

SOUTH SHORE OF STATEN ISLAND COASTAL STORM RISK MANAGEMENT PROJECT

APPENDIX VII REAL ESTATE PLAN

SEPTEMBER 2016

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1. Preamble

a) <u>Project Authorization</u>: A cooperative beach erosion and storm damage reduction study was authorized by a resolution of the U.S. House of Representatives Committee on Public Works and Transportation and adopted 13 May 1993. The resolution states:

"The Secretary of the Army, acting through the Chief of Engineers, is requested to review the report of the Chief of Engineers, on the Staten Island Coast from Fort Wadsworth to Arthur Kill, New York, published as House Document 181, Eighty- ninth Congress, First Session, and other pertinent reports, to determine whether modifications of the recommendations contained therein are advisable at the present time, in the interest of beach erosion control, storm damage reduction and related purposes on the South Shore of Staten Island, New York, particularly in and adjacent to the communities of New Dorp Beach, Oakwood Beach, and Annadale Beach, New York."

The Disaster Relief Appropriations Act of 2013, Public Law 113-2, enacted on 29 January 2013 (hereinafter "P.L. 113-2") authorizes the Secretary of the Army to utilize funds provided in P.L. 113-2, to complete construction of certain authorized but unconstructed projects, which includes the construction of this project. If authorized, the construction of this project will be cost-shared with the non-Federal Sponsor utilizing funds provided in P.L. 113-2.

Previous authorized studies and Federal projects include:

- i. Federal projects in 1937 provided beach fill, timber and rock groins, and a timber bulkhead along the study area.
- ii. A project by the City and State of New York and unknown private entities in 1955 provided beach fill between New Creek and Miller Field.
- iii. A cooperative beach erosion control study, in accordance with Section 2 of Public Law 520 (Rivers and Harbor Act of 1930), on 23 March 1959, for the study of the Atlantic Coast of Nassau County, New York, between Jones Inlet and East Rockaway Inlet; Atlantic Coast of New York City, between East Rockaway Inlet and Norton Point; and Staten Island, New York, between Fort Wadsworth and Arthur Kill.
- iv. A hurricane study authorized by Public Law 71, 84th Congress, 1st Session on June 15, 1955. A combined report covering the cooperative beach erosion control study and the hurricane survey was approved by the Chief of Engineers on 7 December 1960.
- v. An authorized Federal project under the Flood Control Act of 25 October 1965, spanning from Fort Wadsworth to Arthur Kill, Staten Island, New York. The authorized project was not constructed due to a lack of non-federal financing.



- vi. An authorized Federal project under House Document No. 181, 189th Congress, 1st Session for shore and hurricane protection between Fort Wadsworth and Oakwood Beaches. Preconstruction planning for the project was initiated in January 1966 and was brought to sixty percent completion.
- vii. A General Design Memorandum for Fort Wadsworth to Oakwood Beach was completed in June 1976. Work was suspended at the request of local authorities. In 1977, the New York State Department of Environmental Conservation defer their decision on local cooperation due to fiscal constraints.
- viii. A Reconnaissance Study in June 1995 concluded Federal interest in finding solutions to causative agents of ongoing erosion. Alternative solutions redefined the project area to a 6.5 mile portion of the State Island Shoreline from Fort Wadsworth to Oakwood Beach and Annadale Beach.
- ix. Under the Section 103 Continuing Authority Program, the U.S. Army Corps of Engineers ("USACE" or the "Corps") constructed flood risk management project in 1999 in the Oakwood Beach area.
- b) <u>Official Project Designation</u>: Phase 1 of the South Shore of Staten Island Coastal Storm Risk Management (hereinafter the "Project").
- c) <u>Project Location</u>: The Project extends approximately 5.5 miles from Fort Wadsworth to Oakwood Beach along the northern end of the south shoreline of Staten Island in Richmond County, New York.
- d) Non-Federal Partner: The non-Federal partner for this Project is the State of New York through its Department of Environmental Conservation (the "Sponsor" or "NYDEC"), who will subsequently enter into a partnering sub-agreement with the City of New York through its Department of Environmental Protection ("NYCDEP") and the City of New York Department of Parks and Recreation (NYCDPR) (collectively referred to as the "City") as the local stakeholder and agency who will be acquiring the Lands, Easements, and Rights-of-Ways (LER) for the Project.

2. Statement of Purpose

The purpose of this Real Estate Plan (the "REP") is to present the overall plan describing the minimum real estate required for the construction, operation, maintenance, repair and rehabilitation of the proposed Project. This REP is an appendix to the Project's September 2016 Interim Feasibility Study for Fort Wadsworth to Oakwood Beach (the "Feasibility Report").



3. Project Purpose and Features

a) Project Purpose: The purpose of the Project is to provide coastal storm risk management to flood-prone, high risk low-lying residential and commercial structures along the south shore of Staten Island between Oakwood Beach and Fort Wadsworth. This area was devastated by Hurricane Sandy on 29 October 2012 with recorded water surface elevation above sixteen feet National Geodetic Vertical Datum of 1929 (NGVD 1929), (Colleen Fanelli, 2013), and with waves up to six feet in height (Perkins Eastman, BFJ Planning, Louis Berger Group, 2014). The storm caused extensive damage and loss of life along the study area. If approved, the Project will reduce the risk of damages from hurricane and storm surge flooding along the study area, reduce the risk to local resident's life and safety, and would be consistent with and complementary to the New York City Bluebelt Program (hereinafter "Bluebelt"). Bluebelt is the City of New York's (hereinafter "the City") storm water management program that preserves natural drainage corridors for conveying, storing, and filtering storm water.

The Project is currently in the feasibility phase with the Director's Report scheduled for submittal to Congress on February 2017. A Project Partnership Agreement (PPA) is scheduled to be executed with the Sponsor in June 2017.

- b) <u>Plan of Improvement</u>: The plan of improvement provides for coastal storm risk management in the form of a structural line of protection consisting of a levee system and interior drainage facilities.
- I. <u>Line of Protection</u>: The Project includes an approximately 5.5-mile line of protection consisting of buried seawall/armored levee (with a raised promenade from Fort Wadsworth to Oakwood Beach) and levees and a floodwall near Oakwood Beach with a crest elevation range of 18 ft. to 20.5 ft. NGVD 1929 (hereinafter referred to as "Line of Protection" or "LOP"). The LOP will serve as the first line of defense against severe coastal surge flooding and wave forces. The remainder of the LOP consists of T-Type vertical floodwalls and earthen levees. The LOP also includes a stop log closure structure at Hylan Boulevard, drainage control structures for existing storm water outfalls, tide gate structures, vehicle and pedestrian access structures, and demolition of an existing boardwalk.
- *II. Interior Drainage*: The Project includes interior drainage facilities that are segregated by the following drainage areas:
 - Oakwood Beach Interior Drainage Area (Area A)
 - Oakwood Beach Interior Drainage Area (Area B)
 - Midland Beach Interior Drainage Area (Area C)
 - South Beach Interior Drainage Area (Area D)
 - South Beach Interior Drainage Area (Area E)



Areas A, B, and D include tide gates, sluice gates, road raisings, natural storage ponds, and excavated ponds. Areas C and E include tide gates, sluice gates, road raises, and networks of excavated ponds to a depth of approximately 2 feet NGVD 1929. The Interior Drainage Analysis identifies the interior drainage features as minimum facilities in Areas A, B and D. For Areas C and E, the selected plans were incrementally justified as improvements beyond the minimum facility. Where possible, the interior drainage plan was aligned and overlapped with Bluebelt. See Appendix II, *Interior Drainage Analysis*, for additional information.

- *III.* Construction Contracts: The Project is to be implemented through two separate contracts:
- i. Contract 1 consists of Interior Drainage Areas A and B and the LOP beginning at the vicinity of Hyland Blvd and Buffalo Street and ending at the vicinity of New Dorp Lane by Miller Field. Contract award is scheduled for March 2019 and Project construction is anticipated to be completed in June 2022.
- ii. Contract 2 consists of Interior Drainage Areas C, D, and E and the LOP beginning at the vicinity of New Dorp Lane and ending at the vicinity of Ayers Road near Fort Wadsworth. Contract award is scheduled for March 2019 and Project construction is anticipated to be completed in June 2022.
- c) Required Lands, Easements, and Rights-of-Way (LER): The Sponsor will entered into a partnering agreement with the City who will acquire the real estate interests needed for the construction of the proposed Project. The Sponsor will obtain the required easements from NYCDEP containing the required standard estates language and necessary covenants to run with the land therein. Easements will be recorded with the county prior the Corps' certification of real estate.

There are instances where an easement estate is recommended over an entire city-owned lot (or over a large portion therein). For these situations, an easement estate, oppose to fee, is recommended due to the City's desire to expand upon its Bluebelt initiative. Therefore, the City will retain its fee interest to the underlying land. Should the City pursue Bluebelt improvements on lands consisting of the Project, they would be subject to Section 14 of the Rivers and Harbors Act of 1899 (codified in 33 USC 408; "Section 408"), requiring permission from the Corps to authorize alteration or use of lands consisting of a Federal civil works project. See paragraph 21.b for additional information on Bluebelt. The following is a summary of the Project's real estate requirements, which includes streets and right-of-way areas:

Fee. ± 42.58 acresPermanent Easements ± 337.63 acresTemporary Easements ± 48.93 acres

Total: ±429.14 acres



The Project impacts 713 parcels, including streets and right-of-ways. There are 211 privately-owned and 502 publicly-owned (including two Federally-owned) parcels affected by the Project. In some instances, more than one estate is required to be obtained over the lands of the same owner. The following is the required estates and acreage (which includes acres over streets and right-of-ways) needed to support the construction, operation, and maintenance of the Project:

- I. <u>Fee (Standard Estate No. 1)</u>: Approximately 42.58 acres (209 parcels) are required in fee. The fee acquisition recommended herein is solely resulting from the adverse impact an easement acquisition would have on a private landowner. There are instances were an easement is needed over an entire lot or a large portion thereof, causing a significant encumbrance to the owner. In such cases, a fee acquisition is recommended. In cases where an easement significantly encumbers a City-owned parcel, an easement estate is recommended therein for the previously stated reason. Upon the completion of fee acquisitions, only an easement interest is necessary to be conveyed to the Sponsor to support the Project. Costs associated with fee acquisitions (including acquisition costs at fee values) are eligible for crediting.
- II. <u>Flood Protection Levee Easement (Standard Estate No. 9)</u>: Approximately 60.66 acres (62 parcels) are required for the construction, operation, and maintenance of the buried seawall/armored levee (i.e., the LOP). Included is an area at the Greenbelt White Trail off of Hylan Boulevard which serves as the tie-off point of the LOP that has no assigned tax parcel identification number. The Greenbelt White Trial is part of the Willowbrook Parkway Right-of-Way Gateway National Recreation Area, which preserves open space and provides recreational opportunities. Approximately 0.448 of an acre is required in the Greenbelt White Trail area for the Flood Protection Levee Easement. Additionally, approximately 0.131 of an acre is required across Hylan Boulevard for the construction of a gate closure structure that is part of the LOP.
- III. <u>Pipeline Easement (Standard Estate No. 13)</u>: Approximately 0.041 of an acre (2 parcels) is required for the construction, operation and maintenance of an underground storm water drainage structure. The drainage structure is located at the vicinity of Block 4768 Lot 89 and will allow storm water to flow from the open space south of Kissam Avenue into the proposed East Pond.
- *IV.* Road Easement (Standard Estate No. 13): Approximately 1.32 acres (15 parcels) are required to construct and maintain a road and maintenance vehicle access ramps.
- i. Approximately 0.978 acres are required for the construction of an access road located seaward of the LOP at Oakwood Beach. The access road will provide vehicle access to facilitate the operation and maintenance of the proposed elevated interceptor manholes. See paragraph 17c regarding the relocation of existing sewer interceptor manholes.
- ii. Approximately 0.342 acres are required to construct a maintenance vehicle access point to the LOP at Mill Road. The access point will allow maintenance vehicles entry to the LOP for maintenance and operation purposes.



