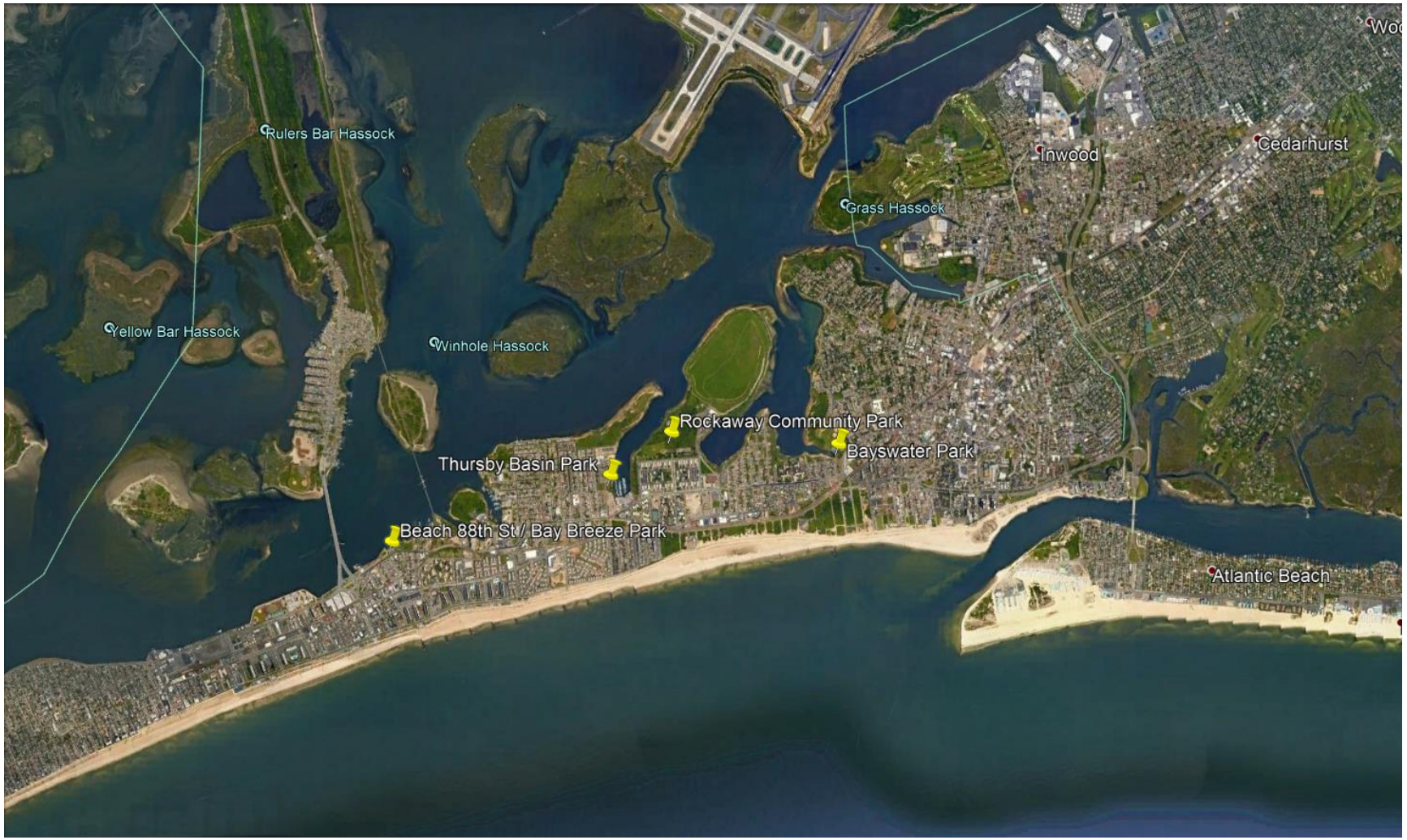
_____Not applicable – Project is not located in a floodplain or in a wetland.

__X__Applicable – Approval is conditioned on review of implementation and post-implementation phases to ensure compliance with the order(s).

Review the implementation and post-implementation phase of the proposed action to ensure that the requirement(s) stated in 44 CFR 9.11 are fully implemented.

APPENDIX B, Figures

Appendix B, Figure 1 – Map of Project Locations on Rockaway Peninsula



Appendix B, Figure 2a – Individual Site Plan Overview: Bayswater Park

NYC Parks

NV5

Michaelis Bayswater Park | Site – Existing Conditions and Uses

N

0’ 300’

NYC Parks

NV5

Michaelis Bayswater Park | Shoreline Restoration and Access

0 80' 160' 320' N

Appendix B, Figure 2b – Individual Site Plan Overview: Rockaway Community Park

Marsh Restoration
~2.5 Acres
- Place clean sand
- Plant low and high marsh
- Possible edge reinforcement

New access control gates or bollards

New gravel pavement turn-around at fishing piers

Replace gravel pavement with maritime planting

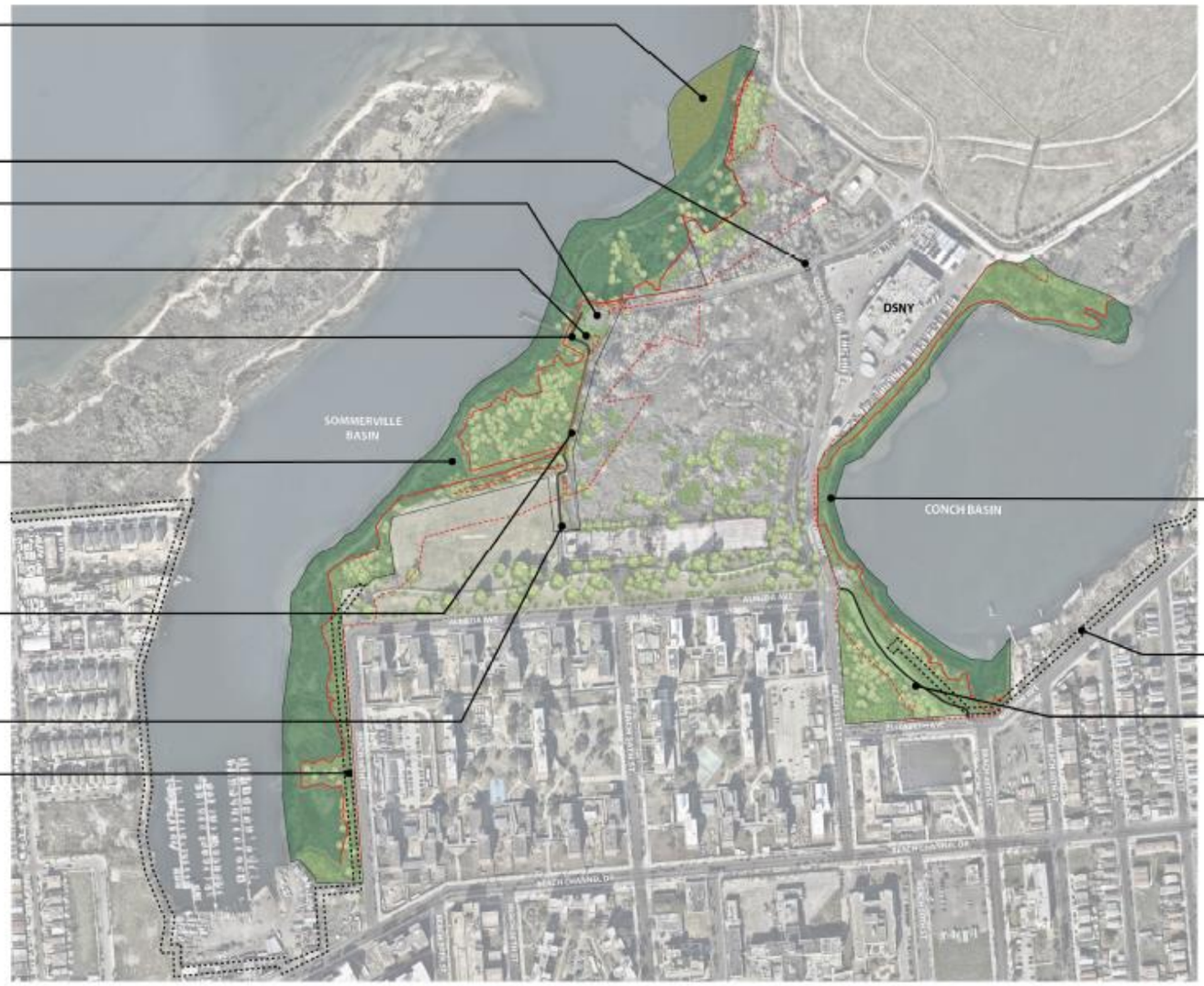
Asphalt path connection

Wetland Enhancement
- remove debris
- protect existing marsh
- plant marsh grasses
- grade and stabilize adjacent slopes

Replace boardwalk decking and railing

Asphalt path connection

Proposed future USACE HFFRRF connection



LEGEND
- Upland Area
- Existing Delineated Wetland Area
- Asphalt Path
- Boardwalk
- Project Area
- 2019 Delineated Wetland
- 2019 Delineated Wetland 150' Offset
- Existing Tree > 6" Caliper
- Existing Tree < 6" Caliper

Wetland Enhancement
- remove debris
- protect existing marsh
- plant marsh grasses
- grade and stabilize adjacent slopes

Proposed future USACE HFFRRF connection

Remove 0.5 acres of de-mapped roadbed and utilities, repurpose remaining strip as ADA accessible path, plant erosion control plantings, create new crosswalk connections

KEY PLAN
0' 400' 800'
N

NYC Parks

NV5

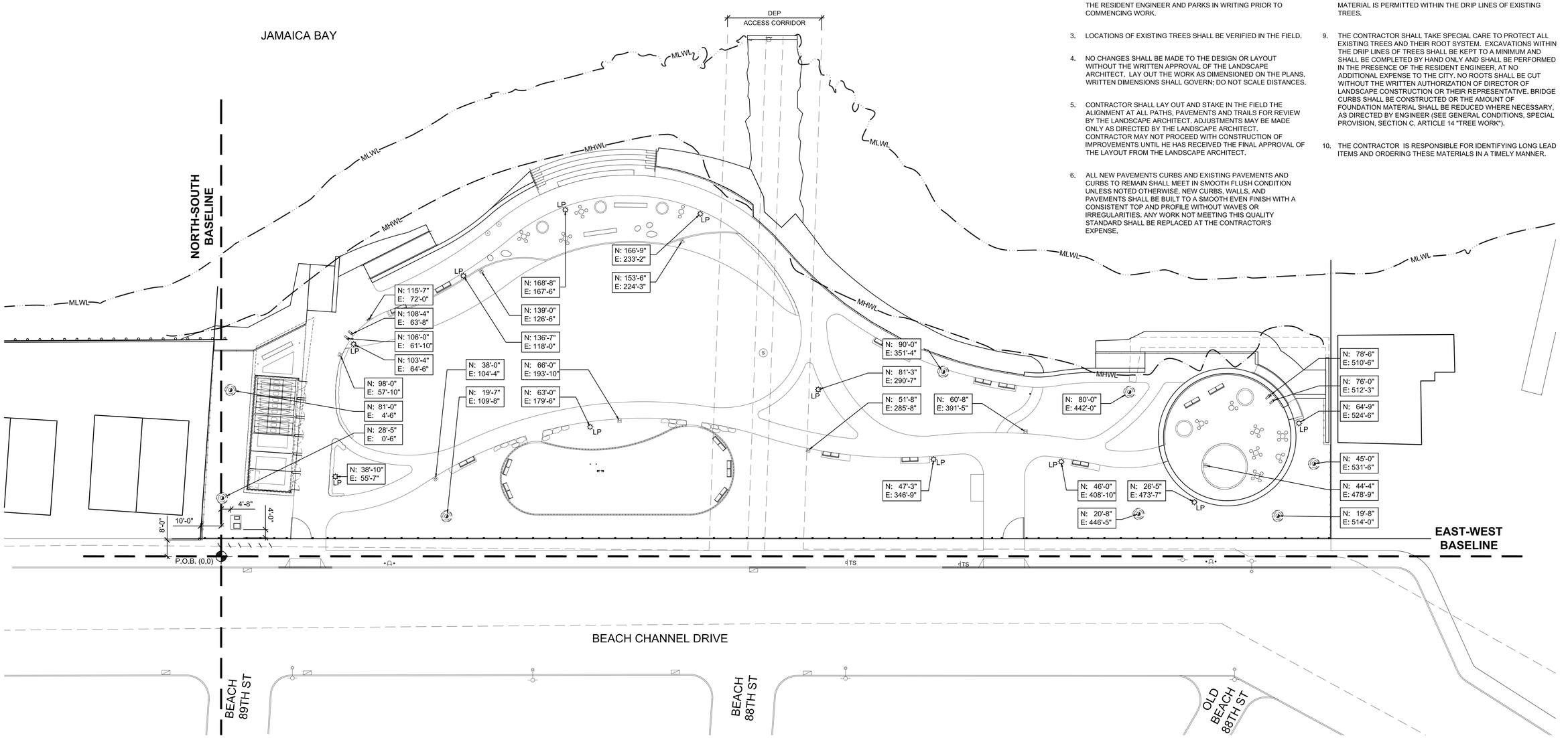
Rockaway Community Park | Concept
Proposed Improvements

February 2020

Appendix B, Figure 2c – Individual Site Plan Overview: Beach 88th St./Bay Breeze Park

LAYOUT AND MATERIALS NOTES:

1. ALL EXISTING SURVEY AND TOPOGRAPHICAL DATA TAKEN FROM SURVEY BY DIMENSION DEVELOPMENT LAND SURVEYING DCP, DATED JUNE 2018, MAP FILE Q499-T-001-2019. ALL ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD 88). SEE SURVEY SHEETS V101.00 AND V102.00 FOR SURVEY LEGEND.
2. THE CONTRACTOR SHALL VERIFY ALL EXISTING 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 RESIDENT ENGINEER AND PARKS IN WRITING PRIOR TO COMMENCING WORK.
3. LOCATIONS OF EXISTING TREES SHALL BE VERIFIED IN THE FIELD.
4. NO CHANGES SHALL BE MADE TO THE DESIGN OR LAYOUT WITHOUT THE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT. LAY OUT THE WORK AS DIMENSIONED ON THE PLANS. WRITTEN DIMENSIONS SHALL GOVERN; DO NOT SCALE DISTANCES.
5. CONTRACTOR SHALL LAY OUT AND STAKE IN THE FIELD THE ALIGNMENT AT ALL PATHS, PAVEMENTS AND TRAILS FOR REVIEW BY THE LANDSCAPE ARCHITECT. ADJUSTMENTS MAY BE MADE ONLY AS DIRECTED BY THE LANDSCAPE ARCHITECT. CONTRACTOR MAY NOT PROCEED WITH CONSTRUCTION OF IMPROVEMENTS UNTIL HE HAS RECEIVED THE FINAL APPROVAL OF THE LAYOUT FROM THE LANDSCAPE ARCHITECT.
6. ALL NEW PAVEMENTS CURBS AND EXISTING PAVEMENTS AND CURBS TO REMAIN SHALL MEET IN SMOOTH FLUSH CONDITION UNLESS NOTED OTHERWISE. NEW CURBS, WALLS, AND PAVEMENTS SHALL BE BUILT TO A SMOOTH EVEN FINISH WITH A CONSISTENT TOP AND PROFILE WITHOUT WAVES OR IRREGULARITIES. ANY WORK NOT MEETING THIS QUALITY STANDARD SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
7. THE CONTRACTOR SHALL EXERCISE CARE DURING EXCAVATION OPERATIONS TO AVOID DISTURBING ADJACENT FACILITIES, SUBGRADE STRUCTURES AND TREES. ALL DAMAGE RESULTING FROM THE CONSTRUCTION SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE REPAIRED AT NO EXPENSE TO THE CITY AND DPR. ALL REPAIR WORK SHALL BE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND DPR. PLANTED AREAS DISTURBED BY CONTRACTOR'S WORK SHALL BE RESTORED AS DIRECTED BY THE LANDSCAPE ARCHITECT.
8. NO HEAVY MACHINERY, EQUIPMENT OR STOCKPILING OF MATERIAL IS PERMITTED WITHIN THE DRIP LINES OF EXISTING TREES.
9. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PROTECT ALL EXISTING TREES AND THEIR ROOT SYSTEM. EXCAVATIONS WITHIN THE DRIP LINES OF TREES SHALL BE KEPT TO A MINIMUM AND SHALL BE COMPLETED BY HAND ONLY AND SHALL BE PERFORMED IN THE PRESENCE OF THE RESIDENT ENGINEER, AT NO ADDITIONAL EXPENSE TO THE CITY. NO ROOTS SHALL BE CUT WITHOUT THE WRITTEN AUTHORIZATION OF DIRECTOR OF LANDSCAPE CONSTRUCTION OR THEIR REPRESENTATIVE. BRIDGE CURBS SHALL BE CONSTRUCTED OR THE AMOUNT OF FOUNDATION MATERIAL SHALL BE REDUCED WHERE NECESSARY, AS DIRECTED BY ENGINEER (SEE GENERAL CONDITIONS, SPECIAL PROVISION, SECTION C, ARTICLE 14 "TREE WORK").
10. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING LONG LEAD ITEMS AND ORDERING THESE MATERIALS IN A TIMELY MANNER.