- V. <u>Restrictive Easement (Standard Estate No. 19)</u>: Approximately 123.08 acres (295 parcels) are required to protect against future development to preserve open space for natural flooding, which is essential to the effectiveness of the proposed ponding areas. Development of open space would result in significant increase flooding caused by storm water runoff and undermine the Project, preventing it from achieving its stated flood reduction benefits. Coordination is ongoing with the Sponsor to identify whether the use of restrictive easements to preserve open space conflicts with state statute authorizing conservation and open space easements or restrictive covenants.
- VI. <u>Temporary Work Area Easement (Standard Estate No. 15)</u>: Approximately 48.93 acres (59 parcels) are required for staging and work area purposes. The required temporary work areas are generally adjacent to the lands required for construction of the LOP, often affecting the same owner. Included is approximately 1.004 acres and 0.243 acres required on lands consisting of the Greenbelt White Trail and Hylan Boulevard respectively for the same purposes discussed in paragraph 3c(II). Temporary work area easements will be required for the duration of the construction contracts identified in paragraph 3.b(III).
- VII. Non-Standard Ponding Easement: Approximately 91.12 acres (210 parcels) are required, in perpetuity, for the excavation of 10 ponds that are part of the Project's storm water management system, which will provide greater volume for residual storm water retention during high intensity precipitation storm events. Ponds will be excavated at existing open space to retain residual flooding. Restrictive Easements will be acquired adjacent to the ponds to preserve open space and natural storage, which would otherwise result in significant increase flooding caused by storm water runoff and undermine the Project if developed. A physical taking analysis was determined not necessary for the increased residual flooding because the Interior Drainage Analysis identifies the interior drainage features as minimum facilities at Interior Drainage Areas A, B and D and incrementally justified as improvements beyond the minimum facility for Drainage Areas C and E. See Exhibit F for flood depth comparison between "with" and "without" project conditions. See Appendix II, Interior Drainage Analysis, for additional information.

There are no excavated material disposal requirements for the Project. The selected contractor will be responsible for transporting and disposing excavated material to an approved disposal site. See paragraph 5 for additional information on non-standard estates.

- *VIII.* <u>Non-Standard Wetland Easement</u>: Approximately 61.41 acres (58 parcels) are required to construct and or enhance existing wetland features.
- i. Approximately 46 acres are required to construct tidal wetlands features as part of an ecosystem-based approach to manage flood risk from coastal storms. The site draws upon the capacity of wetlands to reduce the impacts of storm surge and waves. The feature provides coastal storm risk management benefits and ecological benefits associated with restoring the functionality of the nearby tidal creek to restore the natural flushing of the wetlands and providing native species of plants to support the sustainability of this natural feature. See the Feasibility Report for additional information.



ii. Approximately 15.41 acres is required to enhance the wetland features of the Swamp White Oak Forest located at the northwest corner of Miller Field (Block 3930 Lot 90). Included is approximately 6.636 acres required over lands owned by the City of New York through its Department of Education (Block 3930 Lot 10). The proposed enhancement is provided to compensate for the loss of recreational opportunities at the beach area of Miller Army Airfield Historic District (hereinafter "Miller Field") within the Gateway National Recreation Area (hereinafter "Gateway"). Gateway is a Federal designation that preserves and protects scarce and/or unique natural, cultural, and recreational resources that are rare for high dense urban environments. Title ownership of Miller Field is with the United States of America and maintained through the National Parks Service (NPS). Swamp White Oak Forest was identified by the NPS and is unique to Staten Island.

Wetland enhancement features will be constructed on NPS property under the authority of, and using funds provided by P.L. 113-2. Coordination with HQUSACE and Office of General Counsel determined that the proposed wetland enhancement features to be constructed on the lands of another Federal agency is appropriate and justified under P.L.113-2. See the Project's Main Report and Environmental Impact Statement for additional details regarding wetlands mitigation at Miller Field.

A portion of the proposed wetland enhancement site extends into an adjacent lot owned by the City through its Department of Education. Coordination with the City and its Department of Education on the proposed wetland enhancement has been made and continues. While an easement will be obtained over the City parcel, coordination is ongoing with NPS to identify the appropriate authorizing document to allow wetland construction (see paragraph 7, Federally-owned Land). The language to this non-standard estate will be incorporated into the body of the NPS authorizing document.

Exhibit "B" identifies the impacted parcels and the real estate interest required therein. The recommended estates are provided in Exhibit "C". The size of the real estate interests required for the Project as identified in this report are estimates based on available Geographic Information System (GIS) data. Since the Project is at a feasibility level study, the real estate requirements outlined in this REP are subject to change based upon project refinements during pre-construction, engineering and design (PED). The Sponsor is advised to obtain a land survey and legal description for all lands acquired to determine precise size and boundary limits and to obtain title insurance on all acquired property to protect against "defects" in title and to identify potential encumbrances. There are no real estate interests required for relocations, borrow material, or dredging, nor for excavated material disposal.

d) <u>Appraisal Information</u>: An appraisal cost estimate was completed in September 2014 and updated in May 2015. The total estimated land value for the required real estate is \$27,467,497, effective 18 May 2015. The total land value for Contract 1 is approximately \$11,291,659 and the total land value for Contract 2 is approximately \$16,175,838. The cost estimate was completed based on the appropriate wetland and upland nature of parcels and on a hypothetical condition and extra ordinary assumption. The subject properties may become



encumbered by easements required for the proposed Project creating an easement estate for Project purposes. The easements did not exist as of the date of the cost estimate. Therefore, the cost estimate was completed based on a hypothetical condition that easements will be executed within a reasonable time not to exceed one year from the effective date of the cost estimate. An extra ordinary assumption was made that all LER required for the Project contained no contamination. The cost estimate was completed in accordance with feasibility studies under the Planning Paradigm ("SMART Planning") and the 3x3x3 Rule. Since the value of the required LER does not exceed ten percent of the total Project cost, land values were prepared through a cost estimate – a rough order of magnitude on the value of the lands. A full land valuation based on surveyed boundaries would be required to establish a more accurate valuation, which the Sponsor will obtained during the LER acquisition process.

NYCDEP has been acquiring wetland property in fee in support of Bluebelt and compensating property owners at prices approaching upland values. NYCDEP approached the Corps on the LER valuation process and crediting of real estate acquisition costs for wetlands acquired at upland values. It is the Corps' policy that any wetland acquired for the Project eligible for crediting will be credited to the Sponsor at a wetland value. CENAN-RE memorandum dated 7 Jan 15, subject: Land Valuation Process for Crediting Real Estate Acquisition Expenses for the South Shore of Staten Island Coastal Risk Management Project, was forward to HQUSACE (CEMP-CR), through Sandy Coastal Management Division (CENAD-PD-SC and North Atlantic Division (CENAD-PD-RE), requested confirmation on the Corps' position on the matter. As a follow up to the CENAN-RE memorandum, HQ USACE (Chief Appraiser), in discussion with the USACE North Atlantic Division and USACE New York District, has indicated concurrence with the policy. The Corps will credit (if eligible) at the wetland value.

4. LER Owned by the Non-Federal Partner

The State of New York owns approximately 0.240 acres of land that is required for the Project. The following is a description of the LER required on New York State property:

Parcel BBL No.	Acres	Estate Required
5041300655	±0.012	Ponding Easement
5041300666	± 0.228	Ponding Easement

The State of New York is currently carrying out the NY Rising Buyout and Acquisition Program (the "NYS Buyout Program") for property owners whose homes were substantially damaged by Hurricane Sandy or by other designated storms. The NYS Buyout Program is separate state initiative and is not part of the Project. With the aid of Federal funding, it offers homeowners located in low-lying, high-risk flood areas located in Staten Island and Long Island an opportunity to voluntarily sell their home to the state. Homeowners are offered up to 100% of the property's pre-storm market value. Properties acquired under the program would be maintained as coastal buffer zones.



The Project requires the acquisition of temporary and permanent easements on NYS Buyout Program designated properties. A community at Oakwood Beach has been identified as eligible for the NYS Buyout Program where the Project proposes a temporary staging area, a portion of the LOP, and other project features. The Sponsor is actively acquiring real estate under the authority of the NYS Buyout Program. The Sponsor is not eligible for crediting of real estate acquisition expenses for LER acquired through the NYS Buyout Program since it utilizes Federal funds to support acquisitions.

Since Project construction is under the authority of, and uses funds provided by, P.L. 113-2, the Sponsor is eligible for credit for LER expenses it incurs after 29 January 2013. LER that has been acquired after 29 January 2013 will be identified through a chain of title obtained by the NFS for all lands acquired for the Project. LER acquired with the aid of Federal funds, or where a Federal agency's grant program requires the Sponsor to provide the land as a condition of receiving Federal Funds, are not eligible for crediting. USACE and the Sponsor will work closely to identify those lands eligible for crediting. See also paragraph 21.b for Federal funds provided for Bluebelt.

5. Non-Standard Estates

For the purposes summarized in paragraph 3, there are two recommended non-standard estates for the Project:

O	Required
Ponding Easement	±91.12 ac
Wetland Easement	±61.41 ac

By CENAN-RE memorandum dated 16 Dec 15, subject: Request Approval of non-Standard Ponding and Tidal Wetland Easements for the South Shore of Staten Island Coastal Storm Risk Management Project, the New York District submitted a draft of the proposed non-standard estates to HQ USACE for review and approval (see Exhibit "C" for non-standard estate language). The proposed non-standard estates have been reviewed by Project Delivery Team (PDT) for consistency with project requirements. The District Office of Counsel provided a legal certification for legal sufficiency. As of this report, formal approval of the non-standard estates from HQ USACE is pending.

6. Existing Federal Projects

a) <u>Section 103 Continued Authorities Program (CAP)</u> - USACE constructed a project in 1999 as part of Section 103 CAP to manage flood risk in the Oakwood Beach area. The CAP project is obsolete. All aspects and components of the existing CAP project will be removed and deactivated from CAP. The non-Federal Sponsor for the CAP project and proposed Project are the same. The NYSDEC fully supports the proposed Project, which includes the deactivation and removal of the CAP project.



b) <u>Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)</u> - There is an ongoing study into the extent of contamination on Block 4994 Lot 1 that is part of a CERCLA investigation. A portion of the LOP passes through the lot, which is owned by the City through its Department of Parks and Recreation (hereinafter "NYC Parks"). See paragraph 18, *HTRW*, for additional information.

7. Federally-Owned Land

Approximately 15.94 acres (± 13.34 acres in permanent easements and ± 2.60 acres in temporary easements) are required over Federally-owned lands. However, easements will not be acquired by the Sponsor over Federal lands. The appropriate legal document will be determined after close coordination with the managing Federal agency as discussed below.

a) Miller Army Airfield Historic District - The Miller Army Airfield Historic District (Block 3930 Lot 90) (hereinafter "Miller Field") was once used as an Army Air Corps base, but now serves as a site for recreational activities. It is listed with the National Register of Historic Places (NRHP) and is part of the Staten Island Unit of the Gateway National Recreation Area – a Federal designation that preserves and protects scarce and/or unique natural, cultural, and recreational resources in high dense urban environments. Title ownership of the Miller Field is with the United States of America, and managed by NPS. The following estates are required on Miller Field:

	Required
Flood Protection Levee Easement	±4.35 ac
Wetland Easement	±8.78 ac
Temporary Work Area Easement	± 2.60 ac

NPS has reviewed the relevant deed language and has determined that the deed allows the granting of an easement for the placement, maintenance and operation of a municipal facility to include an armored levee. NPS will grant to the City an easement for Project purposes. For NPS lands where wetlands mitigation will occur, NPS will provide a permit for construction therein. While USACE will provide adapting monitoring for a period of five years, NPS will be responsible for the operation and maintenance of the wetland area. Furthermore, on-going coordination will identify whether NPS requires approval from the Department of Interior, as the parent agency to NPS.