LEGEND

BASELINE	DRINKING FOUNTAIN	SOLID TIMBER BENCH
P.O.B. (0,0) — POINT OF BEGINNING ESTABLISHES LOCATION OF (0,0) COORDINATE	SHOWER/FOOTWASH	8' LONG 1964 WORLD'S FAIR BENCH WITH ARMS
N: 125'-5" E: 283'-7" — COORDINATES TAKEN FROM P.O.B.	LP — NEW PARK LIGHT	CAST STONE TABLES & SEATS
TS — RELOCATED TRAFFIC SIGN	BOULDERS	CAST STONE PEBBLE SEATS
EXISTING UTILITY POLE WITH STREET LIGHT TO REMAIN	PROPOSED GROUND HYDRANT	SWING GATE FOR MAINTENANCE ACCESS
EXISTING UTILITY POLE TO REMAIN	RPZ	TIMBER BARRIER RAIL, TYPE 'B'
EXISTING FIRE HYDRANT AND BOLLARDS TO REMAIN	NEW DRAINAGE STRUCTURE	6' HT. CHAIN LINK FENCE
Ⓦ Ⓣ Ⓜ Ⓢ — EXISTING DRAINAGE AND UTILITY STRUCTURES TO REMAIN	DEP ACCESS CORRIDOR	
	MHWL — MEAN HIGH WATER LINE	
	MLWL — MEAN LOW WATER LINE	

NOTES:

1. ALL CORNER ANGLES TO BE 90° UNLESS OTHERWISE NOTED.

0 10' 20' 40'
SCALE: 1" = 20'-0"

NORTH

Quennell Rothschild & Partners, LLP
Landscape Architects
132 Nassau Street, New York, NY 10038
phone: 212-929-3330

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
OLMSTED CENTER
FLUSHING MEADOWS CORONA PARK
FLUSHING, NEW YORK 11368

SEAL

BLOCK 16109

LOT 70R, 185, 200

PROJECT TITLE
THE CONSTRUCTION OF BAY BREEZE PARK
ON BEACH 88TH STREET ALONG BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

DRAWING TITLE
UTILITY LAYOUT PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
NATE HARRIS	RYAN CASTRO	ALISON SHIPLEY

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1"=20'-0"	L202.00	Q499-118M
	DATE 4/11/2019		SHEET No. 14 OF 70 SHEETS

LAYOUT AND MATERIALS NOTES:

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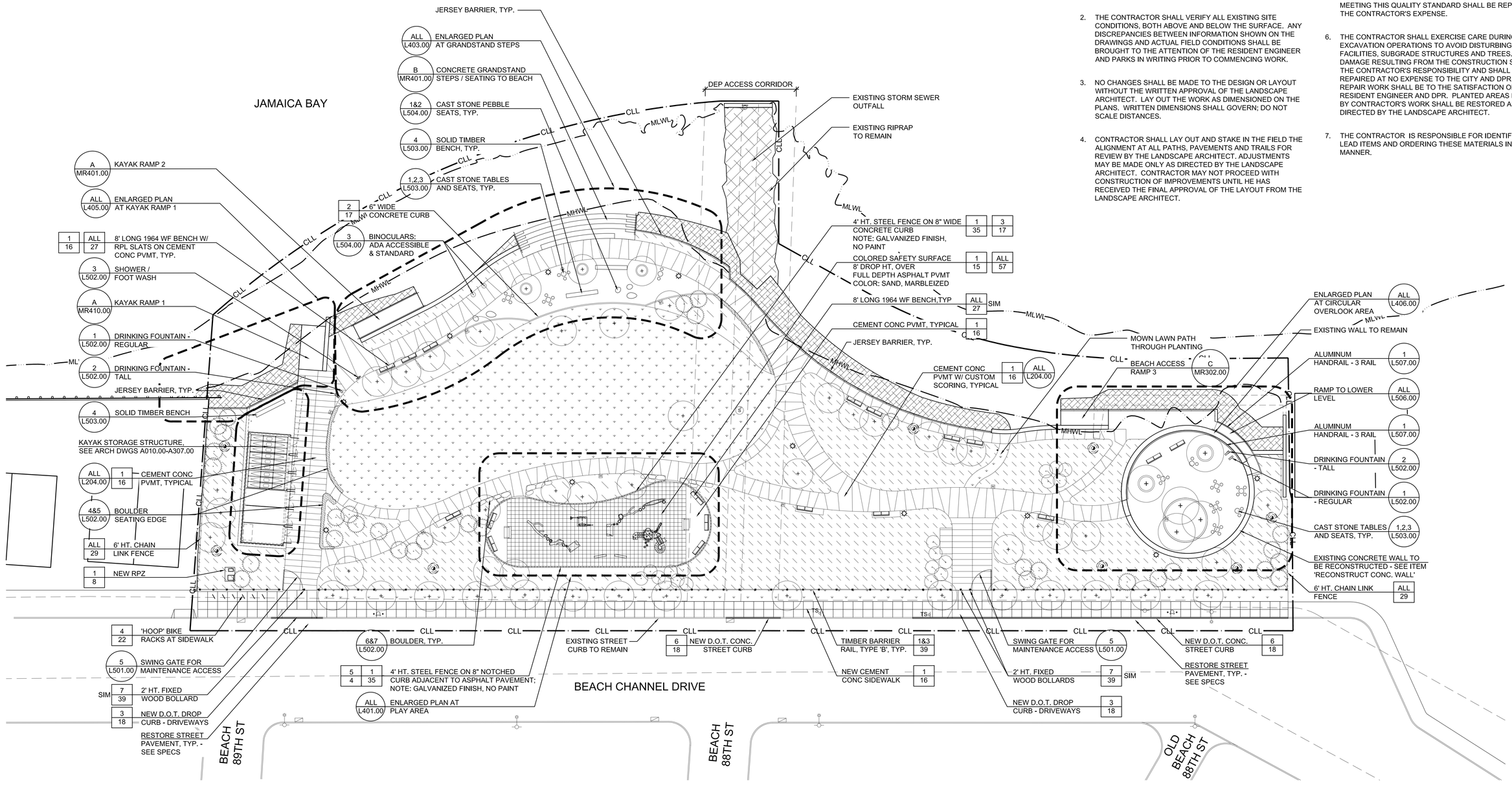
7. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING LONG LEAD ITEMS AND ORDERING THESE MATERIALS IN A TIMELY MANNER.



LEGEND

- CONTRACT LIMIT LINE
- RELOCATED TRAFFIC SIGN
- EXISTING UTILITY POLE WITH STREET LIGHT TO REMAIN
- EXISTING UTILITY POLE TO REMAIN
- EXISTING FIRE HYDRANT AND BOLLARDS TO REMAIN
- EXISTING DRAINAGE AND UTILITY STRUCTURES TO REMAIN
- DEP ACCESS CORRIDOR
- MHWL MEAN HIGH WATER LINE
- MLWL MEAN LOW WATER LINE
- DETAIL NO. X / SHEET NO. L000.00 CONTRACT DETAIL SYMBOL
- DETAIL NO. X / SHEET NO. XX STANDARD DETAIL SYMBOL

MATERIALS LEGEND

- NEW TREE
- LAWN
- PLANTING
- SAFETY SURFACE OVER FULL DEPTH ASPHALT
- EXISTING RIPRAP
- NEW RIPRAP
- BOULDER SEATING EDGE
- SWING GATE FOR MAINTENANCE ACCESS
- TIMBER BARRIER RAIL, TYPE 'B', TYP. 1&3 39
- SOLID TIMBER BENCH 4 L503.00
- 8' LONG 1964 WORLD'S FAIR BENCH WITH ARMS, RPL SLATS, COLOR: WEATHERED WOOD ALL 27
- BOULDERS 6&7 L502.00
- CAST STONE TABLES & SEATS 1,2,3 L503.00
- CAST STONE PEBBLE SEATS 1&2 L504.00
- 6' HT. CHAIN LINK FENCE ALL 29
- DRAINAGE STRUCTURE
- BINOCULARS 3 L504.00
- DRINKING FOUNTAIN 1&2 L502.00
- SHOWER/FOOTWASH, 6 FT. HIGH POST 3 L502.00
- 'HOOP' BIKE RACK 4 22
- RPZ VAULT 1 8
- QCVB 5 7
- PARK LIGHT (FLUSHING MEADOW POLE & LUMINARE, 12' HT) SEE ELECTRICAL DWGS E301.00: LIGHTPOLE DETAILS
- NOTCHED CURB AT SAFETY SURFACE 5 4
- NEW D.O.T. DROP CURB - DRIVEWAYS 3 18
- NEW D.O.T. CONC. STREET CURB 6 18

0 10' 20' 40'
SCALE: 1" = 20'-0"

NORTH

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FLUSHING, NEW YORK 11368

SEAL

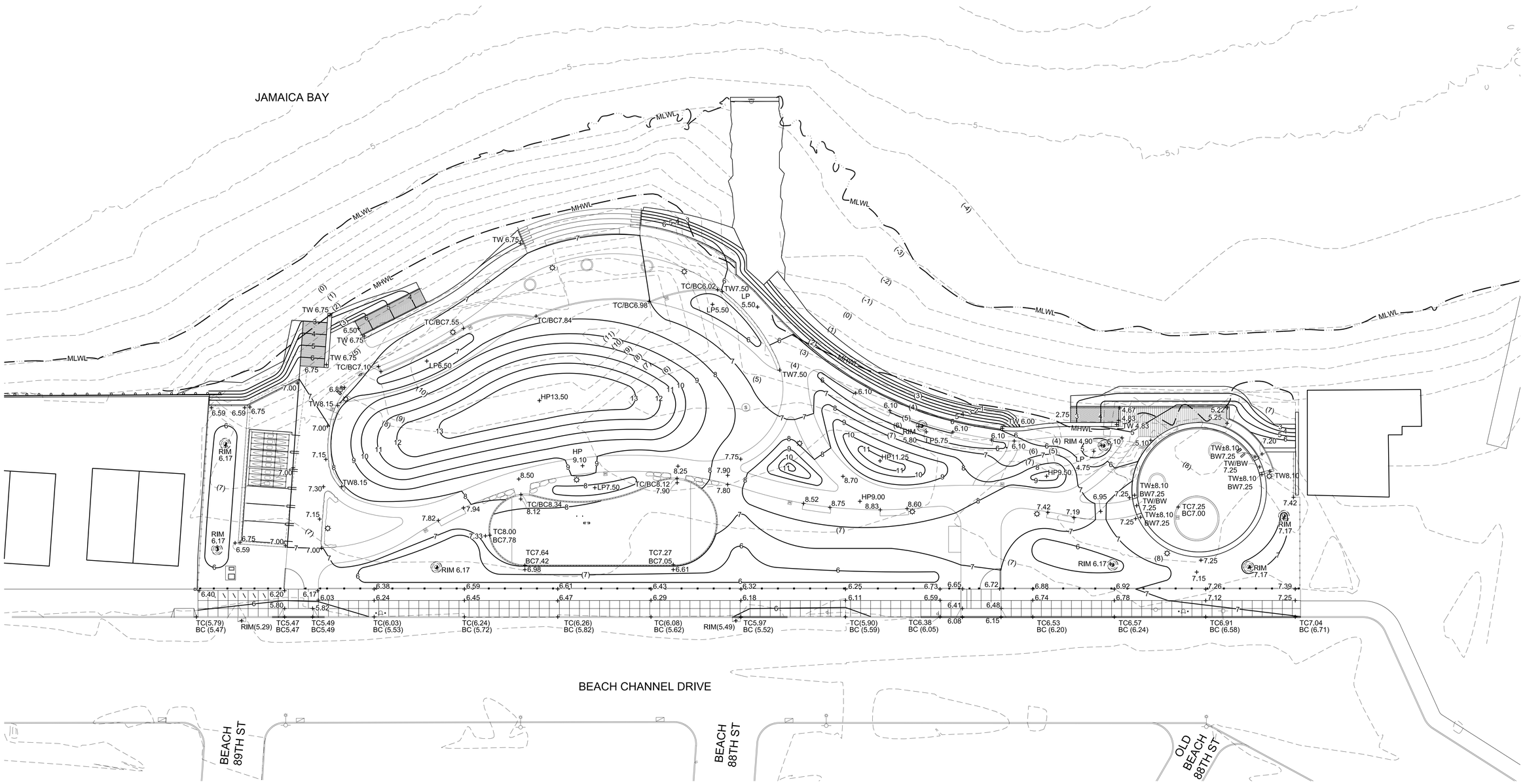
BLOCK 16109
LOT 70R, 185, 200

PROJECT TITLE
THE CONSTRUCTION OF BAY BREEZE PARK
ON BEACH 88TH STREET ALONG BEACH CHANNEL DRIVE
BOROUGH OF QUEENS

DRAWING TITLE
MATERIALS PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
NATE HARRIS	RYAN CASTRO	ALISON SHIPLEY

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1"=20'-0"	L203.00	Q499-118M
	DATE 4/11/2019		SHEET No. 15 OF 70 SHEETS



LEGEND

	EXISTING SIGN
	EXISTING UTILITY POLE WITH STREET LIGHT TO REMAIN
	EXISTING UTILITY POLE TO REMAIN
	EXISTING FIRE HYDRANT AND BOLLARDS TO REMAIN
W T EM S	EXISTING DRAINAGE AND UTILITY STRUCTURES TO REMAIN
	DEP ACCESS CORRIDOR
MHWL	MEAN HIGH WATER LINE
MLWL	MEAN LOW WATER LINE

GRADING LEGEND

(6)	EXISTING CONTOUR LINE (1'-0" INTERVALS)
9	PROPOSED CONTOUR LINE (1'-0" INTERVALS)
+(9.70)	EXISTING SPOT ELEVATION
+9.54	PROPOSED SPOT ELEVATION
HP	PROPOSED HIGH POINT
LP	PROPOSED LOW POINT
	PROPOSED DRAINAGE STRUCTURE

GRADING NOTES

1. AT SAFETY SURFACE: CONTOURS SHOWN ARE TOP OF ASPHALT ELEVATIONS.
2. SEE CIVIL DRAWINGS FOR DRAIN TYPES, RIM & INVERT ELEVATIONS.
3. SEE CIVIL DRAWINGS FOR ALL DRAINAGE STRUCTURE DETAILS AND ALL DRAINAGE PIPING.
4. ALL EXISTING SURVEY AND TOPOGRAPHICAL DATA TAKEN FROM SURVEY BY DIMENSION DEVELOPMENT LAND SURVEYING DCP, DATED JUNE 2018, MAP FILE Q499-T-001-2019. ALL ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD 88). SEE SURVEY SHEETS V101 AND V102 FOR SURVEY LEGEND.
5. THE CONTRACTOR SHALL VERIFY ALL EXISTING TOPOGRAPHIC INFORMATION. ANY DISCREPANCIES BETWEEN THE SURVEY AND EXISTING CONDITIONS, BETWEEN PLANS AND SPECIFICATIONS, OR BETWEEN DIFFERENT PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER AND DPR IN WRITING PRIOR TO COMMENCING WORK.
6. ALL PAVEMENTS SHALL BE INSTALLED TO SMOOTH EVEN GRADE WITH NO PATCHING, IRREGULARITIES, OR BIRDBATHS. ALL NEW PAVEMENTS SHALL MEET EXISTING PAVEMENTS AND GRADES FLUSH AND EVENLY. ALL CURBS SHALL BE INSTALLED TO SMOOTH EVEN GRADES AS INDICATED WITH NO PATCHING OR IRREGULARITIES.
7. THE CONTRACTOR SHALL EXERCISE EXTREME CARE DURING EARTHWORK OPERATIONS, TO AVOID DISTURBING ADJACENT FACILITIES AND OR SUBGRADE STRUCTURES. ALL DAMAGE RESULTING FROM CONSTRUCTION SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE REPAIRED AT NO EXPENSE TO PARKS & RECREATION OR THE CITY OF NEW YORK. ALL REPAIR WORK SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND/OR AGENCY HAVING JURISDICTION.

0 10' 20' 40'
SCALE: 1" = 20'-0"

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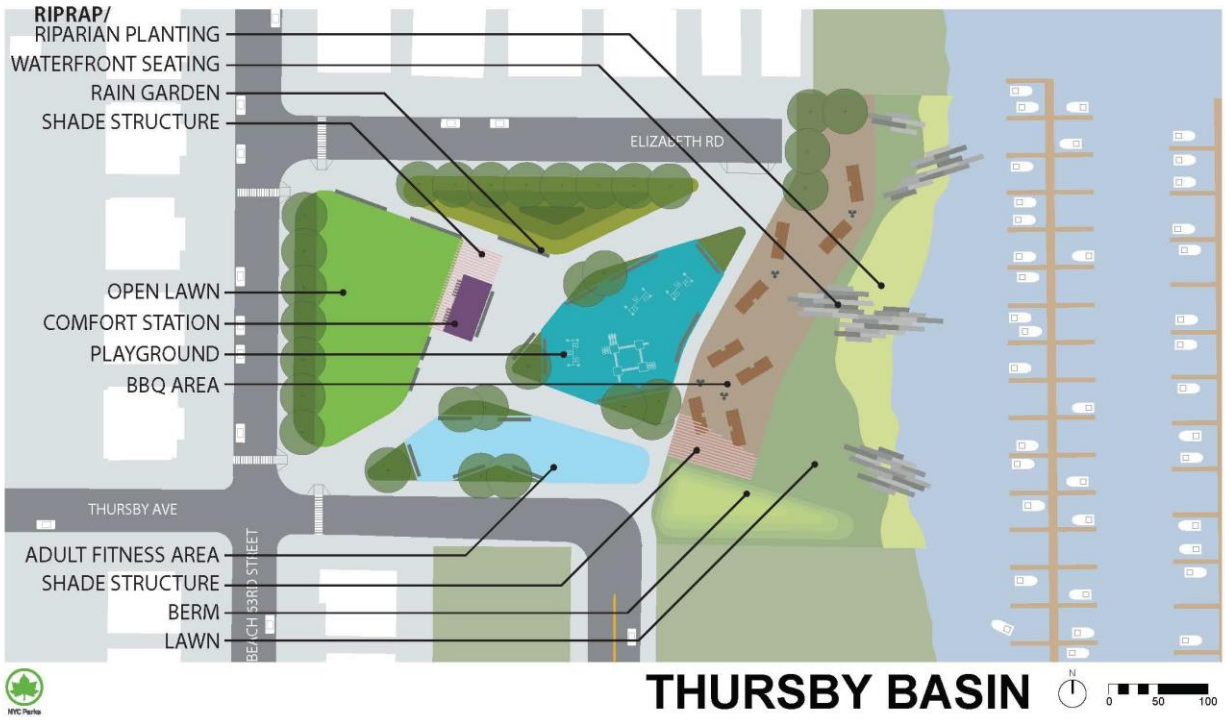
	DATE 4/11/2019		

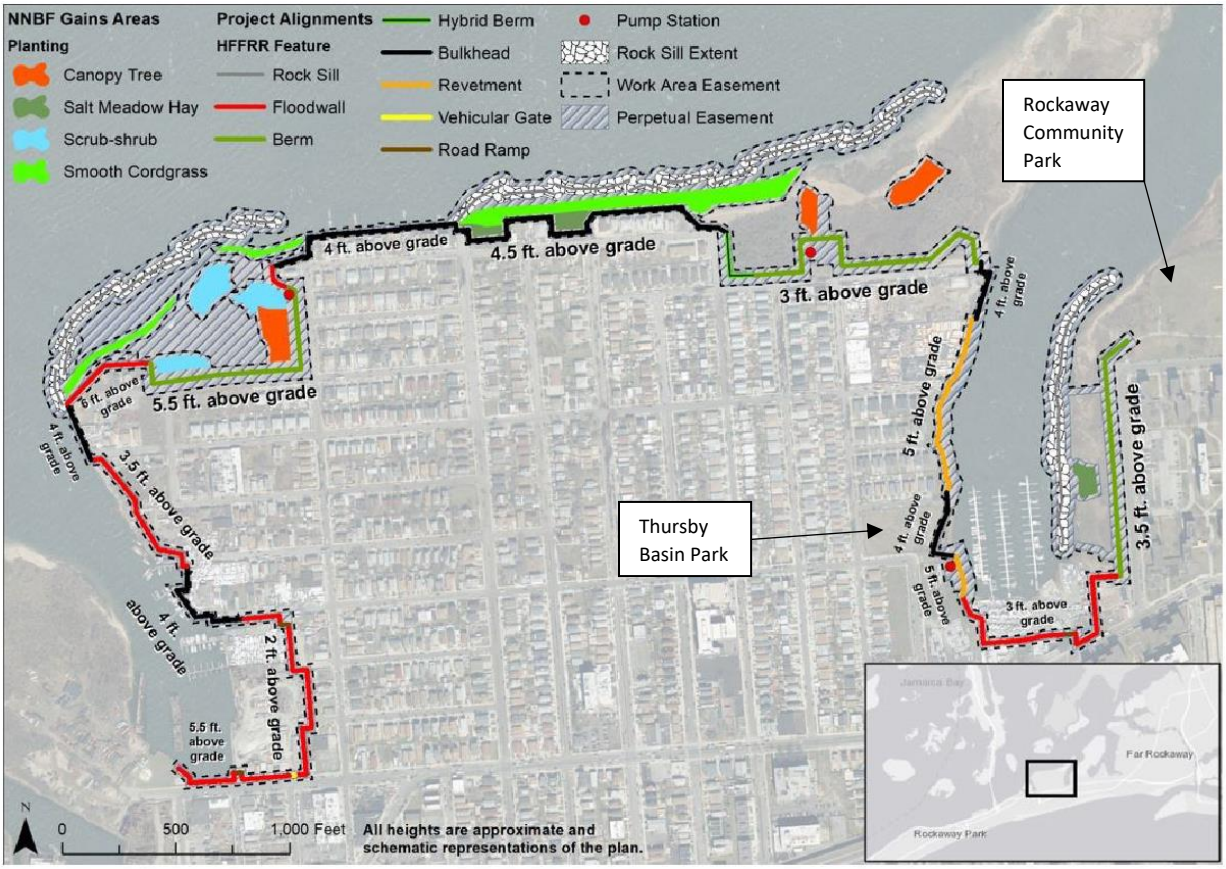
BLOCK 16109
LOT 70R, 185, 200

SHEET No. 17 OF 70 SHEETS

Appendix B, Figure 2d – Individual Site Plan Overview: Thursby Basin Park

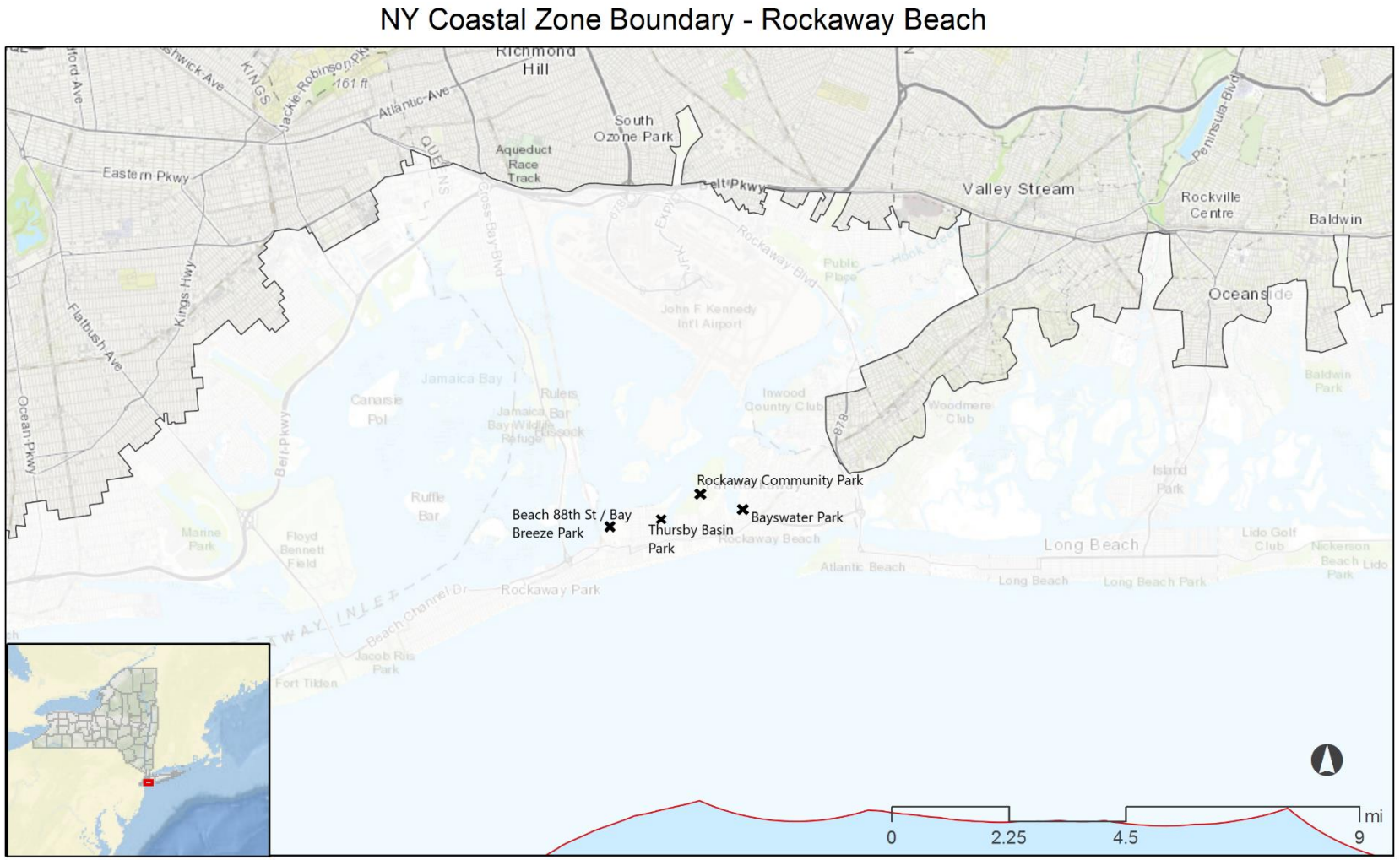


Thursby Basin Park Conceptual Plan (*before* addition of USACE bulkhead)



USACE EIS Shoreline Protection Plans showing proposed bulkhead on shore of Thursby Basin Park

Appendix B, Figure 3 – Coastal Zone Map



Coastal Zone Management Act Federal Consistency Boundary

APPENDIX C, Table 1 – New York State NAAQS

Appendix C, Table 1 – New York State NAAQS

NAAQS for Criteria Air Pollutants

As established by EPA the following table lists the current primary NAAQS for the six criteria air pollutants.

Pollutant	Averaging Time	Level	Form
CO	8 hours	9 ppm	Not to be exceeded more than once per year
CO	1hour	35 ppm	Not to be exceeded more than once per year
Pb	3-month average	0.15 $\mu g/m_3$	Not to be exceeded
NO_2	1 hour	100 ppb	98_{th} percentile of 1-hour daily maximum concentrations, averaged over 3 years
NO_2	1 year	53 ppb	Annual Mean
O_3	8 hours	0.07 ppm	Annual fourth-highest daily maximum 8- hour concentration, averaged over 3 years
$PM_{2.5}$	1 year	12.0 $\mu g/m_3$	Annual mean, averaged over 3 years
$PM_{2.5}$	24 hours	35 $\mu g/m_3$	98_{th} percentile, averaged over 3 years
SO_2	1 hour	75 ppb	99_{th} percentile of 1-hour daily maximum concentrations, averaged over 3 years

APPENDIX D, Correspondence 1 – NYSDOS Coastal Zone Management Act Consultation

U.S. Department of Homeland Security
Federal Emergency Management Agency
FEMA Region II
One World Trade Center
285 Fulton St.
New York, New York 10007

FEMA

May 1, 2020

Anne Bink
Deputy Commissioner for Recovery Programs
Division of Homeland Security & Emergency Services
1220 Washington Ave., Bldg. 7A
Albany, NY 12226

Re: New York State's Coastal Management Program Consistency Review of FEMA-4085-DR-NY Super Storm Sandy: PW4223 Rockaway Beach Boardwalk Underruns Project – Bayswater Park, Rockaway Community Park, Thursby Basin Park, Beach 88th St./Bay Beach Park

Dear Ms. Bink:

On behalf of the New York City Department of Parks and Recreation (DPR) (Sub-Recipient), the New York State Division of Homeland Security and Emergency Services (NYSDHSES) (Recipient) submitted an application for the Federal Emergency Management Agency's (FEMA) Public Assistance (PA) Program for financial assistance to redevelop DPR properties and drainage infrastructure on the Rockaway Peninsula in the borough of Queens, New York. The intent is to improve resiliency to future storm surge and flooding events and provide additional recreational opportunities. The work FEMA seeks to consult on is for four separate Parks along the bay side of the Rockaway peninsula:

- Bayswater Park
- Rockaway Community Park
- Thursby Basin Park
- Beach 88th Street/Bay Breeze Park

The proposed work at each of these sites includes restoration and construction of DPR properties with funding remaining from the reconstruction of the Rockaway Beach Boardwalk. Work items at each site include grading, paving, installation of natural plantings (including bioswales and wetlands), and shoreline protection measures such as berms and hardened surfaces to prevent erosion. More detail for each site is included in attached design/conceptual plans. Additionally, it must be noted that the U.S. Army Corps of Engineers is planning shoreline measures including berms, seawalls, and natural plantings in Far Rockaway, some of which connect or overlap with proposed features of work at the Parks sites. This proposed DPR project would supplement other FEMA-funded work already underway or completed and fulfill the identified opportunities in the Rockaway Conceptual Plan (https://www.nycgovparks.org/facility/beaches/beach-recovery/rockaway-parks-master-plan).

New York State Coastal Policies 1 through 44 have been reviewed with respect to the proposed measures to be performed per FEMA's disaster recovery operations. Based on this review, FEMA

determined that the above referenced activities are consistent with the policies of the New York State Coastal Management Program (CMP) and will not hinder the achievement of those policies. A summary of the proposed project's consistency with the State Coastal Policies is included as an attachment.

FEMA respectfully requests that NYSDHSES coordinates directly with the New York State Department of State (NYSDOS) to obtain their concurrence with FEMA's Coastal Zone Consistency Determination, in accordance with the requirement of the Coastal Zone Management Act of 1972 (15 CFR Part 930, Subpart F), prior to the release of federal funding to the grant recipient. FEMA Environmental Planning and Historic Preservation (EHP) looks forward to your office's feedback within 60 days of receipt of this letter. If you have any questions, please contact me.