Adjacent to, but not included in Miller Army Airfield Historic District, is a 1943 concrete fire control tower. It was built to serve as a "base end station" which aided location of offshore targets through triangulation and worked in concert with stations at Fort Wadsworth on Staten Island and Fort Hamilton in Brooklyn. This structure is owned by NPS and was not included in the NRHP Nomination Form as a contributing element to Miller Field. Construction of the proposed LOP will require that the fire tower be demolished, an expense categorized as a



construction cost. Therefore, there are no requirements to relocate, replace, modify or restore any NPS facility at Miller Field. The Corps will evaluate the NRHP-eligibility of the tower and will continue to work with the NPS to minimize and/or mitigate for impacts to Miller Field. As per the Programmatic Agreement signed by USACE, NPS and the New York State Historic Preservation Office resolution of adverse effects to historic properties on NPS land will be developed by the 30% level of design to ensure the project construction schedule is not impacted. See the Feasibility Report and its Environmental Impact Statement appendix for additional information.

b) <u>Block 4130 Lot 500</u> – According to public land records, fee title to this parcel is retained with the United States of America. The managing Federal agency is currently unknown. Available public resources to identify the managing agency provided no information. Approximately 0.20 of an acre is required for a non-standard Ponding Easement and approximately 0.01 of an acre is required for a Restrictive Easement therein. Efforts are on-going to identify the managing agency.

8. Navigational Servitude

Navigational Servitude is not applicable to the Project.

9. <u>Maps</u>

Real estate maps are provided in Exhibit "A" in two sets. One set pertains to the Project's LOP, the other to its interior drainage. The Base Map provides an overview of the real estate requirements over the entire Project area.

10. Induced Flooding

The Project does not induce flooding.

11. Baseline Cost Estimate for Real Estate (BCERE)

An itemized BCERE is provided in Exhibit "D" in Micro-Computer Aided Cost Estimating System (MCACES) format for each Project contract. The Project's total estimated real estate cost is \$84,915,428, which includes the total cost for the Project's 01-Lands & Damages and 02-Relocation cost accounts.

Cost Account	Contract 1	Contract 2	Total
01-Lands & Damages	\$16,861,540	\$25,754,888 \$40,376,000	\$42,616,428
02-Relocations.	\$1,923,000	\$40,376,000	\$42,299,000
Total Project Real Estate Costs:	\$18,784,540	\$66,130,888	\$84,915,428



The Sponsor's estimated credible Lands, Easements, Rights-of-Way, Relocations, and Disposals (LERRD) expense is \$80,960,000 (rounded), which consists of non-Federal costs only.

	Contract 1	Contract 2	Total
No. of Parcels	245	468	713
LERRD Expense: LER Relocations	\$16,210,822 \$1,923,000	\$24,107,712 \$40,376,000	\$40,318,534 \$42,299,000
Disposals	\$0	\$0	\$0
Total LERRD:	\$18,133,822	\$64,483,712	\$82,617,534

If approved, the Project will be cost-shared (65% Federal and 35% Non-Federal) utilizing funds provided in P.L. 113-2. The Sponsor will be entitled to eligible LERRD credit toward the final cost at the cost-shared amount. The above costs include a 32.9% contingency that was established by the Project's Cost and Schedule Risk Analysis (CSRA) as provided in the Cost Appendix (Appendix IV).

12. Public Law 91-646, Uniform Relocation Assistance

Relocation assistance in accordance with Public Law 91-646 is not anticipated to be required for the Project.

13. Minerals and Timber Activity

There are no present or anticipated mineral activities or timber harvesting within the LER required for the Project.

14. Land Acquisition Experience and Capability of the Non-Federal Partner

The Non-Federal Partner's Capability Assessment Checklist is provided in Exhibit "E" herein. The Sponsor maintains the legal and professional capability and experience to acquire the LER for the construction, operation, and maintenance of the Project. The Sponsor has condemnation authority and other applicable authorities that may apply, if necessary, to support acquisition measures. Recently, the Sponsor has successfully acquired the real estate for the Atlantic Coast of New York City Rockaway Inlet to Norton Point (Sea Gate community of Coney Island) Shore Protection Project and is currently in the process of acquiring the real estate for the Fire Island Inlet to Moriches Inlet Stabilization Project.



Although not anticipated for the Project, the Sponsor is aware of Public Law 91-646 requirements, when applicable. The Sponsor is also aware of the requirement to document acquisition and incidental expenses associated with acquiring the LER for the Project for crediting purposes.

15. Zoning

No application or enactment of local zoning ordinances is anticipated in lieu of, or to facilitate, the acquisition of LER in connection with the Project.

16. Schedule of Acquisition

Milestone	<u>Date</u>
PPA Execution	Jun 2017 Jun 2017
Contract 1 Authorization for Entry for Construction. Contract 1 Certification of Real Estate. Contract 1 Ready to Advertise for Construction.	Nov 2018 Nov 2018 Dec 2018
Contract 2 Authorization for Entry for Construction	Nov 2018 Nov 2018 Dec 2018

17. Relocation of Facilities or Public Utilities

There are five public facility/utility relocations included as part of the Project's LERRD. The Project's total estimated 02-Relcation cost is \$46,294,000 (Contract 1 is \$2,104,000 and Contract 2 is \$44,187,000). The following relocations are captured in the Project's 02-Relocations cost account:

<u>Contract 1</u>- beginning from the tie-off at Hyland Boulevard and ending at Miller Field.

- a. <u>Sanitary Sewer System</u>- There is an existing sanitary sewer line owned by the City through its Department of Sanitation, which is located seaward of the LOP at Oakwood Beach. The area seaward of the LOP will remain exposed to inundation and elevating existing sewer interceptor manholes will reduce water intrusion into the interceptor pipe. The sewer interceptor manholes will be elevated to +10 ft. NGVD. A Road Easement will provide access to the elevated manholes.
- b. <u>Kissam Avenue Road Raising</u>- a public road owned and maintained by the City through its Department of Transportation (NYCDOT) will be raised to provide vehicle access to



the buried seawall/armored levee during storm events where the surrounding roadways will be inundated.

c. <u>Mill Road Resurfacing</u>- Mill Road, a public road owned and maintained by NYCDOT, will be raised to function as a levee to disallow or control storm water spillover between interior drainage areas. While the cost to elevate Mill Road is included as a construction cost, the cost to resurface Mill Road is a relocation expense.

<u>Contract 2</u>- beginning from Miller Field and ending at the tie-off at Fort Wadsworth.

- a. <u>Boardwalk and Promenade Modification/Replacement</u> Along the Project area there is an existing elevated wooden boardwalk (approximately 1.5 miles) and an existing at grade, paved promenade (approximately 1 mile) at a width of approximately 40ft (collectively referred to as "public walkway"). It is owned by the City through its Department of Parks and Recreation. The proposed LOP impacts the public walkway and requires its removal for construction. The Project proposes the construction of a functionally equivalent public walkway, including public access to the shoreline, within its respective right-of-way. This costs includes the modification or replacement of existing public access points to the beach and pier. There are no private concessions located on the boardwalk requiring relocation.
- b. <u>Recreational Facilities</u>- The following City-owned recreational facilities will be repositioned/reconstructed to accommodate the LOP:

Vicinity Location	Facility
Near Fort Wadsworth	Playground, parking lot
South Beach	Baseball field, bike path, gazebo
Ocean Breeze & Midland Beach	Waterfront Park & Splash Plaza
Midland Beach Park	Multipurpose field

c. <u>Resurfacing at the intersection of Seaview Avenue and Father Capadanno Boulevard</u>- The intersection at Seaview Avenue and Father Capadanno Boulevard, public streets owned and maintained by NYCDOT, will be raised to function as a levee to disallow or control storm water spillover between interior drainage areas. While the cost to elevate Mill Road is included as a construction cost, the cost to resurface the intersection is a relocation expense.

The above described public facilities and utilities will require temporary or permanent relocation (they are not removals). They have been identified as eligible for compensation under the substitute facilities doctrine. The substitute facilities doctrine provides an alternate means of just compensation to property owners affected by an acquisition or taking of property in order to place them in as good a position as if the property had not been acquired or taken. The measurement of just compensation, as it relates to the substitute facilities doctrine, has been required only when fair market value has been too difficult to ascertain or when its application



would result in manifest injustice to the owner or the public. In such cases, the cost of constructing a substitute facility may be used as the measure of just compensation paid to the facility/utility owner where a substitute facility/utility is necessary. The substitute facilities doctrine is the foundation for the concept of "relocation" as applied to the implementation of water resources projects by the Corps. Engineering Regulation 405-1-12, Real Estate Handbook, Change 31, 1 May 98, (hereinafter "Real Estate Handbook") defines the term "relocation" as generally meaning:

To provide a functionally equivalent facility to the owner of an existing utility, cemetery, highway, or other eligible public facility and railroad when such action is authorized in accordance with applicable legal principles of just compensation. Providing a functionally equivalent facility may take the form of alteration, lowering, raising, or replacement (and attendant removal) of the affected facility or part thereof.

As a result of the Project's impact to the above described facilities/utilities, there is a requirement to perform such relocation and provide functionally equivalent substitute facilities, in-place or moved, as just compensation for the property owners. There are no requirements to acquire additional LER to perform the relocations described herein. The Corps is in coordination will all respective City agencies regarding the relocations, which have all expressed support for the Project.

All public facilities/utilities described above are considered Project LERRD expenses and a non-Federal responsibility. Relocation costs are creditable toward the Sponsor's cost shared amount. The extent of any potential utility relocation or driveway modifications required due to road raisings will be known upon completion of appropriate surveys during Pre-construction, Engineering and Design (PED). If utilities are identified for relocation or driveways are to be modified to grade levels in accordance with local building codes, the associated costs will be included as a LERRD expense and this report will be updated accordingly. Costs to permanently remove existing utilities will be considered a construction cost.

In accordance with CEMP-CR memorandum dated 10 Jan 13, subject: Real Estate Policy Guidance Letter No. 31-Real Estate Support to Civil Works Planning Paradigm (3x3x3), a preliminary attorney's opinion of compensability was not prepared since the Project's relocation costs does not exceed 30% of the estimated total project costs. Any conclusion or categorization contained in the report that an item is a utility or facility relocation to be performed by the Sponsor as part of its LERRD responsibilities is preliminary only. The Corps will make a final determination of the relocations necessary for the construction, operation, or maintenance of the Project after further analysis and completion and approval of a Final Attorney's Opinion of Compensability for each of the impacted utilities and facilities.

18. <u>Hazardous, Toxic, and Radioactive Waste (HTRW)</u>

Preliminary investigations indicate possible soil or groundwater contaminants within or surrounding the properties and drainage areas of the Project. At some locations, the conclusion



is based on Phase II testing. At other locations, additional site testing may be necessary. Furthermore, there has been recent discovery of radiological contamination at Great Kills National Park that extends into NYC Parks land at the vicinity of Block 4994 lot 1 and Lot 200. Sections of the Great Kills Park are closed to visitation as a result of contamination. NPS initiated a wider investigation into the extent of contamination at the site in the form of a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process in 2010. NPS has identified a plan to determine the nature and extent of contamination and remediate the site to a condition unencumbered by contamination prior to Project construction.

At all sites where contaminated soil or groundwater might be disturbed, the Corps would implement a Construction Health and Safety Program (CHASP) and Remedial Action Plan (RAP). In addition, all excavated soil would be handled and managed in accordance with all applicable city, state, and Federal regulations. HTRW within the Project area is expected to be removed and remediate prior to Project construction. See the Feasibility Report, Section 3.8, *HTRW*, for additional information.

19. Project Support

Public meetings were held in August 2015 where local officials and residents expressed support for the Project. However, NYCDEP and the State of New York have experienced some hesitation from property owners with their respective land acquisition buyout programs. In cases where these lands have also been identified to be required for Project, the Corps will reassess the Project in an attempt to avoid acquisition of these parcels. If properties are unavoidable, the Sponsor will take the necessary course to secure the real estate for the Project. Any modification to the LER required for the Project will be documented with an amendment to this REP.

20. Notification to Non-Federal Partner

Based on its past sponsorship of other USACE water resource (Civil Works) projects and ongoing discussions during the Project's feasibility phase, the Sponsor is aware of the risks of acquiring the LER required for the Project in advance of signing the PPA. However, in accordance with the Real Estate Handbook, a formal written notice identifying the risks associated with acquiring the LER for the Project prior to the full execution of the PPA was provided to the Sponsor through letter dated 6 October 2014.

21. Additional Information

a) <u>Parkland Alienation</u> - The Project requires the city to convey easements, which are considered interests in real estate, on municipally-owned parkland to the Sponsor that will change its use. Since dedicated parkland is inalienable in New York, when a change in parkland use is necessary to advance a public purpose, a "parkland alienation" bill enacted by the NYS Legislature and approved by the Governor is required. Ongoing coordination with the Sponsor and NYC Parks



continues to facilitate appropriate state legislation to allow the conveyance of easements on dedicated parklands for Project purposes.

- b) <u>Bluebelt Federal Funding</u> NYCDEP has been actively acquiring properties in fee simple interest within the Project area in support of Bluebelt. Certain "Bluebelt properties" are required for the Project's interior drainage and will be available for the Project. Bluebelt is working to utilize the aid of Federal grants to support real estate acquisitions. As of the date of this REP, no Federal grants have been received by the City of New York for real estate acquisitions. The Sponsor is not eligible for LERRD crediting for expenses covered with the aid of Federal funding or for LERRD expenses occurring prior to 29 January 2013, the date P.L. 113-2 was enacted.
- I. Community Development Block Grant (CDBG)- The CDBG is funded through the NY Rising Buyout and Acquisition Program by the Dept. of Housing and Urban Development. The grant is for the construction of Bluebelt features, two of which have been identified by NYCDEP as BMPs NC-13 and NC-14. These two sites, located just south of Hylan Boulevard at Seaver Avenue, are included as part of the Project's interior drainage areas, identified as Pond 7 in the Real Estate Base Map (See Exhibit "A"). NYCDEP has confirmed no Federal funds will be used to support real estate acquisitions of NC-13 and NC-14. The Sponsor will be eligible for LERRD credit for the real estate acquisitions associated with Pond 7. The Sponsor has also confirmed with the General Counsel of the Governor's Office of Storm Water Recovery that the use of the properties acquired with the aid of CDBG funds does not conflict with land use restrictions and the proposed Project construction.
- II. Emergency Watershed Protection Program (EMWP) Two Federal grants have been obtained for Bluebelt construction through the EMWP, which is administered by the Dept. of Agriculture, National Resource Conservation Service (USDA NRCS). The Federal grants provided to the City are for Bluebelt construction only that occurring at the vicinity of the ponds located in Interior Drainage C. The USDA NRCS will not acquire any real estate interest on any lands required for the Project. Nor is there a requirement for the Sponsor or City to provide lands as a condition of receiving funding for the activities undertaken on City property. Consequently, there are no compatibility concerns between the EMWP and the Project.
- c) <u>Historical Sites</u> Other than the Miller Army Airfield Historic District discussed in paragraph 7, there are no other known sites listed with the National Register of Historical Places that are located within or adjacent to the LER required for the Project.

22. Point of Contacts

The points of contact for this real estate plan is the Real Estate Project Delivery Team (917)790-8465 Realty **Specialist** Carlos E. Gonzalez (email: member at Carlos.E.Gonzalez@usace.army.mil) (917)790-8430 the undersigned at (email: or Noreen.D.Dresser@usace.army.mil).



23. Recommendations

This report has been prepared in accordance with the Real Estate Handbook. It is recommended that this report be approved.

Malla X Jan XX NOREEN DEAN DRESSER

Chief, Real Estate Division

Real Estate Contracting Officer



EXHIBIT "A" REAL ESTATE MAPS

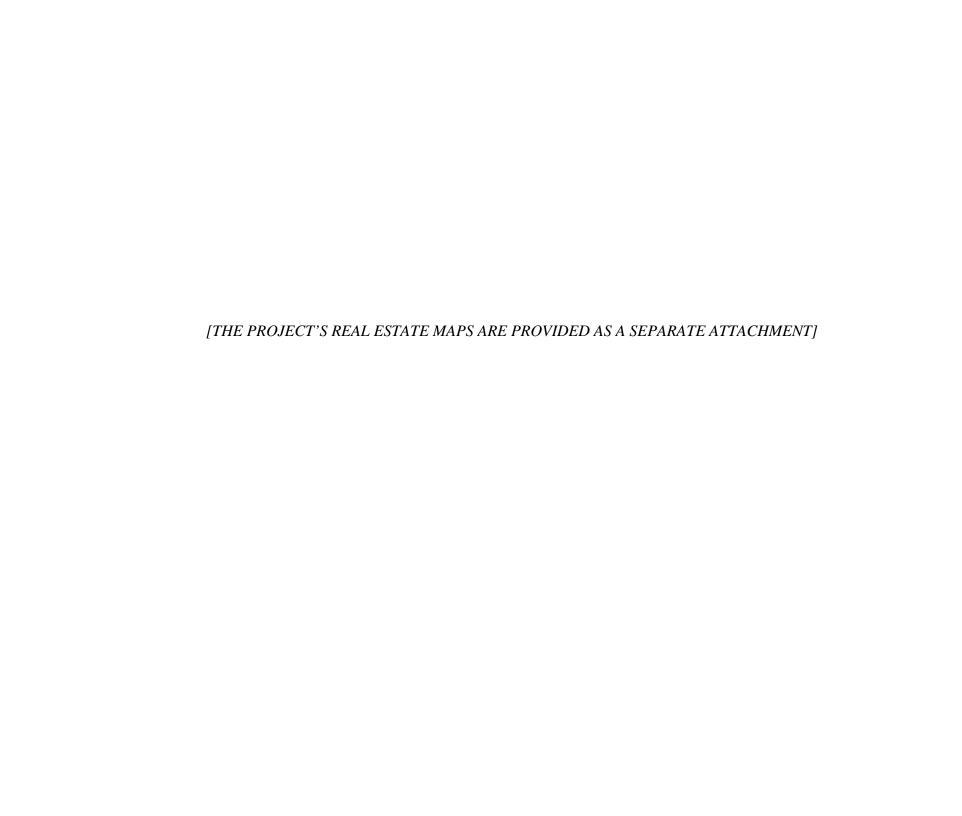


EXHIBIT "B" PARCEL DATA

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
F0410F00F0	NIVC Double	13C Codes Crove Avenue		0.520			1	1		4.647
5041050050	NYC Parks	126 Cedar Grove Avenue	0.000	9.520			6.300	0.209	15.969	4.647
5041080001	Trevett Holdings LLC	Roma Avenue	0.082							
5041080003	Trevett Holdings LLC	Roma Avenue	0.235							
5041080009	Trevett Holdings LLC	Roma Avenue	0.098							
5041080012	Trevett Holdings LLC	Roma Avenue	0.092							
5041080045	NYC Parks	70 Cedar Grove Avenue		0.639		4.302	19.324			
5041300001	JMS 118 LLC	Cedar Grove Avenue	2.867							
5041300070	JMS 118 LLC	Agda Street	3.604							
5041300200	NYC Parks	Roma Avenue				10.494	2.575			
5041300500	U.S. Government	Roma Avenue				0.202	0.006			
5041300655	State of New York	Roma Avenue				0.012				
5041300666	State of New York	Finley Avenue				0.228				
5041600001	NYC Parks	Kissam Avenue				0.130	0.215			
5041600010	NYC Parks	Kissam Avenue				0.020	0.028			
5041600011	Housing Trust Fund Co	69 Kissam Avenue				0.044	0.060			
5041600013	Housing Trust Fund Co	67 Kissam Avenue				0.043	0.055			
5041600016	Tortorella Nancy D.	Kissam Avenue	0.096							
5041600018	Tortorella, Frank D.	55 Kissam Avenue	0.094							
5041600020	Housing Trust Fund Co	51 Kissam Avenue				0.051	0.054			
5041600023	Housing Trust Fund Co	Kissam Avenue				0.050	0.050			
5041600026	Housing Trust Fund Co	45 Kissam Avenue				0.050	0.053			
5041600029	NYC Parks	Kissam Avenue				0.049	0.044			
5041600031	NYC Parks	Kissam Avenue				0.052	0.045			

¹ Borough Block Lot

² Flood Protection Levee Easement

³ Temporary Work Area Easement

^{*}All numbers are represented in acres and are approximations of the required real estate interest.

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5041600034	NYC Parks	Kissam Avenue				0.053	0.044			
5041600037	Housing Trust Fund Co	31 Kissam Avenue				0.016	0.034			
5041600038	Vejselovski, Arun	27 Kissam Avenue	0.099			0.020	0.00			
5041600041	NYC Parks	Kissam Avenue					0.096			
5041600044	NYC Parks	Kissam Avenue					0.051			
5041600045	NYC Parks	Kissam Avenue					0.098			
5041600048	Richard Oneto	11 Kissam Avenue	0.151							
5041600051	Housing Trust Fund Co	7 Kissam Avenue					0.051			
5041600052	Housing Trust Fund Co	3 Kissam Avenue					0.053			
5041600054	Housing Trust Fund Co	472 Mill Road					0.066			
5041600059	NYC Parks	Mill Road		0.527		5.489	1.361	0.166		
5041600070	NYC Parks	Mill Road		1.682		14.115	1.860	0.397	0.771	
5041600100	NYC Parks	Mill Road		0.400		4.138	1.621			
5041600318	NYC Parks	Mill Road						0.007		
5041600321	NYC Parks	Kissam Avenue		0.070				0.075		
5041600325	NYC Parks	Kissam Avenue		0.048						
5041600327	NYC Parks	Kissam Avenue		0.048						
5041600328	NYC Parks	Kissam Avenue		0.048						
5041600329	NYC Parks	Kissam Avenue		0.027	0.041	0.020	0.109			
5041600334	NYC Parks	Kissam Avenue				0.019	0.081			
5041600337	NYC Parks	Kissam Avenue				0.020	0.076			
5041600339	Housing Trust Fund Co	121 Kissam Avenue				0.020	0.070			
5041600341	Housing Trust Fund Co	115 Kissam Avenue				0.025	0.079			
5041600349	Housing Trust Fund Co	103 Kissam Avenue				0.080	0.219			
5041600352	Housing Trust Fund Co	99 Kissam Avenue				0.029	0.067			
5041600355	Housing Trust Fund Co	95 Kissam Avenue				0.031	0.066			
5041600358	Housing Trust Fund Co	93 Kissam Avenue				0.015	0.031			