Sincerely,

BROCK A GIORDANO

Digitally signed by BROCK A GIORDANO
Date: 2020.05.01 14:32:40 -04'00'

Brock Giordano, RPA
EHP Supervisor, NY Sandy
4085-DR-NY

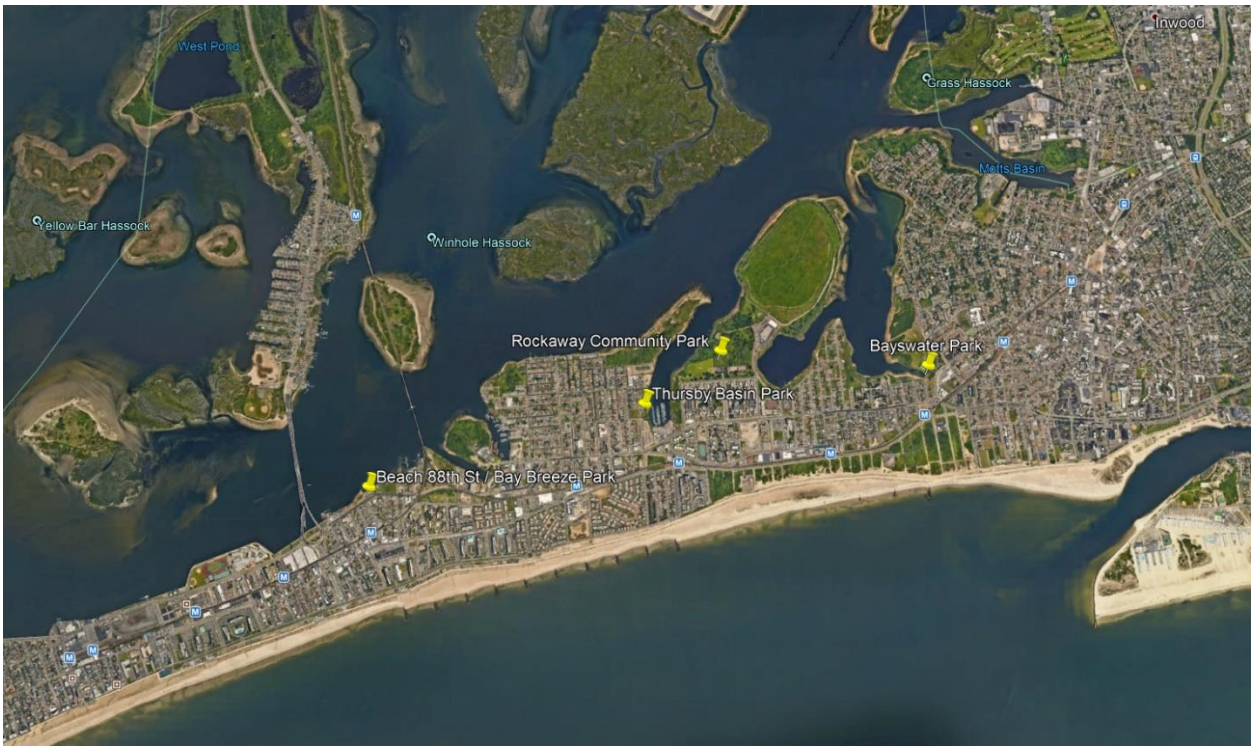
iphone: (347) 574-1467
Email: brock.giordano@fema.dhs.gov

BG/kb

Encl: Project Location Map
Preliminary Project Design Plans/Overview Documents
Consistencies with Coastal Policies of New York Worksheet

ATTACHMENTS

Project Location –All Parks Mapped/Far Rockaway, Queens, NY



Preliminary Project Design Plans/Overview Documents

Summary Table for Project's Consistency with Coastal Policies of New York State

Policy 1

Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.

Consistent. The proposed project will construct/refurbish park facilities along the bay shore of the Rockaway Peninsula.

Policy 2

Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters.

Consistent. The proposed project will not change the water-dependent uses and facilities currently available for the patrons of parks on the Rockaway Peninsula.

Policy 3

Further develop the state's major ports of Albany, Buffalo, New York, Ogdensburg, and Oswego as centers of commerce and industry, and encourage the siting, in these port areas, including those under the jurisdiction of state public authorities, of land use and development which is essential to, or in support of, the waterborne transportation of cargo and people.

N/A. The Rockaway Peninsula is not adjacent to the abovementioned port areas and the proposed project does not entail work in a major port or waterway.

Policy 4

Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities which have provided such areas with their unique maritime identity.

Consistent. Boating areas in the bay adjacent to the proposed projects (parks) will not be adversely affected.

Policy 5

Encourage the location of development in areas where public services and facilities essential to such development are adequate.

Consistent. Constructing/refurbishing parks facilities in this area does not add significantly to the overall strain on public service and utility systems essential to the community.

Policy 6

Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.

Consistent. FEMA provides a 60-day consistency determination review period to the NYSDOS Coastal Management Program before processing the federal disaster relief grant specifically for declaration of NY-4085.

Policy 7

Significant coastal fish and wildlife habitats (SCFWH) will be protected, preserved, and where practical, restored so as to maintain their viability as habitats.

Consistent. Proposed work protects SCFWH in Jamaica Bay by stabilizing shorelines at all sites and by including natural wetland plantings at Bayswater Park and Rockaway Community Park.

Policy 8

Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sub lethal or lethal effect on those resources.

Consistent. The proposed project does not entail introduction of hazardous wastes or other pollutants that bio-accumulate in the food chain.

Policy 9

Expand recreational use of fish and wildlife resources in coastal areas by increasing access to existing resources, supplementing existing stocks, and developing new resources.

Consistent. The proposed project has no anticipated effects on access to, supplementation of, or development of new resources.

Policy 10

Further develop commercial finfish, shellfish, and crustacean resources in the coastal area by encouraging the construction of new, or improvement of existing on-shore commercial fishing facilities, increasing marketing of the state's seafood, maintaining adequate stocks, and expanding aquaculture facilities.

N/A. Policy is not the proposed project's purpose.

Policy 11

Buildings and other structures will be sited in the coastal area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.

Consistent. Facilities will be constructed using Best Management Practices to limit flooding and erosion.

Policy 12

Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands and bluffs.

Consistent. Proposed work at all sites includes shoreline stabilization technique(s), such as construction of berms, concrete grandstands, bulkheads, and natural wetland plantings.

Policy 13

The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least thirty years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.

Consistent. Facilities will be constructed using Best Management Practices to limit flooding and erosion.

Policy 14

Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.

Consistent. The proposed project will be constructed with Best Management Practices in place and utilizing native plantings where appropriate. All appropriate permits will be acquired, and work will be conducted in accordance with all federal, state, and local laws.

Policy 15

Mining, excavation or dredging in coastal waters shall not significantly interfere with the natural coastal processes which supply beach materials to land adjacent to such waters and shall be undertaken in a manner which will not cause an increase in erosion of such land.

Consistent. Any dredging and/or filling activities in coastal waters will be in service of work to stabilize shorelines with natural or man-made features as appropriate.

Policy 16

Public funds shall only be used for erosion protective structures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard area to be able to function, or existing development; and only where the public benefits outweigh the long term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features.

Consistent. The proposed project will include erosion control Best Management Practices.

Policy 17

Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.

Consistent. The proposed project will include native plantings at all sites, including wetland plantings and berms at Bayswater Park and Rockaway Community Park.

Policy 18

To safeguard the vital economic, social and environmental interests of the state and of its citizens, proposed major actions in the coastal area must give full consideration to those interests, and to the safeguards which the state has established to protect valuable coastal resource areas.

Consistent. The proposed project will protect the economic and social interests of the state and its citizens because work will be done in compliance with environmental and historical preservation laws generated to protect said interests. All appropriate permits will be acquired, and work will be conducted in accordance with all federal, state, and local laws.

Policy 19

Protect, maintain, and increase the level and types of access to public water-related recreation resources and facilities.

Consistent. The proposed project will increase opportunities for water-based recreation.

Policy 20

Access to the publicly-owned foreshore and to lands immediately adjacent to the foreshore or the water's edge that are publicly-owned shall be provided and it shall be provided in a manner compatible with adjoining uses.

Consistent. The proposed project will provide improved access to the publicly-owned foreshore through the improvements to lands that make up park properties.

Policy 21

Water-dependent and water-enhanced recreation will be encouraged and facilitated and will be given priority over non-water-related uses along the coast.

Consistent. The proposed project will include access to water-enhanced recreation, such as kayak launches/storage, trails, and fishing opportunities.

Policy 22

Development, when located adjacent to the shore, will provide for water-related recreation, whenever such use is compatible with reasonably anticipated demand for such activities, and is compatible with the primary purpose of the development.

Consistent. The proposed project will provide for compatible water-related recreation.

Policy 23

Protect, enhance and restore structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture of the state, its communities, or the nation.

Consistent. FEMA, in accordance with Section 106 of the National Historic Preservation Act, will consult with the New York State Historic Preservation Officer to determine the potential to affect Historic Properties.

Policy 24

Prevent impairment of scenic resources of statewide significance.

Consistent. The proposed project will not impact known scenic resources of statewide significance.

Policy 25

Protect, restore or enhance natural and man-made resources which are not identified as being of statewide significance, but which contribute to the overall scenic quality of the coastal area.

Consistent. The proposed project will improve the overall scenic quality of the coastal area with the creation/refurbishment of these park facilities and natural plantings.

Policy 26

Conserve and protect agricultural lands in the state's coastal area.

N/A. Proposed activities will take place on previously developed land not suitable for agricultural use.

Policy 27

Decisions on the siting and construction of major energy facilities in the coastal area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location.

N/A. Policy is not the project's purpose because it does not involve siting and construction of energy facilities.

Policy 28

Ice management practices shall not interfere with the production of hydroelectric power, damage significant fish and wildlife and their habitats, or increase shoreline erosion or flooding.

N/A. The proposed project does not entail or is not influenced by ice management practices.

Policy 29

Encourage the development of energy resources on the outer continental shelf, in Lake Erie and in other water bodies, and ensure the environmental safety of such activities.

N/A. Policy is not the project's purpose and project activities will not include development of energy resources.

Policy 30

Municipal, industrial, and commercial discharge of pollutants, including but not limited to, toxic and hazardous substances, into coastal waters will conform to state and national water quality standards.

N/A. The proposed project does not involve the discharge of pollutants into coastal waters.

Policy 31

State coastal area policies and management objectives of approved local waterfront revitalization programs will be considered while reviewing coastal water classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint.

N/A. Policy is not the project's purpose since project does not involve review of or modification to the state's adopted coastal water classifications or water quality standards.

Policy 32

Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.

N/A. Policy is not this proposal's purpose, as it does not involve evaluation of sanitary waste systems.

Policy 33

Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into coastal waters.

Consistent. Industry standard BMPs will be employed while conducting all work and staging activities. Subrecipient is required to obtain the NY State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity if the construction project disturbs more than 5,000 square feet to one acre of land.

Policy 34

Discharge of waste materials into coastal waters from vessels subject to state jurisdiction will be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.

N/A. Policy is not the project's purpose; the project will have no impact on vessel discharges.

Policy 35

Dredging and filling in coastal waters and disposal of dredged material will be undertaken in a manner that meets existing State permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands.

Consistent. Any dredging and/or filling activities in coastal waters will be in accordance with State and Federal permitting.

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.

N/A. Policy is not the project's purpose since the project does not involve shipment and storage of petroleum or other hazardous materials.

Policy 37

Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics and eroded soils into coastal waters.

Consistent. Best Management Practices will be utilized during construction and operation to reduce the potential discharge of excess nutrients, organics, and eroded soils into coastal waters.

Policy 38

The quality and quantity of surface water and groundwater supplies will be conserved and protected, particularly where such waters constitute the primary or sole source of water supply.

Consistent. Proposed activities have no anticipated effects on the quality or quantity of groundwater supplies.

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 land, and scenic resources.

Consistent. Contractors will use BMPs listed in federal/NYSDEC permits for transport, storage, treatment and disposal of all C&D, hazardous waste, etc. during construction activities. There are no probable adverse impacts on fish and wildlife resources, groundwater supply, recreation areas, scenic resources, or agricultural land.

Policy 40

Effluent discharged from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to state water quality standards.

N/A. The proposed project does not entail effluent from a steam electric generating or industrial facility.

Policy 41

Land use or development in the coastal area will not cause national or state air quality standards to be violated.

Consistent. There is no evidence to show that the project or construction activities will violate state or national air quality standards. The subrecipient is required to remove, transport, and dispose of any hazardous debris in compliance with state hazardous materials permit requirements.

Policy 42

Coastal management policies will be considered if the state reclassifies land areas pursuant to the prevention of significant deterioration regulations of the Federal Clean Air Act.

N/A. Policy is not the project's purpose or function as it does not propose reclassifying land areas pursuant to the Federal Clean Air Act.

Policy 43

Land use or development in the coastal area must not cause the generation of significant amounts of acid rain precursors: nitrates and sulfates.

Consistent. The proposed project does not entail significant changes in level of acid rain precursors.

Policy 44

Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.

Consistent. Project activities will include restoration of wetlands at two sites, and natural plantings at all sites adjacent to water. Work at all sites will also include measures to prevent future shoreline erosion. Best Management Practices will be employed during construction so project activities are not anticipated to negatively affect nearby tidal wetlands.

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
SECRETARY OF STATE

July 22, 2020

Anne Bink
Deputy Commissioner for Recovery Programs
NYS Department of Homeland Security & Emergency Services
1220 Washington Avenue
Building 7A-Floor 4
Albany, NY 12242

Re: **F-2020-0359 (FA)**
Applicant- NYS Department of Homeland Security and Emergency Services
FEMA funding to redevelop NYC DPR properties and drainage infrastructure
Various locations on Rockaway Peninsula, Queens County, Jamaica Bay
General Concurrence - No Objection to Funding

Dear Ms. Bink,

The Department of State (DOS) received the information you submitted regarding the above proposed federal financial assistance on May 7, 2020 and has completed its review. Based on this review, the Department of State has no objection to the release of the U.S. Department of Homeland Security- FEMA Public Assistance Program funding in support of the proposed project.

This concurrence pertains to the federal financial assistance activity or activities for this project only. It appears that certain aspects of this project may require a federal permit or other form of federal agency authorization. The Department of State would conduct separate consistency review(s) of permit activities, including those that may be authorized by the Army Corps of Engineers pursuant to the Nationwide Permit Program and the Department's consistency determination regarding that program.
.

When communicating with us regarding this matter, please contact us at (518) 474-6000 and refer to our file # F-2020-0359 (FA).

Sincerely,

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

MM/rf

Cc: NYC LWRP -Chris Wassif

NEW YORK STATE OF OPPORTUNITY. Department of State

APPENDIX D, Correspondence 2 – NYSHPO Consultations

APPENDIX D, Correspondence 2 – NYSHPO Consultations

U.S. Department of Homeland Security
Federal Emergency Management Agency
FEMA Region II
One World Trade Center
285 Fulton Street
New York, New York 10007

FEMA

June 4, 2020

R. Daniel Mackay
Deputy State Historic Preservation Officer
Division for Historic Preservation
Peebles Island State Park
P. O. Box 189
Waterford, NY 12188-0189

Re: **Project Number:** PA-02-NY-4085-PW-04223
Subrecipient: New York City Department of Parks and Recreation (NYCDPR)
Address: Michaelis-Bayswater Park, 701 Bay 32nd Street, Far Rockaway, NY (40.599775, -73.76855)
Undertaking: Demolition and reconstruction of park amenities, construction of new park buildings and shoreline protection measures
SHPO ID: 20PR00170

Dear Mr. Mackay:

The Federal Emergency Management Agency (FEMA) will be providing funds authorized through the Public Assistance Alternative Procedures (PAAP) 428 program in response to the major Disaster Declaration for FEMA-4085-DR-NY, dated October 28, 2012, as amended. FEMA is conducting Section 106 review for the above referenced Undertaking.

Project Information
This FEMA project worksheet was originally written to capture damages resulting from Hurricane Sandy at the Queens Rockaway Boardwalk. On February 23, 2017, FEMA received an updated scope of work in which the subrecipient proposed to utilize the flexibility of the 428 PAAP program using "underrun" funds at multiple parks on the Far Rockaway Peninsula. The subject of this consultation is the proposed work at Bayswater Park.

Bayswater Park, also known as Michaelis-Bayswater Park, is located near the southeast corner of Jamaica Bay on the Far Rockaway Peninsula. The park is bounded to the north by Norton Basin Resource Area, to the east by Bay 32nd Street, to the south by Beach Channel Drive and to the southwest and west by Jamaica Bay (see Map Index, Figures 1 and 2). The neighborhood adjacent to the park is a developed, urban area consisting predominantly of single and multi-family dwellings as well as commercial centers and designated green space. Topography of the park is relatively flat with some man-made slopes for landscaping purposes and in total averages less than 10-feet in elevation.

A consultant for NYCDPR submitted a project review request with your office in January 2020. Their submission included a conceptual plan for the park with approved and proposed alterations resulting from an October 2019 NYC Public Design Commission meeting. On February 10, 2020, your office determined that Michaelis-Bayswater Park was not eligible for listing on the National Register of Historic Places

(NRHP).

In April 2020, FEMA was made aware that the consultant's submission was in the NYSHPO Cultural Resources Information System (CRIS) for this FEMA-funded project. The purpose of this consultation is to initiate formal Section 106 consultation for the Undertaking and submit current project plans.

Description of Undertaking
The scope of work proposed for this project includes demolition, reconstruction and introduction of new park amenities including demolition and reconstruction of the existing comfort station, construction of a new maintenance and operations building, construction of a kayak launch, new sections of boardwalk, an event stage, ballfields, and tennis courts (see Map Index, Figure 4).

Additional work consists of shoreline flood mitigation measures to help protect the park and the nearby neighborhood against flooding from adjacent Norton Basin. Proposed work includes construction of rock sills, engineered wetlands, berms, bioswale/rain gardens and retaining walls, adding riprap, removing non-native vegetation, forest restoration and native vegetation plantings, and shoreline debris removal (see Map Index, Figure 5).

Additional work meets the description of Tier II allowances: I.B.1., I.B.2., I.C.1., and III.A.5. as defined in the 2019 NY Statewide Programmatic Agreement.

Area of Potential Effects (APE)
The APE for Undertaking is determined to be limited to the park property boundaries as defined above within Lot 1: Block 15745 (see Map Index, Figure 3).