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5041600359	Elders Management Corps	91 Kissam Avenue	0.052							
5041600360	Elderts M. Co	Kissam Avenue	0.052							
5046930007	NYC DEP	Dugdale Street					0.098			
5046930008	NYC DEP	Dugdale Street					0.048			
5046930009	R. Chesebrough	Dugdale Street	0.063							
5046930011	S. Berman	Amherst Avenue	0.205							
5046930015	Ackerman Sylvia	Amherst Avenue	0.146							
5046930018	NYC DEP	Fairbanks Avenue					0.180			
5046930022	Wadsworth Richmond Co	Fairbanks Avenue	0.138							
5046940001	NYC DEP	Dugdale Street					0.058			
5046940003	NYC DEP	Dugdale Street					0.278			
5046940009	Frank H. Feinberg	Dugdale Street	0.088							
5046940011	S. Berman	Riga Street	0.105							
5046940013	M. Berman	Riga Street	0.101							
5046940015	M. Berman	Riga Street	0.153							
5046940018	M. Berman	Fairbanks Avenue	0.139							
5046940021	Miller Jonas	Fairbanks Avenue	0.184							
5046940025	Mary Dimos Tamsen	Fairbanks Avenue	0.138							
5046940028	M. Berman	Amherst Avenue	0.251							
5046940034	De Vito Joseph	Amherst Avenue	0.104							
5047280002	NYC DEP	Grayson Street					0.036			
5047360001	NYC DEP	Fairbanks Avenue					0.209			
5047360006	NYC DEP	Fairbanks Avenue					0.186			
5047360012	NYC DEP	Brook Avenue					0.116			
5047360015	NYC DEP	Brook Avenue					0.094			
5047370001	NYC DEP	Fairbanks Avenue					0.183			
5047370005	NYC DEP	Fairbanks Avenue					0.091			

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5047370007	NYC DEP	Fairbanks Avenue					0.090			
5047370009	NYC DEP	Fairbanks Avenue					0.136			
5047370013	NYC DEP	Lynn Street					0.139			
5047370014	NYC DEP	Lynn Street					0.145			
5047370018	NYC DEP	Falcon Avenue					0.143			
5047380001	NYC DEP	Amherst Avenue					0.916			
5047390001	NYC DEP	Fairbanks Avenue					1.681			
5047400001	NYC DEP	Brook Avenue					0.093			
5047400007	NYC DEP	Brook Avenue					0.054			
5047400009	NYC DEP	Brook Avenue					0.082			
5047400011	NYC DEP	Brook Avenue					0.121			
5047400013	NYC DEP	Brook Avenue					0.082			
5047400014	NYC DEP	Brook Avenue					0.096			
5047400015	NYC DEP	Brook Avenue					0.113			
5047400016	NYC DEP	Brook Avenue					0.399			
5047400021	NYC DEP	Brook Avenue					0.199			
5047400024	NYC DEP	Brook Avenue					0.481			
5047400033	NYC DEP	Brook Avenue					0.112			
5047400035	NYC DEP	Brook Avenue					0.057			
5047400036	NYC DEP	Brook Avenue					0.056			
5047400037	NYC DEP	Brook Avenue					0.224			
5047400041	NYC DEP	Brook Avenue					0.116			
5047400043	NYC DEP	Brook Avenue					0.170			
5047400046	NYC DEP	Brook Avenue					0.085			
5047460048	Rhea Slade	Emmet Avenue	0.102							
5047460049	Edward N. Slade	Emmet Avenue	0.621							
5047460054	Edward N. Slade	Emmet Avenue	0.162							

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5047460058	Edward N. Slade	Emmet Avenue	0.057							
5047460059	Edward N. Slade	Emmet Avenue	0.125							
5047460062	Edward N. Slade	Emmet Avenue	0.115							
5047460066	Edward N. Slade	Riga Street	0.219							
5047460069	Edward N. Slade	Riga Street	0.062							
5047460070	Edward N. Slade	Riga Street	0.120							
5047460071	Edward N. Slade	Riga Street	0.085							
5047460073	Edward N. Slade	Riga Street	0.084							
5047460075	Spartan Ram Corp	Fairbanks Avenue	0.087							
5047460077	Edward N. Slade	Fairbanks Avenue	0.045							
5047460078	Edward N. Slade	Fairbanks Avenue	0.136							
5047460081	Edward N. Slade	Fairbanks Avenue	0.091							
5047460083	Helen Craniotes	Fairbanks Avenue	0.091							
5047540045	Housing Trust Fund Co	460 Stoneham Street					0.113			
5047540047	Housing Trust Fund Co	Mill Road					0.090			
5047540049	Housing Trust Fund Co	8 Kissam Avenue					0.053			
5047540050	Szalkiewicz, Joseph	10 Kissam Avenue	0.045							
5047540051	Szalkiewicz, Joseph	12 Kissam Avenue	0.048							
5047540053	Costa, Franca T.	14 Kissam Avenue	0.052							
5047540054	Housing Trust Fund Co	16 Kissam Avenue					0.051			
5047540055	Housing Trust Fund Co	18 Kissam Avenue					0.048			
5047540057	Housing Trust Fund Co	20 Kissam Avenue					0.049			
5047540058	Kolpak, Czeslaw	22 Kissam Avenue	0.049							
5047540059	Housing Trust Fund Co	24 Kissam Avenue					0.051			
5047540060	Housing Trust Fund Co	26 Kissam Avenue					0.049			
5047540062	Dungan, Jonathan	38 Kissam Avenue	0.053							
5047540063	Housing Trust Fund Co	32 Kissam Avenue					0.100			

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5047680046	Housing Trust Fund Co	70 Kissam Avenue					0.087			
5047680048	Housing Trust Fund Co	72 Kissam Avenue					0.046			
5047680050	Housing Trust Fund Co	Kissam Avenue					0.045			
5047680071	Housing Trust Fund Co	108 Kissam Avenue					0.043			
5047680075	Housing Trust Fund Co	114 Kissam Avenue					0.088			
5047680082	Eric Nelson And Nancy	126 Kissam Avenue	0.106							
5047680089	Zygmunt Maslowski	Kissam Avenue	0.186							
5047820025	Z Maslowski M. Wanzie	Promenade Avenue	0.293							
5047820038	Z Maslowski-M. Wanzie	Kissam Avenue	0.052							
5047820039	Z Maslowski-M. Wanzie	Kissam Avenue	0.052							
5047820040	NYC DEP	Kissam Avenue		0.052						
5047820041	Z Maslowski-M. Wanzie	Kissam Avenue	0.102							
5047850001	Cum, Maria Christina	Promenade Avenue	0.732							
5047870001	NYC Parks	Cedar Grove Avenue							10.120	
5047870002	NYC Parks	Great Kills Lane							0.004	
5047870003	NYC Parks	Great Kills Lane							0.012	
5047870004	NYC Parks	Great Kills Lane							0.011	
5047870005	NYC Parks	Great Kills Lane							0.023	
5047870007	NYC Parks	Great Kills Lane							0.011	
5047870008	NYC Parks	Great Kills Lane							0.011	
5047870012	NYC Parks	Great Kills Lane							0.011	
5047870020	NYC Parks	Cedar Grove Avenue							0.529	
5047870026	NYC Parks	Cedar Grove Avenue							0.356	
5047870031	NYC Parks	Cedar Grove Avenue							0.369	
5047870037	NYC Parks	Cedar Grove Avenue							0.385	
5047870045	NYC Parks	Cedar Grove Avenue							0.783	
5047880011	NYC Parks	Cedar Grove Avenue		0.424				0.006		0.081

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5047880105	NYC Parks	Cedar Grove Avenue		0.199				0.010		0.036
5047880200	NYC Parks	Cedar Grove Avenue		0.228				0.019		0.041
5047880290	NYC Parks	Cedar Grove Avenue		0.238				0.025		0.043
5047880375	NYC Parks	Cedar Grove Avenue		0.646				0.083		0.113
5047910046	NYC DCAS	Fox Beach Avenue							0.027	
5047910050	Housing Trust Fund Co	39 Fox Beach Avenue							0.036	
5047910051	Housing Trust Fund Co	Fox Beach Avenue							0.033	
5047910052	Housing Trust Fund Co	Fox Beach Avenue							0.034	
5047910053	Housing Trust Fund Co	45 Fox Beach Avenue							0.034	
5047910054	Housing Trust Fund Co	Fox Beach Avenue							0.037	
5047910055	Housing Trust Fund Co	49 Fox Beach Avenue							0.033	
5047910056	Housing Trust Fund Co	51 Fox Beach Avenue							0.066	
5047910057	Housing Trust Fund Co	Fox Beach Avenue							0.033	
5047910058	NYC DCAS	Fox Beach Avenue							0.004	
5047910061	Housing Trust Fund Co	633 Cedar Grove Avenue		0.129						
5047910066	Gregory Epshteyn	71 Fox Beach Avenue	0.056							
5047910071	Sheynfeld, Zinoviy	80 Fox Lane	0.094							
5047910073	Housing Trust Fund Co	627 Cedar Grove Avenue		0.095						
5047910082	NYC DCAS	Great Kills Lane							0.029	
5047910084	Housing Trust Fund Co	Fox Beach Avenue							0.032	
5047910085	Housing Trust Fund Co	Great Kills Lane							0.037	
5047910087	Randall S. Downer	Great Kills Lane	0.068							
5047910089	Robert J. Guddahl	Great Kills Lane	0.033							
5047910090	Housing Trust Fund Co	Great Kills Lane							0.031	
5047910091	A. Stiering	Great Kills Lane	0.014							
5047920058	Housing Trust Fund Co	106 Fox Beach Avenue								0.157
5047920061	Housing Trust Fund Co	102 Fox Beach Avenue								0.160

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5047920063	Housing Trust Fund Co	98 Fox Beach Avenue								0.073
5047920066	Housing Trust Fund Co	96 Fox Beach Avenue								0.034
5047920068	Housing Trust Fund Co	94 Fox Beach Avenue								0.036
5047920069	Housing Trust Fund Co	92 Fox Beach Avenue								0.071
5047920071	Housing Trust Fund Co	90 Fox Beach Avenue								0.038
5047920072	Housing Trust Fund Co	88 Fox Beach Avenue								0.083
5047920073	Housing Trust Fund Co	84 Fox Beach Avenue								0.154
5047920076	Housing Trust Fund Co	80 Fox Beach Avenue								0.054
5047920078	Housing Trust Fund Co	78 Fox Beach Avenue								0.052
5047920082	Housing Trust Fund Co	107 Tarlton Street								0.048
5047920083	Housing Trust Fund Co	105 Tarlton Street								0.032
5047920084	Housing Trust Fund Co	103 Tarlton Street								0.052
5047920090	Housing Trust Fund Co	Tarlton Street								0.044
5047920092	Housing Trust Fund Co	Tarlton Street								0.036
5047920093	Housing Trust Fund Co	91 Tarlton Street								0.146
5047920101	Housing Trust Fund Co	77 Tarlton Street								0.050
5047920201	Housing Trust Fund Co	74 Fox Beach Avenue		0.056						0.104
5047920204	Housing Trust Fund Co	72 Fox Beach Avenue		0.163						
5047920206	Housing Trust Fund Co	66 Fox Beach Avenue		0.037						
5047920208	Housing Trust Fund Co	641 Cedar Grove Avenue		0.041				0.001		
5047920209	Housing Trust Fund Co	645 Cedar Grove Avenue		0.045						
5047920210	Housing Trust Fund Co	117 Tarlton Street		0.038						
5047930070	Housing Trust Fund Co	110 Tarlton Street		0.032						0.047
5047930072	Housing Trust Fund Co	Tarlton Street		0.091						
5047930074	Housing Trust Fund Co	118 Tarlton Street		0.051						
5047930075	Housing Trust Fund Co	Tarlton Street		0.038						
5047930076	NYC DCAS	Delwit Avenue		0.040						

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5047930077	City of New York	Delwit Avenue		0.078				0.005		
5047930078	Edwin Karten & Irving Cohen	Delwit Avenue	0.166							
5048020011	Housing Trust Fund Co	646 Cedar Grove Avenue							0.282	
5048020018	Housing Trust Fund Co	50 Fox Beach Avenue							0.035	
5048020019	Housing Trust Fund Co	48 Fox Beach Avenue							0.213	
5048020021	NYC DCAS	Fox Beach Avenue							0.037	
5048020022	NYC DCAS	Fox Beach Avenue							0.036	
5048020023	NYC DEP	Fox Beach Avenue							0.039	
5048020024	Martinelli John	Fox Beach Avenue	0.010							
5048020090	NYC DCAS	Tarlton Street							0.031	
5048020093	NYC DEP	Tarlton Street							0.043	
5048020094	NYC DEP	Tarlton Street							0.046	
5048030017	NYC Parks	Tarlton Street							0.008	
5048030018	Housing Trust Fund Co	134 Tarlton Street							0.144	
5048030022	NYC Parks	Tarlton Street							0.050	
5048030023	NYC Parks	Tarlton Street							0.042	
5048030024	NYC Parks	Tarlton Street							0.046	
5048030025	NYC Parks	Tarlton Street							0.046	
5048030026	NYC Parks	Tarlton Street							0.049	
5048030027	NYC Parks	Tarlton Street							0.049	
5048030028	NYC Parks	Tarlton Street							0.031	
5048030104	NYC Parks	Delwit Avenue							0.011	
5048030106	NYC Parks	Delwit Avenue							0.162	
5048030110	NYC Parks	Delwit Avenue							0.081	
5048030112	NYC Parks	Delwit Avenue		0.028					0.213	0.030
5048050400	NYC Parks	Cedar Grove Avenue		0.123					0.330	0.195
5048050404	NYC Parks	Cedar Grove Avenue		0.059					0.064	0.006

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5048050407	NYC Parks	Cedar Grove Avenue		0.036						
5048050412	NYC Parks	Cedar Grove Avenue		0.052						
5049940001	NYC Parks	Marine Park		1.705			0.760			1.851
5049940200	NYC Parks	Emmet Avenue		2.701						1.139
5050670001	NYC DEP	3650 Hylan Boulevard		1.357					0.409	1.626
5050670500	NYC DEP	751 Mill Road		1.848				0.286		2.240
Greenbelt White Trail	NYC	Hylan Blvd & Buffalo		0.448						1.004
Streets & ROWs	Public	-		4.328	0.062	1.027	8.294	2.732	5.328	5.893

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline	Ponding	Restrictive	Road	Wetland	TWAE ³
					Easement	Easement	Easement	Easement	Easement	
5031250002	NYC Parks	Fr Capodanno Blvd		3.661						1.266
5031250003	NYC Parks	Fr Capodanno Blvd		2.211						2.049
5031250116	Concord Seaside Housing	20 Fr Capodanno Blvd		0.119						0.271
5033550001	NYC Parks	777 Seaview Avenue					3.170			
5033550002	City of New York	Mason Avenue					0.011			0.900
5033550070	NYC Parks	625 Fr Capodanno Blvd					27.558			
5034040050	Seem Realty I Realty	Wentworth Avenue	0.174							
5034050100	Albanese, Maria	Lansing Street	0.100							
5034050102	NYC DEP	Lansing Street				1.840	0.899			
5034070001	City of New York	Quincy Avenue					2.059			
5034080001	NYC DEP	Quincy Avenue				2.436	0.094			
5034130003	Twin Bros Electrical	Oceanside Avenue	0.042							
5034130004	Twin Bros Electrical	Oceanside Avenue	0.040							
5034130005	Lopes Premises Trust	Oceanside Avenue	0.082							
5034130007	C. J. Stoppa	Oceanside Avenue	0.135							
5034130009	George H. Kuzar Jr	Oceanside Avenue	0.085							
5034130014	Thomas &P Catalano	Reynaud Street	0.148							
5034130018	C. J. Stoppa	Reynaud Street	0.050							
5034130035	T&P Catalano	Quincy Avenue	0.088							
5034130037	Solomon Koenigsberg	Quincy Avenue	0.090							
5034130039	NYC DEP	Quincy Avenue				0.178				
5034130043	NYC DEP	Quincy Avenue				0.259				
5034130049	NYC DEP	Quincy Avenue				0.121				
5034130061	NYC DEP	Reynaud Street				0.516				
5034130065	Truzin CP	Reynaud Street	0.179							

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
	AW/0.757									
5034130070	NYC DEP	Reynaud Street				0.017				
5034130071	NYC DEP	Reynaud Street				0.011				
5034130075	Sanginario, Alfred	Quincy Avenue	0.249							
5034140001	NYC DEP	Mc Laughlin Street				0.375				
5034140009	NYC DEP	Mc Laughlin Street				0.099				
5034140011	NYC DEP	Mc Laughlin Street				0.151				
5034140014	NYC DEP	Mc Laughlin Street				0.289	0.361			
5034140028	NYC DEP	Quincy Avenue					0.094			
5034140030	Margaret H. Di Giorgio	Quincy Avenue	0.144							
5034140035	Damiano Blanche	Andrews Street	0.075							
5034140036	NYC DEP	Andrews Street				0.538				
5034140047	NYC DEP	Andrews Street				0.096				
5034140049	Joan Diclemente	Andrews Street	0.092							
5034140051	Vincent Fabozzi	Andrews Street	0.047							
5034140052	Vincent Fabozzi	Andrews Street	0.047							
5034140053	Vincent Fabozzi	Andrews Street	0.093							
5034150001	Arlene Bolen	Andrews Street	0.066							
5034150003	WM & Arlene Bolen	Andrews Street	0.074							
5034150005	Victor R. Brocchini	Andrews Street	0.076							
5034150007	Victor R. Brocchini	Andrews Street	1.646							
5034150026	Victor Brocchini	Quincy Avenue	0.091							
5034150033	Victor R Brocchini	Quincy Avenue	0.091							
5034150053	NYC DEP	Oceanside Avenue				0.155				
5034160010	C & P Mandracchi	Wentworth Avenue	0.134							
5034160015	Cucco Lucille	Wentworth Avenue	0.180							

Parcel BBL¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline	Ponding	Restrictive	Road	Wetland	TWAE ³
					Easement	Easement	Easement	Easement	Easement	
5034160019	Piazza, Anthony	Wentworth Avenue	0.090							
5034160021	Anthony B. Dacchille	Wentworth Avenue	0.583							
5034160035	Anthony B. Dacchille	Orlando Street	1.281							
5034170214	NYC DEP	Vulcan Street					1.258			
5034170236	Verneda Josephs	Mallory Avenue	0.026							
5034180050	NYC DEP	Lava Street					0.724			
5034180057	NYC DEP	Lava Street					0.063			
5034220001	EQ Investors Inc.	Winfield Street	2.915							
5034230001	NYC DEP	Patterson Avenue					0.247			
5034230007	NYC DEP	Patterson Avenue				1.296	1.195			
5034230041	NYC DEP	Quincy Avenue				0.045				
5034270010	Thomas & P. Catalano	Quincy Avenue	0.034							
5034270100	Thomas & P. Catalano	Oceanside Avenue	0.221							
5034270200	NYC Parks	Oceanside Avenue				1.173				
5034270260	NYC Parks	Oceanside Avenue				1.089				
5034270300	NYC Parks	Oceanside Avenue				2.248				
5034910008	NYC DEP	Andrews Street				5.142	3.650			
5035000050	NYC DEP	Oceanside Avenue				1.582				
5035000060	NYC Parks	Fr Capodanno Blvd				0.542	0.137			
5035000072	City of New York	Fr Capodanno Blvd				0.499	0.031			
5035000082	NYC DEP	Fr Capodanno Blvd				0.890	0.078			
5035000200	NYC DCAS	Oceanside Avenue				0.028				
5035250200	NYC Parks	300 Fr Capodanno Blvd		12.644						10.200
5035410001	NYC Parks	Seaver Avenue				0.101				
5035410003	NYC Parks	Seaver Avenue				0.197				

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5035410007	NYC Parks	Seaver Avenue				0.062	0.032			
5035410009	NYC Parks	Seaver Avenue				0.000	0.090			
5035410012	NYC Parks	Zoe Street				0.045	0.047			
5035410014	NYC Parks	Zoe Street				0.043	0.045			
5035410016	NYC Parks	Zoe Street				0.045	0.049			
5035410018	NYC Parks	Zoe Street				0.023	0.025			
5035410019	NYC Parks	Zoe Street				0.075	0.108			
5035410024	NYC Parks	Naughton Street					0.099			
5035410026	NYC Parks	Naughton Street				0.197	0.106			
5035410032	NYC Parks	Cletus Street				0.103	0.002			
5035410036	NYC Parks	Cletus Street				0.143				
5035410039	NYC Parks	Cletus Street				0.136				
5035410042	NYC DCAS	Cletus Street				0.094				
5035410044	NYC Parks	Cletus Street				0.132				
5035420001	NYC Parks	Seaver Avenue				0.005	0.093			
5035420003	NYC Parks	Seaver Avenue				0.035	0.104			
5035420006	NYC Parks	Seaver Avenue				0.108	0.020			
5035420009	NYC Parks	Seaver Avenue				0.084				
5035420012	NYC Parks	Cletus Street				0.119	0.111			
5035420017	NYC DEP	Cletus Street				0.030	0.058			
5035420019	NYC Parks	Cletus Street				0.032	0.108			
5035420022	NYC Parks	Cletus Street				0.007	0.085			
5035420026	NYC Parks	Naughton Avenue				0.002	0.096			
5035420028	NYC Parks	Naughton Avenue					0.112			
5035420030	NYC Parks	Naughton Avenue					0.106			

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5035420032	NYC Parks	Naughton Avenue					0.438			
5035420043	NYC Parks	Husson Street					0.320			
5035440001	NYC DEP	Zoe Street				0.708	1.516			
5035450001	NYC DEP	Cletus Street				1.061	0.244			
5035450026	NYC DEP	Cletus Street				0.089				
5035450029	NYC DEP	Cletus Street				0.124				
5035450030	NYC DCAS	Seaver Avenue				0.101				
5035450033	NYC DEP	Seaver Avenue				0.211				
5035450038	NYC Parks	Seaver Avenue				0.090				
5035450041	NYC DEP	Husson Street				0.091				
5035450043	NYC DCAS	Husson Street				0.090				
5035450045	NYC DCAS	Husson Street				0.110				
5035500001	NYC DEP	Stobe Avenue				1.423	0.717			
5035510006	NYC DEP	Stobe Avenue					0.108			
5035510008	NYC DEP	Stobe Avenue				0.581	1.587			
5035510116	Hylan Seaver Mall Inc.	1919 Hylan Boulevard	0.319							
5036580001	NYC DEP	Hylan Boulevard				0.723	0.932			
5036610001	NYC DEP	Laconia Avenue					0.974			
5036620001	NYC DEP	Bermuda Place				0.155	0.008			
5036630001	NYC DEP	Boundary Avenue				0.356	0.236			
5036640004	NYC DEP	Hylan Boulevard					0.059			
5036640005	NYC DEP	Hylan Boulevard				0.009	0.055			
5036640006	NYC DEP	Hylan Boulevard				0.034	0.022			
5036640007	NYC DEP	Hylan Boulevard				0.048	0.009			
5036640008	NYC DEP	Hylan Boulevard				0.109	0.007			