Evaluation of Architectural Significance
Research conducted using CRIS revealed that Bayswater Park was previously determined not eligible for the National Register of Historic Places as a building district (USN 08101.013183). CRIS also shows the buildings and structures in the park as not individually eligible or listed on the NRHP and none of the adjacent buildings in the surrounding neighborhood appear in CRIS as NRHP eligible or listed resources. The park and its buildings are not calendared or listed as NYC Landmarks or Scenic Landmarks or located within a calendared or listed NYC Historic District. As noted above, SHPO determined that no historic properties, including archaeological and/or historic resources, would be affected by the Undertaking submitted from NYCDPR's consultant in January 2020.

The park property is irregularly shaped and consists of about 40 acres. Park amenities include barbecue/grilling areas, baseball fields, basketball, handball, and tennis courts, hiking trails, playgrounds, a skate park, and a comfort station. On the western side of the park is a maintained, but natural area of coastal shrubbery with walking paths to the bay. Most of the facilities are situated in the southeast portion of the property including the hard surface "courts" and comfort station, with the baseball fields centrally located and expanding into the northwest portion of the park (see Photo Index, Images 1-5).

The park was established in 1931 with upgraded facilities constructed by the late 1960s and renovations completed in 1996. The existing comfort station is a one-story, brick clad Postmodern building with flat roof. Architectural features include wide overhangs supported by square, minimalistic concrete columns. In the southern section of the park, near the corner of Bay 32nd Street and Beach Channel Drive is a series of decoratively painted concrete walls (see Photo Index, Images 1, 2 and 5).

Bayswater Park does not possess unique character defining features associated with an architectural style or method of construction. In addition, the park's design does not represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack

individual distinction. While the park falls within the age requirement for listing on the NRHP, it lacks the level of integrity required for consideration.

Evaluation of Archaeological Impact
Research conducted using CRIS revealed the APE is located outside any documented archaeologically sensitive areas. Additionally, no documented archaeological sites have been mapped within 1000ft of the APE (see Map Index, Figure 3). The absence of sites at or below the facility's elevation is likely due to inhospitable or submerged conditions in such areas prior to the early-20th century and the area's history of filling and development.

According to the USDA Soil Survey, the soils in the APE are classified as Fortress-sand, 0 to 3% slopes (FoA), Marinepark-Verrazano complex, 0 to 3% slopes (MVA), Urban land-Bigapple, non-dredge material complex, 0 to 3% slopes, low impervious surface (UBAI), Urban land, tidal marsh substratum, 0 to 3% slopes (UmA), and Urban land-Verrazano complex, 0 to 3% slopes, low impervious surface (UVAI). The proposed scope of work planned for the site is in previously disturbed soils, which is confirmed by mapping sources noted above. These soils are not likely to possess intact and distinct historic cultural soil horizons and thereby have an extremely low probability for the Undertaking to encounter archaeological artifacts or features within their original depositional contexts.

Overall, the vertical and horizontal limits of disturbance for the proposed improvements will be located within the limits of previously disturbed artificial landscapes with little to no historical development within the APE. Therefore, based on the environmental and historic conditions, as well as the lack of archaeological sites recorded within the vicinity of the subject property, prehistoric and historic archaeological sensitivity is assessed as low. As previously noted, SHPO determined that no historic properties, including archaeological and/or historic resources, would be affected by the Undertaking submitted from NYCDPR's consultant in January 2020.

Determination of Effect
Based on the information above, FEMA concurs with SHPO's finding that Bayswater Park is not eligible for listing on the National Register of Historic Places. Additionally, the potential to encounter *in situ* prehistoric and/or historic-period archaeological sites for this scope of work is low. Therefore, FEMA concurs with SHPO's determination of **No Historic Properties Affected** for the Undertaking.

FEMA requests confirmation of this determination of effect within fifteen (15) calendar days. Should you need additional information please contact structures reviewer Xana Peltola (xana.peltola@fema.dhs.gov) or archaeology reviewer Brock Giordano (brock.giordano@fema.dhs.gov).

Sincerely,

JAMES M ZWOLAK
Digitally signed by JAMES M ZWOLAK
Date: 2020.06.04 12:08:52 -04'00'

For,
Brock Giordano
FEMA EHP Sandy (4085) Supervisor
4085-DR-NY

BG/jz/xp

cc: Stephanie Couture, New York Division of Homeland Security and Emergency Services

Gina Santucci, Director of Environmental Review, NYC Landmarks Preservation Commission
Amanda Sutphin, Director of Archaeology, NYC Landmarks Preservation Commission

enc: 20200604_Map Index_BayswaterPark
20200604_Photo Index_BayswaterPark
Design Plans_BayswaterPark

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

June 09, 2020

Mr. James Zwolak
EHP Deputy Supervisor-Sandy NY/Lead Historic Preservation Specialist
FEMA
285 Fulton Street
New York, NY 10007

Re: FEMA
Reconstruction of Michaelis-Bayswater Park
701 Bay 32 Street, Queens, NY 11691
20PR00170

Dear Mr. Zwolak:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include other environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, the New York SHPO concurs with the finding that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking.

If you have any questions, please don't hesitate to contact me.

Sincerely,

Philip A. Perazio, Historic Preservation Program Analyst - Archaeology Unit
Phone: 518-268-2175
e-mail: philip.perazio@parks.ny.gov via e-mail only

cc: Stephanie Couture, DHSES
Brock Giordano, FEMA
Ashley Metius, NV5
Gina Santucci and Amanda Sutphin, LPC

U.S. Department of Homeland Security
Federal Emergency Management Agency
FEMA Region II
One World Trade Center
285 Fulton Street
New York, New York 10007

FEMA

June 4, 2020

R. Daniel Mackay
Deputy State Historic Preservation Officer
Division for Historic Preservation
Peebles Island State Park
P. O. Box 189
Waterford, NY 12188-0189

Re: **Project Number:** PA-02-NY-4085-PW-04223
Subrecipient: New York City Department of Parks and Recreation (NYCDPR)
Address: Rockaway Community Park, Almeda Ave., Norton Ave. bet. Beach 58th St., Sommerville Basin and Beach 49th St., Conch Basin Rockaway, Queens County (40.603077, -73.780730)
Undertaking: Park reconstruction including amenities upgrades and shoreline flood protection measures
SHPO ID: 19PR08710

Dear Mr. Mackay:

The Federal Emergency Management Agency (FEMA) will be providing funds authorized through the Public Assistance Alternative Procedures (PAAP) 428 program in response to the major Disaster Declaration for FEMA-4085-DR-NY, dated October 28, 2012, as amended. FEMA is conducting Section 106 review for the above referenced Undertaking.

Project Information
This FEMA project worksheet was originally written to capture damages resulting from Hurricane Sandy at the Queens Rockaway Boardwalk. On February 23, 2017, FEMA received an updated scope of work in which the subrecipient proposed to utilize the flexibility of the 428 PAAP program using "underrun" funds at multiple parks throughout the Far Rockaway Peninsula. The subject of this consultation is the proposed work at Rockaway Community Park.

Rockaway Community Park was constructed on a manmade peninsula in Jamaica Bay. It is bounded by Conch Basin to the southeast, Norton Basin to the east, Jamaica bay to the north, Sommerville Basin to the west, and Beach 54th and Almeda Avenues to the south (see Map Index, Figures 1-3). The park is located in a developed area consisting predominantly of single and multi-family dwellings and situated adjacent to NYCHA Ocean Bay Apartments. The northern most part of the park is the former Edgemere landfill that has been capped resulting in an elevation of 20-25 feet at its highest point.

A consultant for NYCDPR submitted a project review request with your office in December 2019. Their submission (APE) was specifically focused on shoreline work. On January 2, 2020, your office determined that the boardwalk within Rockaway Community Park was not eligible for listing on the National Register of Historic Places (NRHP) and no historic properties, including archaeological and/or historic resources,

would be affected by the proposed shoreline work.

In April 2020, FEMA was made aware that the consultant's submission was in the NYSHPO Cultural Resources Information System (CRIS) for this FEMA-funded project. The purpose of this consultation is to initiate formal Section 106 consultation for the Undertaking throughout the entire park and submit current project plans.

Description of Undertaking
The scope of work proposed for this project includes park circulation improvements and shoreline protection measures using flood mitigation techniques to protect the community against flooding from adjacent waterways.

Park improvements:

- Remove Conch Place asphalt roadway and adjacent utility poles (in the southeast section of the park); backfill with clean sand, seed, and plant for soil stabilization; mill and resurface a strip of the roadway for a new ADA pathway
- Construct a new asphalt trail connecting the existing boardwalk to the fishing piers and existing asphalt pathways
- Remove a portion of the existing gravel storage area "pavement" and replace with native plantings
- Remove excess chain link fence and footings adjacent to the boardwalk and replace with native plantings

Shoreline protection measures:

- Rebuilding up to 2.5 acres of tidal salt marsh with approximately 18,000 cubic yards of clean sand at specific slopes and elevations for planting low and high tide marsh vegetation
- Expand existing fringe marsh (from 20 ft.) up to 250 ft. wide with the outer edge of the marsh area graded down to existing substrate and reinforced by a continuous or partial rock sill (or other stabilizing structure(s))
- Shoreline and marine debris removal including large and small pieces of concrete and deposited marine debris:
    - Conch Basin – approximately 1,950 cubic yards
    - Somerville Basin – approximately 1,600 cubic yards
- Additional bank stabilization including grading of steep, eroded banks, "over-excavation" to remove invasive vegetation in specific areas, backfilling with clean sand, seeding and planting with new vegetation
- Removal and disposal of contaminated debris

Additional work meets the description of Tier I Allowances: I.A.1., I.C.1., and I.C.2. as well as Tier II Allowances: I.A.1., I.B1. I.B.2, I.C.1, III.A.4., III.A.5, as defined in the 2019 NY Statewide Programmatic Agreement.

Area of Potential Effects (APE)
The APE for this Undertaking is determined to be limited to the park property boundaries as defined above within Lot 2, Block: 15980 (see Map Index, Figure 4).

Evaluation of Architectural Significance
Research conducted using CRIS revealed that the boardwalk (USN Number: 08101.013180) within Rockaway Community Park was determined not eligible for listing on the NRHP. None of the buildings and structures adjacent to the park appear in the CRIS database as NRHP listed or eligible resources. The park is not calendared or listed as a NYC Landmark or Scenic Landmark and is not located within a

calendared or listed NYC Historic District. As noted above, SHPO determined that no historic properties, including archaeological and/or historic resources, would be affected by the proposed shoreline work submitted from NYCDPR's consultant in January 2020.

The park property originally consisted of tidal marsh that was filled sometime between 1938 and 1947. The filled area was used as an airfield and later functioned as the Edgemere Landfill. It became part of the New York City park system in 1948 with additional land purchased in 1955 (see Map Index, Figures 5-10). Park amenities were developed as early as 1966 and by 1980 most of the built environment was established within the park (see Map index, Figures 11-14).

Today the park is irregularly shaped and is comprised of about 250 acres. Current amenities include cricket fields, basketball, handball, and tennis courts, playgrounds, and fishing piers. Most of the facilities are situated along the southern edge of the property occupying about 66 acres of land. Facilities include landscaped areas of mature, perennial trees, low shrubs, and flowers accessed by a boardwalk and walking trails. A significant portion of the park, located on the north side of the property, is currently inaccessible to the public due to its former use as a landfill. This area is covered in grass with a road encircling the mound. The shoreline around the park's peninsula includes mudflats and salt marsh with native and invasive vegetation (see Photo Index, Images 1-7).

Rockaway Community Park does not possess unique character defining features associated with an architectural style or method of construction. In addition, the park's design does not represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction. While the park falls within the age requirement for listing on the NRHP, it lacks the level of integrity required for consideration.

Evaluation of Archaeological Impact

Research conducted using CRIS revealed the APE is located outside any documented archaeologically sensitive areas. Additionally, no documented archaeological sites have been mapped within one mile of the APE (see Map Index, Figure 3). The absence of sites at or below the facility's elevation is likely due to inhospitable or submerged conditions in such areas prior to the early-20th century and the area's history of filling and development.

According to the USDA Soil Survey, the soils in the APE are classified as, Freshkills sandy loam, 0 to 8% slopes (FkB), Freshkills sandy loam, 15 to 35% slopes (FkE), Fortress sand, 0 to 3% slopes (FoA), Oil-waste land (Oi), Sandyhook mucky fine sand, 0 to 2% slopes, very frequently flooded (SaA), Urban land, tidal marsh substratum, 0 to 3% slopes (UmA). The soils classification is indicative of the formation of the peninsula. The predominant soil type in the APE, the Freshkills series, consists of very deep, well drained soils on anthropogenic landforms. These soils formed in a thick mantle of human transported material that includes loamy soil material over a geomembrane over a mixture of household garbage, construction debris, and other discarded materials layered with human transported soil material. These soils occur in landfills on artificial landscapes.

As noted above the park property originally consisted of tidal marsh that was filled sometime between 1938 and 1947. Review of the historic topographic maps dating to 1938 label the current APE as "Little Bay Marsh." The filled area was used as an airfield and later functioned as the Edgemere Landfill before having Park amenities as early as 1966 and by 1980 most of the built environment was established within the park (see Map index, Figures 11-14).

Overall, the vertical and horizontal limits of disturbance for the proposed improvements will be located within the limits of previously disturbed artificial landscapes. Therefore, based on the environmental and historic conditions, as well as the lack of archaeological sites recorded within the vicinity of the subject

property, prehistoric and historic archaeological sensitivity is assessed as low. As previously noted, SHPO determined that no historic properties, including archaeological and/or historic resources, would be affected by the Undertaking (shoreline work) submitted from NYCDPR's consultant in January 2020.

Determination of Effect
Based on the information above, FEMA has determined that Rockway Community Park is not eligible for listing on the National Register of Historic Places. FEMA concurs with SHPO's previous determination that the boardwalk within the park is not eligible for NRHP listing and that no historic properties, including archaeological and/or historic resources will be affected by the proposed shoreline work. Additionally, the potential to encounter *in situ* prehistoric and/or historic-period archaeological sites for this scope of work is low. Therefore, FEMA's determination for the entire Undertaking is **No Historic Properties Affected**.

FEMA requests concurrence with this determination of effect within fifteen (15) calendar days. Should you need additional information please contact structures reviewer Xana Peltola (xana.peltola@fema.dhs.gov) or archaeology reviewer Brock Giordano (brock.giordano@fema.dhs.gov).

Sincerely,

JAMES M ZWOLAK Digitally signed by JAMES M ZWOLAK Date: 2020.06.04 10:15:39 -04'00' For,

Brock Giordano
FEMA EHP Sandy (4085) Supervisor
4085-DR-NY

BG/jz/xp

cc: Stephanie Couture, New York Division of Homeland Security and Emergency Services
Gina Santucci, Director of Environmental Review, NYC Landmarks Preservation Commission
Amanda Sutphin, Director of Archaeology, NYC Landmarks Preservation Commission

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Feb 2020 50%ConceptDiagram_RockawayCommunityPark

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

June 08, 2020

Mr. James Zwolak
EHP Deputy Supervisor-Sandy NY/Lead Historic Preservation Specialist
FEMA
285 Fulton Street
New York, NY 10007

Re: FEMA
The Reconstruction of Shoreline Protection Measures at Rockaway Community Park
Borough of Queens, Queens County, NY
19PR08710

Dear Mr. Zwolak:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include other environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, the New York SHPO concurs with FEMA's finding that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking.

If you have any questions, please don't hesitate to contact me.

Sincerely,

Philip A. Perazio, Historic Preservation Program Analyst - Archaeology Unit
Phone: 518-268-2175
e-mail: philip.perazio@parks.ny.gov via e-mail only

cc: Stephanie Couture, DHSES
Brock Giordano, FEMA
Ashley Metius, NV5
Gina Santucci and Amanda Sutphin, LPC

U.S. Department of Homeland Security
Federal Emergency Management Agency
FEMA Region II
One World Trade Center
285 Fulton Street
New York, New York 10007

FEMA

June 8, 2020

R. Daniel Mackay
Deputy State Historic Preservation Officer
Division for Historic Preservation
Peebles Island State Park
P. O. Box 189
Waterford, NY 12188-0189

Re: **Project Number:** PA-02-NY-4085-PW-04223
Subrecipient: NYC Department of Parks and Recreation
Address: Bay Breeze Park, Beach 88th Street and Beach Channel Drive, Rockaway Beach, Queens (40.59030, -73.81422)
Undertaking: Development of park grounds including installation of recreational amenities and shoreline flood protection measures

Dear Mr. Mackay:

The Federal Emergency Management Agency (FEMA) will be providing funds authorized through the Public Assistance Alternative Procedures (PAAP) 428 program in response to the major Disaster Declaration for FEMA-4085-DR-NY, dated October 28, 2012, as amended. FEMA is conducting Section 106 review for the above referenced Undertaking.

Project Information
This FEMA project worksheet was originally written to capture damages resulting from Hurricane Sandy at the Queens Rockaway Boardwalk. On February 23, 2017, FEMA received an updated scope of work in which the subrecipient proposed to utilize the flexibility of the 428 PAAP program using "underrun" funds at multiple parks throughout the Far Rockaway Peninsula. The subject of this consultation is the proposed work at Bay Breeze Park.

The site to become Bay Breeze Park is located on the Far Rockaway Peninsula situated on the south-central area of Jamaica Bay. The site is bounded to the north by Jamaica Bay, to the east by Old Beach 88th Street, to the south by Beach Channel Drive, and to the west by Beach 89th Street. It is located in a developed area consisting predominantly of single and multi-family dwellings as well as commercial centers (see Map Index, Figure 1 and Photo Index, Images 1-4).

Description of Undertaking
The scope of work proposed for this project includes shoreline protection measures using flood mitigation techniques to protect the community against flooding from adjacent Jamaica Bay (see Map Index, Figure 4). Shoreline protection measures include the installation of Jersey barriers, riprap, sheet pile walls, grandstand seating, etc. (see Design Plans, pages 22-25 and 33-34). Amenities proposed for the site include a kayak ramp and storage shed, playground equipment, picnic areas and benches, bike racks, a shower/foot wash, and drinking fountains. Other park features will include overhead and security lighting and the

installation of differing surface materials, low walls, and fencing to provide delineation of program areas within the park (see Design Plans, pages 12-20). Based on past use of the land, it has been specified that about two feet of potentially contaminated soil will be excavated with machines and/or by hand in specified areas (see Design Plans, page 12).

Additional work meets the description of Tier II allowances: I.A.3. and I.B.2. as defined in the 2019 NY Statewide Programmatic Agreement.

Area of Potential Effects (APE)
The APE for this undertaking is determined to be limited to the property's boundaries as defined above within Lot 200: Block 16109 (see Map Index, Figures 2 and 3).

Evaluation of Architectural Significance
Research conducted using the NYSHPO Cultural Resources Information System (CRIS) shows that the property for the new park is not listed or eligible for listing on the National Register of Historic Places (NRHP) individually or as part of a historic district. Additionally, the park is not calendared or listed as a NYC Landmark or Scenic Landmark and is not located within a calendared or listed NYC (LPC) Historic District (see Map Index, Figure 2).

While the property is currently undeveloped, it has built elements including a bulkhead, concrete walls (some below grade), and a storm sewer system/outfall pipe. None of these elements appear to possess unique character defining features associated with a method of construction or engineering. They also do not appear to represent the work of a master, possess high artistic value, or represent a significant and distinguishable entity whose components may lack individual distinction. In addition, the nearby buildings and structures do not appear to retain the level of integrity required to be considered a NRHP Historic District (see Photo Index, Images 3 and 4). While the existing structures in the park may fall within the age requirement for listing on the NRHP, they lack the level of integrity necessary for consideration.

Evaluation of Archaeological Impact
Research conducted using CRIS shows that the APE is located outside any documented archaeologically sensitive areas. Additionally, no documented archaeological sites have been mapped within one mile of the APE (see Map Index, Figure 5). Mapping sources show continual building and demolition on the site beginning with the 1912 Sanborn Map. This map shows the shoreline as a more natural state with buildings situated along the irregular beach front. There is also a pier extending into the bay with the Jamaica Bay Yacht Club atop. By 1951, these buildings are no longer extant, and a seawall shows a hard edge along the shoreline. Additionally, the 1951 map shows a structure on the east side of the site near what would be Old Beach 88th Street. In 1954, there is also a small structure just west of present-day Beach 88th Street. By 1966, the large building on the east side of the site is gone as well as a large section of the seawall about centered within the site. All buildings are gone by 2004 and the site remains undeveloped to the present. (See Map Index, Figures 6-11.)

According to the USDA Soil Survey, the soils in the APE are classified as Laguardia-Urban land complex, 0 to 3% slopes (LUA). The proposed scope of work planned for the site is in previously disturbed soils, which is confirmed by mapping sources noted above. These soils are not likely to possess intact and distinct historic cultural soil horizons and thereby have an extremely low probability for the undertaking to encounter archaeological artifacts or features within their original depositional contexts.

Overall, the vertical and horizontal limits of disturbance for the proposed improvements will be located within the limits of previously disturbed artificial landscapes with little to no historical development within the APE. Therefore, based on the environmental and historic conditions, as well as the lack of archaeological sites recorded within the vicinity of the subject property, prehistoric and historic

archaeological sensitivity is assessed as low.

Determination of Effect
Research conducted for the Undertaking has revealed that although there are above ground structures at the site, none of these exhibit the historic integrity or context required for listing on the National Register of Historic Places. Additionally, the potential to encounter *in situ* prehistoric and/or historic archaeological sites eligible for listing on the National Register of Historic Places within the APE is low. Therefore, FEMA has concluded that the determination for this Undertaking is **No Historic Properties Affected** that are either on, or eligible for inclusion on, the State or National Register of Historic Places.

FEMA requests concurrence with this determination of effect within fifteen (15) calendar days. Should you need additional information, contact structures reviewer, Xana Peltola (xana.peltola@fema.dhs.gov) or archaeology reviewer, Brock Giordano (brock.giordano@fema.dhs.gov).

Sincerely,

JAMES M ZWOLAK Digitally signed by JAMES M ZWOLAK Date: 2020.06.08 14:35:01 -04'00' For,

Brock Giordano
FEMA EHP Sandy (4085) Supervisor
4085-DR-NY

BG/jz/xp

cc: Stephanie Couture, New York Division of Homeland Security and Emergency Services
Gina Santucci, Director of Environmental Review, NYC Landmarks Preservation Commission
Amanda Sutphin, Director of Archaeology, NYC Landmarks Preservation Commission

enc: 20200608_Map Index_BayBreezePark
20200608_Photo Index_BayBreezePark
Design Plans_BayBreezePark

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

June 09, 2020

James Zwolak
FEMA
285 Fulton Street
New York, NY 10007

Re: FEMA/PA
NYCDPR - Bay Breeze Park
20PR03419
PA-02-NY-4085-PW-04223

Dear James Zwolak:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include other environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, the New York SHPO concurs with the finding that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking.

If you have any questions, please don't hesitate to contact me.

Sincerely,

Philip A. Perazio, Historic Preservation Program Analyst - Archaeology Unit
Phone: 518-268-2175
e-mail: philip.perazio@parks.ny.gov via e-mail only

cc: Stephanie Couture, DHSES
Brock Giordano, FEMA
Gina Santucci and Amanda Sutphin, LPC

U.S. Department of Homeland Security
Federal Emergency Management Agency
FEMA Region II
One World Trade Center
285 Fulton Street
New York, New York 10007

FEMA

June 9, 2020

R. Daniel Mackay
Deputy State Historic Preservation Officer
Division for Historic Preservation
Peebles Island State Park
P. O. Box 189
Waterford, NY 12188-0189

Re: **Project Number:** PA-02-NY-4085-PW-04223
Subrecipient: NYC Department of Parks and Recreation
Address: Thursby Basin Park, 62-02 Beach 63rd Street, Arverne, Queens County (40.59565, -73.79172)
Undertaking: Development of park grounds including installation of recreational amenities and shoreline flood protection measures

Dear Mr. Mackay:

The Federal Emergency Management Agency (FEMA) will be providing funds authorized through the Public Assistance Alternative Procedures (PAAP) 428 program in response to the major Disaster Declaration for FEMA-4085-DR-NY, dated October 28, 2012, as amended. FEMA is conducting Section 106 review for the above referenced Undertaking.

Project Information
This FEMA project worksheet was originally written to capture damages resulting from Hurricane Sandy at the Queens Rockaway Boardwalk. On February 23, 2017, FEMA received an updated scope of work in which the subrecipient proposed to utilize the flexibility of the 428 PAAP program using "underrun" funds at multiple parks throughout the Far Rockaway Peninsula. The subject of this consultation is the proposed work at Thursby Basin Park.

The site to become Thursby Basin Park is located on the Far Rockaway Peninsula situated near the southwestern corner of Jamaica Bay. The park is bounded to the north by Elizabeth Road, to the east by Jamaica Bay (and Marina 59), to the south by Thursby Avenue, and to the west by Beach 63rd Street. It is located in a developed area consisting predominantly of single and multi-family dwellings as well as commercial centers (see Map Index, Figure 1 and Photo Index, Images 1-6).

Description of Undertaking
The scope of work proposed for this project includes shoreline protection measures using flood mitigation techniques to protect the community against flooding from adjacent Somerville Basin. Mitigative measures may include: an engineered wetland for storm water run-off, wetland restoration, bioswales, shoreline riprap and riparian planting, berms, a rain garden, and landscaping with open lawns, shade trees, shrubs, perennials, and fencing. Park amenities will include waterfront seating, shade structures, a comfort station, and a playground and adult fitness area (see Map Index, Figure 9).

Additional work meets the description of Tier II allowances: I.A.3. and I.B.2. as defined in the 2019 NY Statewide Programmatic Agreement.

Area of Potential Effects (APE)
The APE for this undertaking is determined to be limited to the property's boundaries as defined above within Lot 1: Block 16010 (see Map Index, Figures 2 and 3).

Evaluation of Architectural Significance
Research conducted using the NYSHPO Cultural Resources Information System (CRIS) shows that the property for the new park is not listed or eligible for listing on the National Register of Historic Places (NRHP) individually or as part of a historic district. Additionally, the park is not designated as a NYC Landmark or Scenic Landmark and is not located within a calendared or listed NYC (LPC) Historic District. As the property is currently undeveloped, it does not contain any above ground resources.

The Sanborn Fire Insurance Map from 1912 shows a city incinerator located on the site (see Map Index, Figure 4). However, by 1954, maps show that the incinerator was no longer present (see Map Index, Figure 5). In 1966, maps show buildings/structures on the site, but by 1980 and to the present, the site has been vacant (see Map Index, Figures 6-8). As there are presently no above ground features on the lot, it is not part of an adjacent historic district, and the adjacent neighborhood does not appear eligible for NRHP listing, the undertaking will have no impact to above ground resources.

Evaluation of Archaeological Impact
Research conducted using CRIS shows the APE is located outside any documented archaeologically sensitive areas. Additionally, no documented archaeological sites have been mapped within one mile of the APE (see Map Index, Figure 10). Historic aerials show that the site was used as the location of an incinerator in the early twentieth century, which was no longer present by 1954. Subsequent construction and removal of buildings/structures on the site in the latter twentieth century until present day demonstrates continued use and dis-use of the site along with documented ground disturbance. The shoreline of the site appears to be altered after 1966 further eliminating the potential to encounter intact archaeological resources in areas along the site's waterfront.

According to the USDA Soil Survey, the soils in the APE are classified as Urban land-Bigapple, non-dredge material complex, 0 to 3% slopes, low impervious surface (UBAl). The proposed scope of work planned for the site is in previously disturbed soils, which is confirmed by mapping sources (see Map Index, Figures 4-8). Review of historic topographic maps dating from 1898 through 1938 illustrate the APE consisted of tidal marsh prior to the shoreline development in the mid-20th century. Review of the historic topographic maps dating to 1938 label the current APE as "Little Bay Marsh." These soils are not likely to possess intact and distinct historic cultural soil horizons and thereby have an extremely low probability for the undertaking to encounter archaeological artifacts or features within their original depositional contexts.

Overall, the vertical and horizontal limits of disturbance for the proposed improvements will be located within the limits of previously disturbed artificial landscapes. Therefore, based on the environmental and historic conditions, as well as the lack of archaeological sites recorded within the vicinity of the subject property, prehistoric and historic archaeological sensitivity is assessed as low.

Determination of Effect
Research conducted for the Undertaking has revealed that there are no above ground resources on the site of Thursby Basin Park. Additionally, the potential to encounter *in situ* prehistoric and/or historic archaeological sites eligible for listing on the National Register of Historic Places within the APE is low. Therefore, FEMA has concluded that the determination for this Undertaking is **No Historic Properties Affected** that are either

on, or eligible for inclusion on, the State or National Register of Historic Places.

FEMA requests concurrence with this determination of effect within fifteen (15) calendar days. Should you need additional information, contact structures reviewer, Xana Peltola (xana.peltola@fema.dhs.gov) or archaeology reviewer, Brock Giordano (brock.giordano@fema.dhs.gov).

Sincerely,

JAMES M ZWOLAK Digitally signed by JAMES M ZWOLAK Date: 2020.06.09 11:43:33 -04'00' For,

Brock Giordano
FEMA EHP Sandy (4085) Supervisor
4085-DR-NY

BG/jz/xp

cc: Stephanie Couture, New York Division of Homeland Security and Emergency Services
Gina Santucci, Director of Environmental Review, NYC Landmarks Preservation Commission
Amanda Sutphin, Director of Archaeology, NYC Landmarks Preservation Commission

enc: 20200609_Map Index_ThursbyBasinPark
20200609_Photo Index_ ThursbyBasinPark

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

June 09, 2020

James Zwolak
FEMA
285 Fulton Street
New York, NY 10007

Re: FEMA/PA
NYCDPR - Thursby Basin Park
62-02 Beach 63rd Street, Queens, NY
20PR03435
PA-02-NY-4085-PW-04223

Dear James Zwolak:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include other environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, the New York SHPO concurs with the finding that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking.

If you have any questions, please don't hesitate to contact me.

Sincerely,

Philip A. Perazio, Historic Preservation Program Analyst - Archaeology Unit
Phone: 518-268-2175
e-mail: philip.perazio@parks.ny.gov via e-mail only

cc: Stephanie Couture, DHSES
Brock Giordano, FEMA
Gina Santucci and Amanda Sutphin, LPC

APPENDIX D, Correspondence 3 – USFWS Section 7 Consultation

U.S. Department of Homeland Security
Federal Emergency Management Agency
FEMA Region II
26 Federal Plaza.
Suite 1307
New York, New York 10278

FEMA

May 29, 2020

Mr. Steve Papa
United States Department of the Interior
Fish and Wildlife Service
Long Island Field Office
340 Smith Road
Shirley, New York 11967

Re: FEMA Public Assistance (DR-4085 Hurricane Sandy), PW4223 Rockaway Beach Boardwalk Underruns Project – Bayswater Park, Rockaway Community Park, Thursby Basin Park, Beach 88th St./Bay Beach Park

Dear Mr. Papa:

On October 29, 2012, storm surge brought on by Hurricane Sandy damaged public infrastructure across Queens County, NY, including properties of the New York City Department of Parks and Recreation (NYCDPR) (sub-recipient). NYCDPR has requested federal assistance through FEMA's Public Assistance Alternate Procedures Program to redevelop DPR properties and drainage infrastructure on the Rockaway Peninsula in the borough of Queens, New York. The intent is to improve resiliency to future storm surge and flooding events and provide additional recreational opportunities. The work FEMA seeks to consult on is for four separate Parks along the bay side of the Rockaway peninsula:

- Bayswater Park (40.598019, -73.767490)
- Rockaway Community Park (40.598909, -73.784680)
- Beach 88th Street/Bay Breeze Park (40.590354, -73.814400)
- Thursby Basin Park (40.595498, -73.791837)

The proposed work at each of these sites includes restoration and construction of DPR properties with funding remaining from the reconstruction of the Rockaway Beach Boardwalk. Work items at each site include grading, paving, installation of natural plantings (including bioswales and wetland plantings), and shoreline protection measures such as berms and hardened surfaces to prevent erosion. More detail for each site is included in attached design/conceptual plans. Additionally, it must be noted that the U.S. Army Corps of Engineers is planning shoreline measures including berms, seawalls, and natural plantings in Far Rockaway, some of which connect or overlap with proposed features of work at the Parks sites. This proposed DPR project would supplement other FEMA-funded work already underway or completed and fulfill the identified opportunities in the Rockaway Conceptual Plan (https://www.nycgovparks.org/facility/beaches/beach-recovery/rockaway-parks-master-plan).

Per the USFWS IPaC website, species of concern in the area of this proposed project are:

- Red knot *Calidris canutus rufa* - Threatened
- Piping plover *Charadrius melodus* - Threatened
- Roseate tern *Sterna dougallii dougallii* - Endangered
- Seabeach amaranth *Agalinis acuta* - Endangered

In accordance with Section 7 of the Endangered Species Act, FEMA is requesting USFWS concurrence on its determinations of impacts to Threatened and Endangered species that may be present near the proposed project's action areas. Please see the attached scope of work with impact determinations, site location map, plans, and photos for review and comment. Should you have any questions concerning this project, please don't hesitate to call Kyle Bartowitz at (202) 716-4318.