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5036640010	NYC DEP	Bermuda Place				0.068	0.085			
5036650001	NYC DEP	Boundary Avenue					1.021			
5036800001	NYC DEP	Mason Avenue					2.291			
5036800031	NYC DEP	Rowan Avenue					0.093			
5036960001	NYC Parks	Lincoln Avenue				0.824	2.301			
5036960030	NYC Parks	Midland Avenue				0.229	0.118			
5036960035	NYC Parks	Boundary Avenue				1.962	0.817			
5036960100	City of New York	333 Midland Avenue					0.125			
5037080035	City of New York	Buel Avenue					0.857			
5037080043	City of New York	Dongan Hills Avenue					0.727			
5037140001	NYC DEP	Mason Avenue				1.963	0.879			
5037150001	NYC DEP	Mason Avenue				2.749	0.124			
5037160014	NYC DEP	Rowan Avenue					1.178			
5037210099	NYC DEP	Mason Avenue					1.148			
5037220001	NYC DEP	Hunter Avenue					0.091			
5037220004	NYC DEP	Hunter Avenue					0.045			
5037220011	NYC DEP	Hunter Avenue					0.001			
5037220015	NYC DEP	Hunter Avenue					0.006			
5037220020	NYC DEP	Hunter Avenue					0.004			
5037220024	NYC DEP	439 Hunter Avenue					0.012			
5037220027	NYC DEP	Hunter Avenue					0.456			
5037230003	NYC DEP	Hunter Avenue					0.959			
5037230022	NYC DEP	Grimsby Street					0.043			
5037230023	NYC DEP	Grimsby Street					0.172			
5037230045	NYC DEP	Nugent Avenue					0.182			

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5037230048	NYC DEP	Nugent Avenue					0.174			
5037230052	NYC DEP	Jefferson Avenue					0.172			
5037230056	NYC DEP	Jefferson Avenue					0.212			
5037320051	NYC Parks	Midland Avenue					1.490			
5037320075	NYC DOE	Midland Avenue					0.124			
5037480001	Laiserin M. & Fireston	Dongan Hills Avenue	0.213							
5037480006	Laiserin M. & Fireston	Olympia Boulevard	0.175							
5037480010	Laiserin M. & Fireston	Buel Avenue	0.007							
5037480020	Laiserin M. & Fireston	Buel Avenue	0.701							
5037480035	Laiserin M. & Fireston	Patterson Avenue	0.276							
5037480043	Laiserin M. & Fireston	Patterson Avenue	0.083							
5037480045	Laiserin M. & Fireston	Patterson Avenue	0.070							
5037480048	Laiserin M. & Fireston	Dongan Hills Avenue	0.232							
5037480053	Laiserin M. & Fireston	Dongan Hills Avenue	0.106							
5037480055	Laiserin M. & Fireston	Dongan Hills Avenue	0.109							
5037480057	Laiserin M. & Fireston	Dongan Hills Avenue	0.172							
5037480060	Laiserin M. & Fireston	Dongan Hills Avenue	0.129							
5037480062	Laiserin M. & Fireston	Dongan Hills Avenue	0.197							
5037480065	Laiserin M. & Fireston	Dongan Hills Avenue	0.440							
5037510001	M. Qabazand	Patterson Avenue	0.036							
5037510002	Hameed Qabazard	Patterson Avenue	2.938							
5037510010	NYC DEP	Patterson Avenue					0.083			
5037520001	NYC DEP	Patterson Avenue				2.196	0.703			
5037530024	J. Firestone	Dongan Hills Avenue	0.259							
5037530035	J. Firestone	Naughton Avenue	0.107							

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline	Ponding	Restrictive	Road	Wetland	TWAE ³
					Easement	Easement	Easement	Easement	Easement	
5037530036	J. Firestone	Naughton Avenue	0.090							
5037550025	Sharp Holdings, LLC	Slater Boulevard	0.049							
5037550026	Sharp Holdings, LLC	Slater Boulevard	0.101							
5037550028	Sharp Holdings, LLC	Slater Boulevard	0.052							
5037550029	Sharp Holdings, LLC	Slater Boulevard	0.053							
5037550030	Sharp Holdings, LLC	Slater Boulevard	0.048							
5037550031	Huie Lai S.	Slater Boulevard	0.101							
5037550033	Huie Lai S.	Slater Boulevard	0.099							
5037550035	Estate of Arthur Mil	Slater Boulevard	0.053							
5037550036	Estate of Arthur Mil	Slater Boulevard	0.043							
5037550037	Estate of Arthur Mil	Slater Boulevard	0.044							
5037550038	Estate of Arthur Mil	Slater Boulevard	0.113							
5037550042	Alvin I. Halper	Patterson Avenue	0.135							
5037550044	Huie Lai S.	Seaver Avenue	0.130							
5037550047	Huie Lai S.	Seaver Avenue	0.203							
5037550051	Huie Lai S.	Seaver Avenue	0.100							
5037550053	Huie Lai S.	Seaver Avenue	0.053							
5037550054	Huie Lai S.	Seaver Avenue	0.052							
5037550055	Huie Lai S.	Seaver Avenue	0.047							
5037550056	Huie Lai S.	Seaver Avenue	0.054							
5037550057	Huie Lai S.	Seaver Avenue	0.050							
5037550058	Huie Lai S.	Seaver Avenue	0.153							
5037550061	Huie Lai S.	Seaver Avenue	0.103							
5037550063	Francine Lista Trust	Seaver Avenue	0.050							
5037560023	Jewish Community Center	Naughton Avenue	0.137							

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline	Ponding	Restrictive	Road	Wetland	TWAE ³
					Easement	Easement	Easement	Easement	Easement	
5037560035	Jewish Community Center	Slater Boulevard	0.229							
5037570001	NYC DEP	Patterson Avenue				0.185	0.148			
5037570007	A. Fink	Slater Boulevard	0.084							
5037570009	NYC DEP	Slater Boulevard				0.043	0.036			
5037570011	NYC DEP	Slater Boulevard				0.052	0.028			
5037570013	City of New York	Slater Boulevard				0.033	0.018			
5037570020	City of New York	Seaver Avenue				0.106				
5037570021	Peter J. Fearon	Seaver Avenue	0.188							
5037580001	NYC DEP	Seaver Avenue				1.831	0.938			
5037590001	NYC DEP	Seaver Avenue					0.089			
5037590003	NYC DEP	Seaver Avenue				0.002	0.203			
5037590008	NYC DEP	Seaver Avenue				0.027	0.067			
5037590011	NYC DEP	Freeborn Street				0.167	0.007			
5037590015	NYC DEP	Freeborn Street				0.214				
5037590020	NYC DEP	Freeborn Street				0.128				
5037590023	NYC DEP	Freeborn Street				0.087				
5037590025	NYC DEP	Freeborn Street				0.132				
5037590028	NYC DEP	Freeborn Street				0.089				
5037590030	NYC DEP	Freeborn Street				0.044				
5037590033	NYC DEP	Graham Boulevard				0.025	0.078			
5037590034	NYC DEP	Graham Boulevard				0.064	0.072			
5037590037	NYC DEP	Graham Boulevard				0.011	0.081			
5037590039	NYC DEP	Graham Boulevard					0.102			
5037590042	NYC DEP	Grimsby Street				0.101	0.031			
5037590045	NYC DEP	Grimsby Street				0.131				

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5037590048	NYC DEP	Grimsby Street				0.214				
5037590048	NYC DEP	Grimsby Street				0.214				
		•					0.055			
5037590058	NYC DEP	Grimsby Street				0.118	0.055			
5037600001		Seaver Avenue				0.021	0.158			
5037600005	NYC DEP	Seaver Avenue				0.447	0.132			
5037600009	NYC DEP	Olympia Boulevard				0.117	0.018			
5037600013	NYC DEP	Olympia Boulevard				0.176				
5037600018	NYC DEP	Olympia Boulevard				0.037				
5037600019	NYC DEP	Olympia Boulevard				0.037	0.000			
5037600020	NYC DEP	Olympia Boulevard				0.035	0.003			
5037600021	NYC DEP	Olympia Boulevard				0.102	0.048			
5037600025	NYC DEP	Olympia Boulevard				0.005	0.073			
5037600027	NYC DEP	Olympia Boulevard					0.081			
5037600036	NYC DEP	Graham Boulevard					0.047			
5037600037	NYC DEP	Graham Boulevard					0.093			
5037600040	NYC DEP	Freeborn Street				0.027	0.052			
5037600042	NYC DEP	Freeborn Street				0.070	0.007			
5037600044	NYC DEP	Freeborn Street				0.073				
5037600046	NYC DEP	Freeborn Street				0.075				
5037600048	NYC DEP	Freeborn Street				0.074				
5037600050	NYC DEP	Freeborn Street				0.216				
5037600056	NYC DEP	Freeborn Street				0.071				
5037600058	NYC DEP	Freeborn Street				0.070				
5037610001	Ole KJ Construction Co	Seaver Avenue	0.085							
5037610003	Ole KJ Construction Co	Seaver Avenue	0.041							

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5037610004	Ole KJ Construction Co	Seaver Avenue	0.193							
5037610009	NYC DEP	Colony Avenue				0.074	0.013			
5037610011	NYC DEP	Colony Avenue				0.278				
5037610017	NYC DEP	Colony Avenue				0.097				
5037610019	M. Karp	Colony Avenue	0.091							
5037610021	M. Karp	Colony Avenue	0.131							
5037610024	NYC DEP	Colony Avenue					0.132			
5037610027	NYC DEP	Colony Avenue					0.130			
5037610030	NYC DEP	Colony Avenue					0.085			
5037610032	NYC DEP	Graham Boulevard					0.084			
5037610034	NYC DEP	Graham Boulevard					0.092			
5037610036	NYC DEP	Graham Boulevard					0.092			
5037610038	NYC DEP	Graham Boulevard					0.049			
5037610042	NYC DEP	Olympia Boulevard					0.085			
5037610044	NYC DEP	Olympia Boulevard					0.087			
5037610046	NYC DEP	Olympia Boulevard					0.088			
5037610048	NYC DEP	Olympia Boulevard					0.131			
5037610051	NYC DEP	Olympia Boulevard					0.138			
5037610054	NYC DEP	Olympia Boulevard				0.017	0.076			
5037610056	NYC DEP	Olympia Boulevard				0.043	0.008			
5037610057	NYC DEP	Olympia Boulevard				0.091	0.003			
5037610059	NYC DEP	Olympia Boulevard				0.183	0.008			
5037620001	Rhea Slade	Seaver Avenue	0.222							
5037620006	Rhea Slade	Seaver Avenue	0.084							
5037620008	Rhea Slade	Seaver Avenue	0.089							

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5007520040	DI CI I	D. L. DI	0.000			2000				
5037620010	Rhea Slade	Baden Place	0.088							
5037620012	Rhea Slade	Baden Place	0.041							
5037620013	Rhea Slade	Baden Place	0.086							
5037620015	Rhea Slade	Baden Place	0.086							
5037620017	Rhea Slade	Baden Place	0.254							
5037620023	Rhea Slade	Baden Place	0.083							
5037620042	Reslade, L.P.	Colony Avenue	0.046							
5037620043	Reslade, L.P.	Colony Avenue	0.086							
5037620045	Reslade, L.P.	Colony Avenue	0.658							
5037620060	Rhea Slade	Colony Avenue	0.133							
5037630001	City of New York	Seaver Avenue				0.141				
5037630004	City of New York	Seaver Avenue				0.140				
5037630007	City of New York	Seaver Avenue				0.136				
5037630010	City of New York	Patterson Avenue				0.085				
5037630012	City of New York	Patterson Avenue				0.085				
5037630014	City of New York	Patterson Avenue				0.083				
5037630017	City of New York	Patterson Avenue				0.129				
5037630019	City of New York	Patterson Avenue				0.043				
5037630020	City of New York	Patterson Avenue				0.061				
5037630022	City of New York	Patterson Avenue				0.064				
5037630023	City of New York	Patterson Avenue				0.045	0.002			
5037630024	City of New York	Patterson Avenue				0.093	0.029			
5037630027	NYC DEP	Patterson Avenue				0.131	0.044			
5037630032	NYC DEP	Graham Boulevard				0.046	0.060			
5037630034	NYC DEP	Graham Boulevard				0.046	0.001			