Sincerely,

BROCK A GIORDANO
Digitally signed by BROCK A GIORDANO
Date: 2020.05.29 13:01:32 -04'00'

Brock Giordano, RPA
EHP Supervisor (NY Sandy, DR-4085)

FEMA Region II
Mitigation Division/EHP
(347) 574-1467 iphone
Email: brock.giordano@fema.dhs.gov

BG/kb

Attachments: Scope of Work/Determinations
Project Location Map
Project Plans

Scope of Work

Bayswater Park (40.598019, -73.767490)

- Wetland restoration and natural plantings
- Berm to tie in to USACE planned berm to the west along Jamaica Bay
- Restore existing kayak launch, including path over proposed berm
- Exercise paths
- Refurbish Athletic fields
- Refurbish Playgrounds
- New storage building for kayaks and park equipment

Rockaway Community Park (40.598909, -73.784680)

- Wetland restoration and natural plantings
- Berm to tie in to USACE planned berm to the east and west along Jamaica Bay
- Access control gates to piers
- Gravel drive
- Replace boardwalk decking and railing
- Remove old roadbed and utilities, place ADA accessible path and native plantings

Beach 88th St./Bay Breeze Park (40.590354, -73.814400)

- Reshape shoreline to accommodate proposed features below
- Grandstand steps/seating down to water
- Kayak access ramp
- New storage building for kayaks and park equipment
- Natural plantings, including rain gardens
- New playground
- Utility connections for drinking fountain and lighting
- Permeable pavers and seating area

Thursby Basin Park (40.595498, -73.791837)

- USACE bulkhead along waterfront of this site
- Natural plantings, including rain gardens
- Comfort Station
- Playground and Adult Fitness Area
- Shade structures/BBQ Area/waterfront seating
- Open lawns

Determinations

Piping Plover *Charadrius melodus* (Threatened)

The piping plover can be found nesting in sandy beach habitats along seacoasts. Piping plover live on dry sandy beaches or in areas that have been filled with dredged sand, often near dunes in areas with little or no beach grass. Piping plover are distributed across the barrier islands of Nassau County and throughout the north and south shores of Suffolk County as well as the Peconic Bay's ecosystem. Piping plovers feed on small invertebrates in exposed wet sand in wash and intertidal zones.

The piping plover is the first of the shorebirds to arrive on the breeding grounds, starting from early to mid-March, with breeding beginning in mid-April and ending mid-September. Nests, which are shallow scrapes, are made during courtship and are sometimes lined with pebbles and/or shells. They are usually placed well above the high tide mark on open, generally grassless sand beaches, dredged spoil areas, or blowouts (bowl shaped divots in the sand created by the wind). Nests are typically 200 feet apart. Plovers are very sensitive to disturbances in their breeding ground, and anything from pedestrians to dune stabilization can dramatically reduce plover breeding populations. After piping plover eggs hatch, the chicks remain unable to fly for about a month. This has led to problems in the past of them being inadvertently crushed by machinery. Beginning in late July and August, the piping plover migrate south for the winter.

Potential for Project Related Effects
The proposed project activities may occur at possible suitable habitat along the Jamaica Bay shoreline at Bayswater Park and Rockaway Community Park. In both locations, construction work for shoreline wetland restorations and native plantings could impact beach/dune areas that plover could potentially use for nesting. At Beach 88th St./Bay Beach Park and Thursby Basin Park, locations are less open and more developed, and less likely to be hospitable to plovers.

Effect Determination for Piping Plover
Based on the best currently available scientific information (i.e., USFWS Piping Plover Recovery Plan, 1996) for piping plover biological requirements, and the proposed protection measures above, FEMA is requesting U.S Fish and Wildlife Service concurrence with a "*May affect, not likely to adversely affect*" determination for work at Bayswater Park and Rockaway Community Park, and *"no effect"* at Beach 88th St./Bay Beach Park and Thursby Basin Park. No designated critical habitat for this species occurs in or near the project areas.

Red Knot *Calidris canutus rufa* (Threatened)

The Rufa Red Knot is a large sandpiper with speckled wings, a cinnamon-brown underside and a short, straight, black bill. Small numbers of red knots may occur in New York year-round, while large numbers of birds rely on New York coastal stopover habitats during the spring (mid-May through early June) and fall (late-July through November) migration periods. They usually have a brief 10 to 14-day spring stay in the mid-Atlantic to replenish their body fat before continuing on to Arctic breeding grounds. Large flocks of red knots arrive at stopover areas along the Delaware Bay. Additionally, smaller flocks have appeared commonly at Jamaica Bay Wildlife Refuge and

Plumb Beach. Other secondary sites suited to red knots include East Pond, Gerritsen Inlet, Far Rockaway, Long Beach, Jones Beach, and New Jersey's Atlantic coast each spring, with many of the birds having flown directly from Brazil. The spring migration is timed to coincide with the spawning season for the horseshoe crab (*Limulus polyphemus*). They feed on invertebrates, especially small clams, mussels, and snails, but also crustaceans, marine worms, and horseshoe crab eggs. On the breeding grounds red knots mainly eat insects. Horseshoe crab eggs provide a rich, easily digestible food source for migrating birds. Mussel beds on New Jersey's southern Atlantic coast are also an important food source for migrating red knots. The "USFWS Rufa Red Knot Background Information and Threats Assessment, 2014; Status of the Red Knot in the Western Hemisphere," 2008, provides a comprehensive summary of species life history.

Potential for Project Related Effects
The proposed project activities would occur near suitable stopover habitat for the red knot along the Jamaica Bay shoreline at Bayswater Park, Rockaway Community Park, and Beach 88th St./Bay Beach Park. In each location, construction work for shoreline wetland restorations and native plantings could impact shoreline that the red knot could potentially use for foraging. At Thursby Basin Park, the location is adjacent to a marina, and less likely to be hospitable to species that the red knot may prey upon.

Effects Determination
Based on the best currently available scientific information pertaining to red knot biological requirements (i.e., USFWS Rufa Red Knot Background Information and Threats Assessment, 2014; Status of the Red Knot in the Western Hemisphere, 2008), FEMA is requesting the U.S Fish and Wildlife Service concurrence with a "*May affect, not likely to adversely affect*" determination at Bayswater Park, Rockaway Community Park, and Beach 88th St./Bay Beach Park and *"no effect"* at Thursby Basin Park. No designated critical habitat for this species occurs in or near the project area.

Roseate Tern *Sterna dougallii dougallii* (Endangered)

The roseate tern is a medium sized gull-like seabird with a white body and black cap, long, deeply forked tail, black beak. During the breeding season the basal three-fourths of the otherwise entirely black bill and legs turn orange-red, and a rosy tinge can be seen on the chest and belly. It is found almost exclusively on saltwater coastlines. Roseate terns nest in colonies on coastal beaches and offshore islands. They nest in hollows or under dense vegetation, debris or rocks hidden from predators. Roseate terns in northeastern North America almost always nest in colonies with common terns. One active colony of roseate terns occurs at Great Gull Island, Long Island, where the species feeds, breeds, and nests during the spring migration period. Roseate tern breeding areas have also been recorded in the accreting end of Breezy Point. However, one of the largest tern populations in the northeastern U.S. is found in the Long Island sound on Falkner Island. There, the terns are found on an area called a spit, which is comprised of gravel and sand extending into the ocean.

Roseate terns begin arriving to breeding areas at the end of April and begin laying eggs as early as the third or fourth week of May, or as late as July. Eggs are typically laid in shallow scrapes, which

are then slowly outfitted with nesting material. They lay about one to two eggs, rarely three, and rely on the more aggressive Arctic and common terns in the surrounding colony to defend them.

Potential for Project Related Effects
Known Long Island locations (per the New York Natural Heritage Program) of active colonies of roseate terns indicate that this species is most likely not present in or adjacent to the project site.

Effects Determination
Based on the best currently available scientific information pertaining to roseate tern biological requirements (i.e. USFWS Roseate Tern Recovery Plan – Northeastern Population, First Update, 1998), FEMA has determined that no significant project related effects to this species will occur and is therefore requesting the U.S Fish and Wildlife Service concurrence with a "*No Effect*" determination for all proposed sites. No designated critical habitat for this species occurs in or near the project areas.

Seabeach Amaranth *Amaranthus pumilus* (Threatened)

Seabeach amaranth is an annual plant approximately 10 to 15 inches in diameter that has pink or red fleshy stems and small rounded leaves ½ to 1 inch in diameter with a small notch at their tip. It occurs on barrier island beaches, where its primary habitat consists of overwash flats at accreting ends of islands and the area between the high tide line and the toe of the primary dune. 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 is known only to be found along the Atlantic shoreline of Long Island. It appears to do poorly in well-vegetated sites, and appears to need large areas of barrier island beaches and inlets, functioning in a relatively natural and dynamic manner. These characteristics allow it to be distributed around the landscape as a fugitive species, occupying suitable habitat as it becomes available.

Germination takes place over a relatively long period of time, generally beginning in April and continuing at least through July. Flowers begin forming in July, and seed production and dispersal reach their peak in September. These seeds are the foundation of next year's population of seabeach amaranth.

Potential for Project Related Effects
The species is not known to be present in the project area but occurs on areas of Long Island (per the New York Natural Heritage Program). While there is proximity to known populations, the shorefronts at each project site are too heavily vegetated and do not have sufficient open beach areas to suit the seabeach amaranth.

Effect Determination
Based on the best currently available scientific information pertaining to seabeach amaranth biological requirements (i.e. USFWS Recovery Plan for Seabeach Amaranth (*Amaranthus pumilius*), 1996), FEMA has determined that no significant project related effects to this species will occur and is therefore requesting the U.S Fish and Wildlife Service concurrence with a "*No*

Effect" determination for all proposed sites. No designated critical habitat for this species occurs in or near the project area and therefore will not be impacted by project related activities.

Summary

FEMA has determined that the project activities referenced above will have no effect on the roseate tern and seabeach amaranth. For the piping plover, FEMA has reached a determination of "*May affect, not likely to adversely affect*" determination for work at Bayswater Park and Rockaway Community Park, and *"no effect"* at Beach 88th St./Bay Beach Park and Thursby Basin Park. For the red knot, FEMA proposes *"May affect, not likely to adversely affect"* at Bayswater Park, Rockaway Community Park, and Beach 88th St./Bay Beach Park and *"no effect"* at Thursby Basin Park. A summary of the determination is provided in Table 1.

Table 1 – Effects to Threatened and Endangered Species at Proposed Project Sites

	Bayswater	**Rockaway Community**	**B88th/Bay Beach**	**Thursby Basin**
Piping plover	*May affect, not likely to adversely affect*	*May affect, not likely to adversely affect*	*No effect*	*No effect*
Roseate tern	*No effect*	*No effect*	*No effect*	*No effect*
Red knot	*May affect, not likely to adversely affect*	*May affect*	*May affect, not likely to adversely affect*	*No effect*
Seabeach amaranth	*No effect*	*No effect*	*No effect*	*No effect*

Project Location –All Parks Mapped/Far Rockaway, Queens, NY

Bayswater Park (40.598019, -73.767490)

NYC Parks

NV5

Michaelis Bayswater Park | Site – Existing Conditions and Uses

N

0’ 300’

NYC Parks

NV5

Michaelis Bayswater Park | Shoreline Restoration and Access

0 80' 160' 320' N

NYC Parks

The following images show the existing conditions of the site:

Western Edge by Bayswater Inlet

Seating Area by Beach Channel Drive and Beach 35th

Bayswater Inlet by Tennis Courts (Western Edge)

Kayak Launch by Bayswater Inlet

Rockaway Community Park (40.598909, -73.784680)

Marsh Restoration
~2.5 Acres
- Place clean sand
- Plant low and high marsh
- Possible edge reinforcement

New access control gates or bollards

New gravel pavement turn-around at fishing piers

Replace gravel pavement with maritime planting

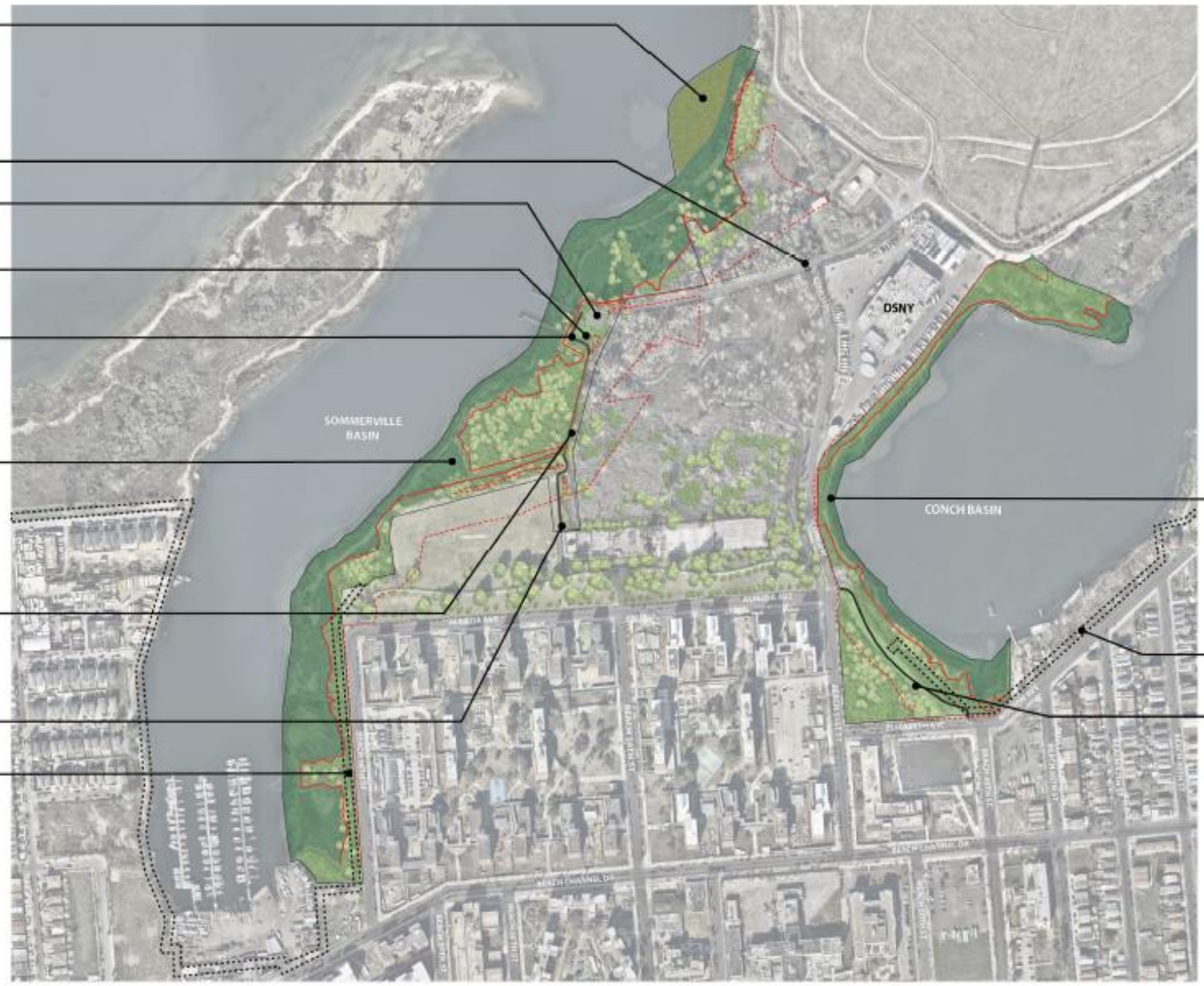
Asphalt path connection

Wetland Enhancement
- remove debris
- protect existing marsh
- plant marsh grasses
- grade and stabilize adjacent slopes

Replace boardwalk decking and railing

Asphalt path connection

Proposed future USACE HFFRRF connection



LEGEND
- Upland Area
- Existing Delineated Wetland Area
- Asphalt Path
- Boardwalk
- Project Area
- 2019 Delineated Wetland
- 2019 Delineated Wetland 150' Offset
- Existing Tree > 6" Caliper
- Existing Tree < 6" Caliper

Wetland Enhancement
- remove debris
- protect existing marsh
- plant marsh grasses
- grade and stabilize adjacent slopes

Proposed future USACE HFFRRF connection

Remove 0.5 acres of de-mapped roadbed and utilities, repurpose remaining strip as ADA accessible path, plant erosion control plantings, create new crosswalk connections

KEY PLAN
0' 400' 800'
N

NYC Parks

NV5

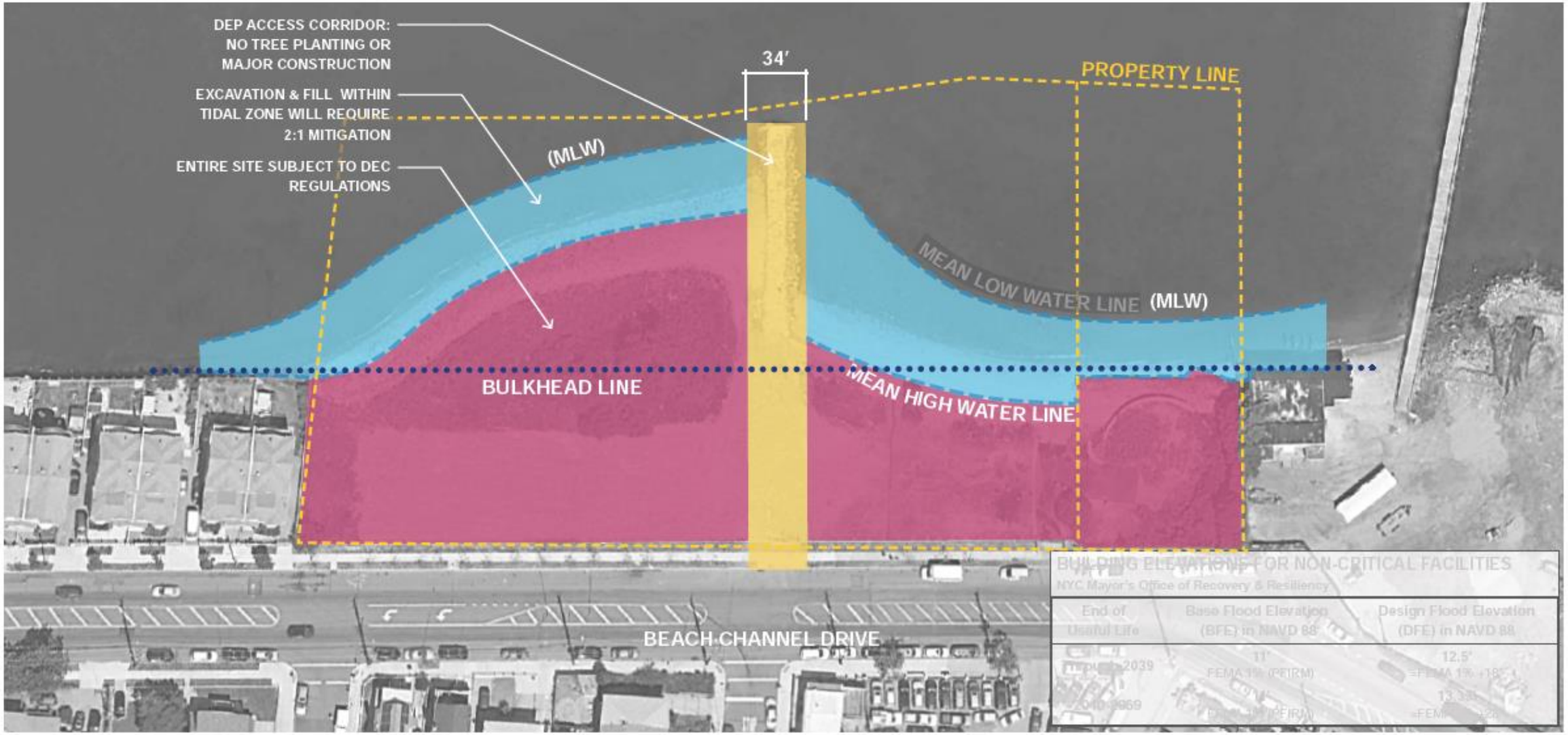
Rockaway Community Park | Concept
Proposed Improvements

February 2020

Rockaway Community Park North Shoreline

Rockaway Community Park North Shoreline with Ocean Bay Apartments in Background

Beach 88th Street/Bay Breeze Park (40.590354, -73.814400)



NYC Parks

QRP

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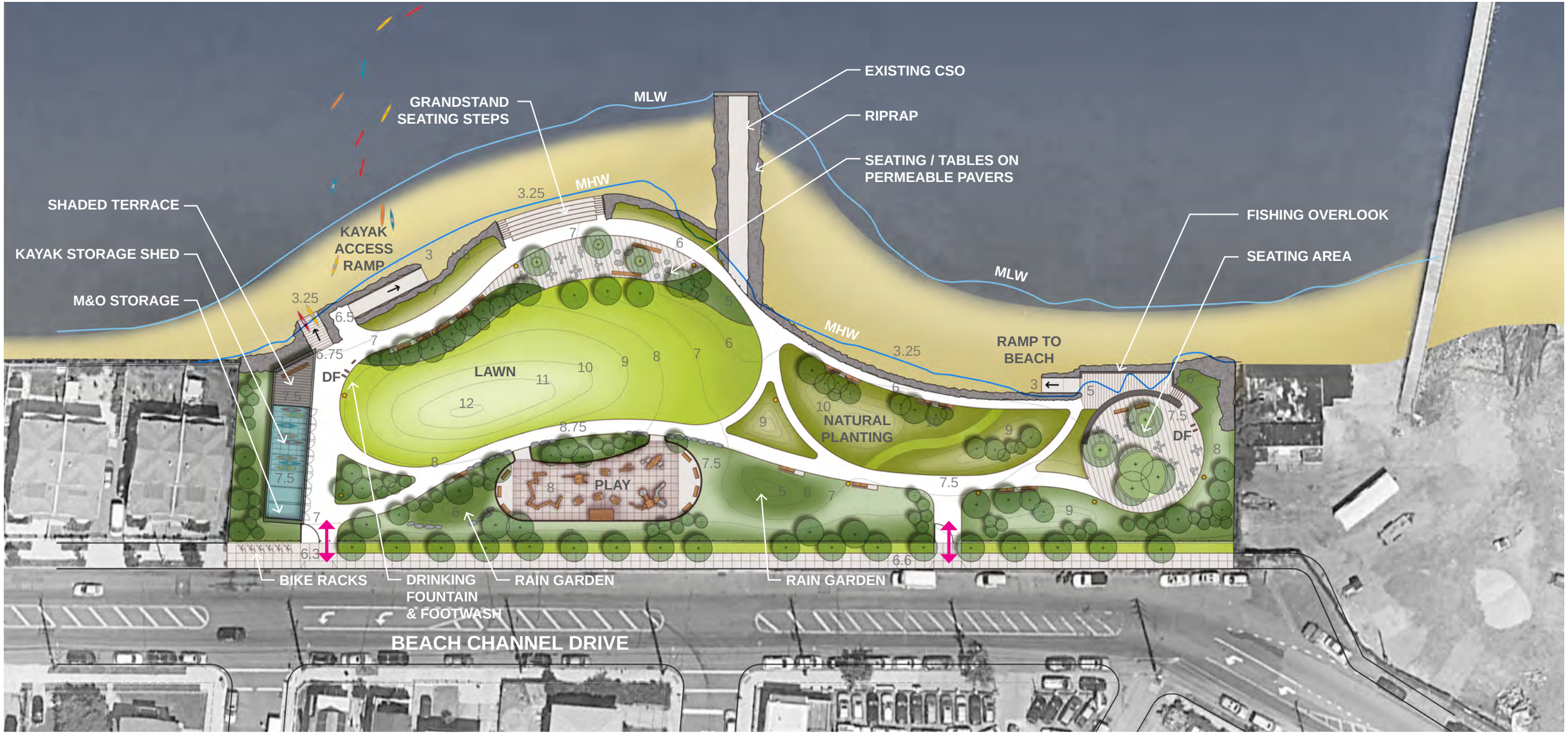
Bay Breeze Park | Site Constraints



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Bay Breeze Park | Concept Plan

0 20 40 80 ft

Legend

- MEDIUM / PERIMETER FENCES 4′ TO 6′ HT.
- 6′ CHAIN LINK FENCE
- 4′ STEEL FENCE
- LOW / PLANTING FENCES 2′ TO 3′ HT.
- 3′ PIPE HANDRAIL
- 2′ TIMBER GUARD RAIL
- 3′ HT. TIMBER BOLLARD
- 3′ HT. SWING GATE

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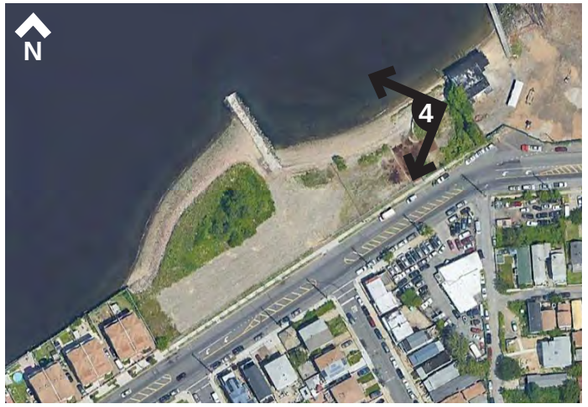
Bay Breeze Park | Fencing Diagram

0 20 40 80 ft

4 - View west over project site



NYC Parks

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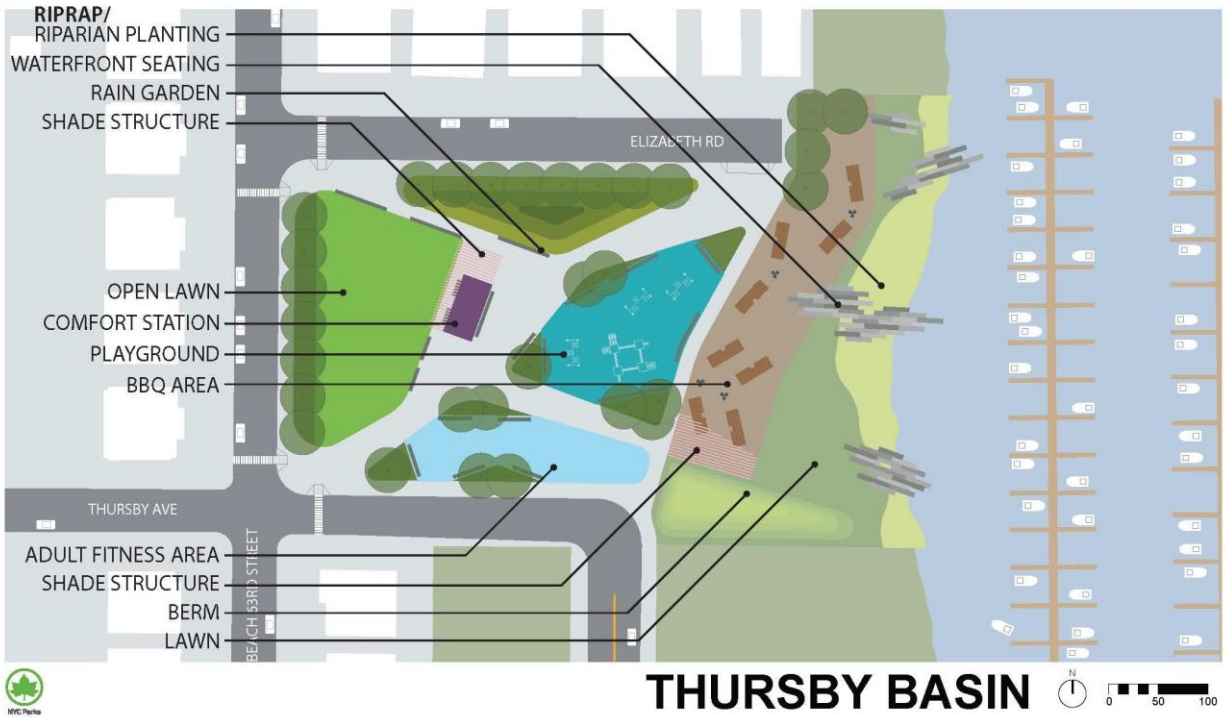
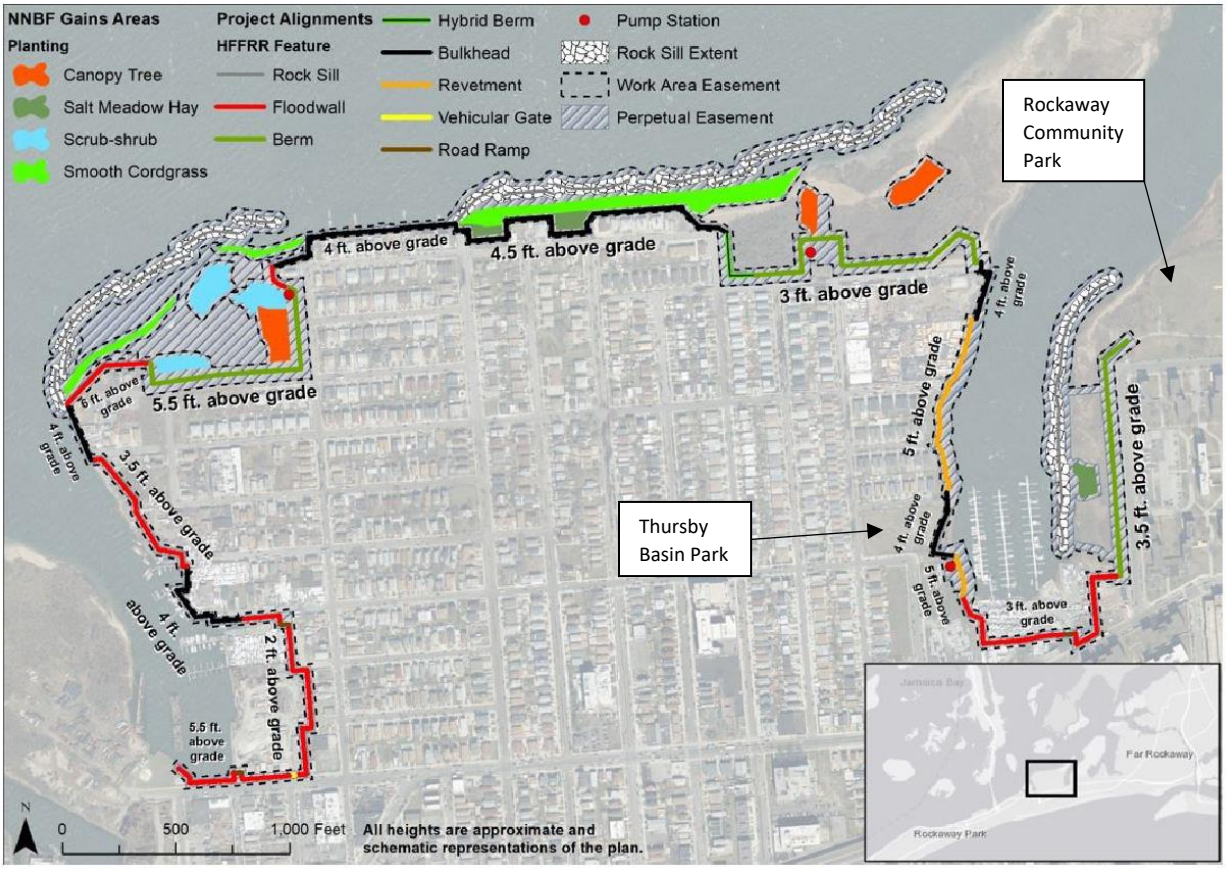
Bay Breeze Park | Site Photos

Thursby Basin Park (40.595498, -73.791837)



Thursby Basin Park Conceptual Plan (*before* addition of USACE bulkhead)



USACE EIS Shoreline Protection Plans showing proposed bulkhead on shore of Thursby Basin Park

Looking East from the site

Looking East from the site

Environmental & Historic Preservation
FEMA Region II
26 Federal Plaza
New York, NY 10278

Memo to File

FEMA-4085-DR-NY

MEMORANDUM to: File

Prepared by: K Bartowitz

Date: 7/2/2020

Applicant: NYCDPR

Site Name: PW4223 Rockaway Boardwalk Underruns – Bayswater Park, Rockaway Community Park, Beach 88th St/Bay Beach Park, Thursby Basin Park

Proposed Action: Construct/Reconstruct parks with shoreline resiliency measures

Environmental and Historic Preservation Notes: Informal Consultation under Section 7 of the Endangered Species Act was sent by FEMA on 05/29/2020. No response from USFWS was received within 30 days

Determination: Based on no response within 30 days, FEMA intends to proceed with assumed concurrence with the findings of the consultation for Threatened and Endangered Species on this project.