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
					Lusement		1	Lasement	Lasement	
5037630035	City of New York	Graham Boulevard				0.090	0.002			
5037630037	City of New York	Graham Boulevard				0.092	0.002			
5037630039	Sidney Berman	Graham Boulevard	0.105							
5037630042	Sidney Berman	Baden Place	0.910							
5037640001	NYC DEP	Jefferson Avenue					0.127			
5037640004	NYC DEP	Jefferson Avenue					0.160			
5037640008	NYC DEP	Jefferson Avenue					0.090			
5037640038	NYC DEP	Grimsby Street					0.046			
5037640039	NYC DEP	Grimsby Street					0.047			
5037640040	NYC DEP	Grimsby Street					0.044			
5037650001	NYC DEP	Jefferson Avenue					0.117			
5037650004	NYC DEP	Jefferson Avenue					0.073			
5037650006	NYC DEP	Jefferson Avenue					0.035			
5037650007	NYC DEP	Jefferson Avenue					0.122			
5037650011	NYC DEP	Grimsby Street					0.088			
5037650013	NYC DEP	Grimsby Street					0.042			
5037650037	NYC DEP	Freeborn Street					0.042			
5037650038	NYC DEP	Freeborn Street					0.087			
5037660001	NYC DEP	Jefferson Avenue					0.084			
5037660003	NYC DEP	Jefferson Avenue					0.082			
5037660005	NYC DEP	Jefferson Avenue					0.131			
5037660008	NYC DEP	Jefferson Avenue					0.086			
5037660011	NYC DEP	Freeborn Street					0.086			
5037660035	NYC DEP	Olympia Boulevard					0.042			
5037660036	NYC DEP	Olympia Boulevard					0.082			

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5037670001	City of New York	Jefferson Avenue				0.074				
5037670003	City of New York	Jefferson Avenue				0.075				
5037670005	City of New York	Jefferson Avenue				0.193				
5037670011	Benjamin Goldstein	Olympia Boulevard	0.090							
5037670013	Benjamin Goldstein	Olympia Boulevard	0.043							
5037670033	Benjamin Goldstein	Colony Avenue	0.006							
5037670035	Mary Pantano	Colony Avenue	0.084							
5037670037	Fegarionos D.	Colony Avenue	0.043							
5037680001	City of New York	Jefferson Avenue				0.082				
5037680003	City of New York	Jefferson Avenue				0.037				
5037680004	NYC DEP	Jefferson Avenue				0.348	0.147			
5037680008	City of New York	Jefferson Avenue				0.082				
5037690001	NYC DEP	Jefferson Avenue				0.003	0.128			
5037690004	City of New York	Jefferson Avenue				0.163	0.011			
5037690008	City of New York	Jefferson Avenue				0.096				
5037690011	City of New York	Baden Place				0.138	0.001			
5037690014	NYC DEP	Baden Place				0.215	0.195			
5037690019	City of New York	Graham Boulevard				0.041	0.107			
5037690022	City of New York	Graham Boulevard				0.037	0.010			
5037690023	City of New York	Graham Boulevard				0.082	0.053			
5037690026	NYC DEP	Graham Boulevard					0.105			
5037690029	NYC DEP	Patterson Avenue				0.034	0.060			
5037900012	NYC DEP	Grimsby Street					0.044			
5037900013	NYC DEP	Grimsby Street					0.041			
5037900014	NYC DEP	Grimsby Street					0.040			

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5037900015	NYC DEP	Grimsby Street					0.040			
5037900016	NYC DEP	Grimsby Street					0.048			
5037900017	NYC DEP	Grimsby Street					0.048			
5037900018	NYC DEP	Grimsby Street					0.042			
5037900019	NYC DEP	Grimsby Street					0.044			
5037900020	NYC DEP	Grimsby Street					0.044			
5037900021	NYC DEP	Grimsby Street					0.044			
5037900022	NYC DEP	Grimsby Street					0.046			
5037900023	NYC DEP	Grimsby Street					0.121			
5037900031	NYC DEP	Jefferson Avenue					0.456			
5037900045	NYC DEP	Freeborn Street					0.148			
5037910022	NYC DEP	Freeborn Street					0.158			
5037910031	NYC DEP	Jefferson Avenue					0.359			
5037920021	NYC DEP	Olympia Boulevard					0.107			
5037920027	NYC DEP	Olympia Boulevard					0.087			
5037920029	Graham Slater	Olympia Boulevard	0.085							
5037920031	NYC DEP	Jefferson Avenue				0.080				
5037920033	City of New York	Jefferson Avenue				0.161				
5037920037	NYC DEP	Jefferson Avenue				0.125				
5037920041	NYC DEP	Colony Avenue				0.087	0.039			
5037920044	NYC DEP	Colony Avenue					0.053			
5037920047	NYC DEP	Colony Avenue					0.142			
5037920050	NYC DEP	Colony Avenue					0.047			
5037930027	NYC DEP	Colony Avenue				0.402	0.126			
5037930028	NYC DEP	Colony Avenue				0.090				

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5037930031	NYC DEP	Jefferson Avenue				0.102				
5037930033	NYC DEP	Jefferson Avenue				0.043				
5037930034	Rhea Slade	Jefferson Avenue	0.044							
5037930035	Russo Lydia	Jefferson Avenue	0.236							
5037930047	NYC DEP	Baden Place				0.041	0.028			
5037940016	Jewish Community Center	Baden Place	0.127							
5037940019	Jewish Community Center	Baden Place	0.045							
5037940020	Jewish Community Center	Baden Place	0.039							
5037940021	Jewish Community Center	Baden Place	0.303							
5037940028	Dolle Kennedy	Baden Place	0.021							
5037940030	NYC DEP	Baden Place				0.072				
5037940031	Asset Holding CP	Jefferson Avenue	0.112							
5037940033	Joel S. Berson	Jefferson Avenue	0.133							
5037940053	Edwin Jaques	Patterson Avenue	0.135							
5037940056	NYC DEP	Patterson Avenue				0.134				
5037940059	NYC DEP	Patterson Avenue				0.049				
5037940060	NYC DEP	Patterson Avenue				0.050				
5037940061	NYC DEP	Patterson Avenue				0.155	0.068			
5038230001	NYC DEP	Canoe Place					0.553			
5038240006	NYC DEP	Slater Boulevard					0.126			
5038240012	Azzara, Giovanna	Slater Boulevard	0.042							
5038250001	City of New York	Canoe Place				0.006	0.080			
5038250004	City of New York	Canoe Place					0.037			
5038260001	NYC DEP	Canoe Place				0.000	0.278			
5038290100	NYC DEP	Ocean Road					0.927			

Parcel BBL ¹ No.	Owner's Name	Property Location	Fee	FPLE ²	•		Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5038330001	NYC Parks	Fr Capodanno Blvd		0.409						1.642
5038330002	NYC Parks	Fr Capodanno Blvd		0.029						0.051
5038330003	NYC Parks	Fr Capodanno Blvd		1.112						0.575
5038330015	NYC Parks	Fr Capodanno Blvd								0.027
5038330030	NYC Parks	Fr Capodanno Blvd		0.147						0.436
5038330100	NYC Parks	700 Fr Capodanno Blvd		1.924						0.848
5038330500	NYC Parks	Fr Capodanno Blvd		0.404						0.309
5038340051	Sharp Holdings, LLC	Fr Capodanno Blvd	0.142							
5038350001	Sharp Holdings, LLC	Fr Capodanno Blvd	0.184							
5038360001	NYC DEP	Quincy Avenue					0.036			
5038420001	Leo A. Barrile	Seaver Avenue	0.096							
5038420003	City of New York	Seaver Avenue				0.098				
5038420005	City of New York	Seaver Avenue				0.196	0.020			
5038420008	Gladys Madovoy/Tee	Seaver Avenue	1.383							
5038420027	Gladys Madovoy/Tee	Graham Boulevard	0.140							
5038420029	Gladys Madovoy/Tee	Graham Boulevard	0.094							
5038420037	Gladys Madovoy/Tee	Graham Boulevard	0.115							
5038450001	NYC DEP	Sioux Street					0.117			
5038460001	NYC DEP	Graham Boulevard					0.272			
5038510001	NYC Parks	Fr Capodanno Blvd		0.030						0.115
5038510040	NYC Parks	Fr Capodanno Blvd		0.012						0.023
5038510050	NYC Parks	Fr Capodanno Blvd		2.068						0.918
5038560007	L Hall	Jay Street	0.090							
5038560016	NYC DEP	Jefferson Avenue					0.028			
5038560017	Andrei Karpov	637 Jefferson Avenue	0.034							

Parcel BBL ¹ No.	Owner's Name Property Location		Fee	FPLE ²	Pipeline Easement	Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³
5038560019	Dolle Kennedy	Jefferson Avenue	0.045							
5038560023	NYC DEP	Jefferson Avenue				0.015	0.164			
5038560028	NYC DEP	Patterson Avenue					0.100			
5038590001	NYC DEP	Graham Boulevard					0.168			
5038600031	Jean H. Bott	Jefferson Avenue	0.138							
5038610001	Gail K. Byrnes F/K/A	Patterson Avenue	0.260							
5038610014	Gail K. Byrnes F/K/A	Patterson Avenue	0.664							
5038610019	Freda Shammah	Patterson Avenue	0.024							
5038610024	Gail Byrnes	Jefferson Avenue	0.039							
5038610025	NYC DEP	Jefferson Avenue				0.067	0.018			
5038610027	Abid Shoman	Jefferson Avenue	0.087							
5038610029	NYC DEP	Jay Street				0.098				
5038610031	NYC DEP	Jay Street				0.046				
5038610032	NYC DEP	Jay Street				0.046				
5038610033	NYC DCAS	Jay Street				0.091				
5038610035	NYC DEP	Jay Street				0.186				
5038610039	G Slater Co	Jay Street	0.095							
5038610041	J. Endervelt	Jay Street	0.042							
5038610042	J. Endervelt	Jay Street	0.072							
5038640010	NYC DEP	Oceanside Avenue					0.069			
5038640012	Adrienne Ferrett	Fr Capodanno Blvd	0.039							
5038640013	Adrienne Ferrett	Fr Capodanno Blvd	0.033							
5038640014	Adrienne Ferrett	Fr Capodanno Blvd	0.032							
5038640015	Adrienne Ferrett	Fr Capodanno Blvd	0.030							
5038640016	Adrienne Ferrett	Fr Capodanno Blvd	0.029							

Parcel BBL ¹ No.	Owner's Name			Ponding Easement	Restrictive Easement	Road Easement	Wetland Easement	TWAE ³		
5038640017	Michael Steven Tannen	Oceanside Avenue	0.035							
5038640018	Hub Development Corp	Fr Capodanno Blvd	0.262							
5038640100	NYC DEP	Jay Street				0.106	0.033			
5038640103	Steven Guterman	Jay Street	0.086							
5038640105	NYC DEP	Jay Street				0.028	0.063			
5038640107	Steven Guterman	Jay Street	0.051							
5038640108	Steven Guterman	Jay Street	0.096							
5038640110	Steven Guterman	Jay Street	0.054							
5038640111	Steven Guterman	Jay Street	0.089							
5038680001	NYC Parks	Fr Capodanno Blvd		0.121						2.821
5038680002	NYC Parks	Fr Capodanno Blvd		0.850						0.257
5038680060	NYC Parks	Fr Capodanno Blvd		1.139						0.557
5038790001	NYC Parks	2231 Fr Capodanno Blvd		2.843						7.270
5038790002	NYC Parks	Fr Capodanno Blvd		0.715						0.470
5038930001	NYC Parks	660 Lincoln Avenue		2.186						1.766
5039300010	NYC Doe	2151 New Dorp Lane								
5039300090	National Park Service	455 New Dorp Lane		4.353						2.605
5041050050	NYC Parks	126 Cedar Grove Avenue								0.000
STREETS & ROWs	Public	-				20.711	16.219			

EXHIBIT "C" ESTATES

EXHIBIT "C" ESTATES

A. STANDARD ESTATES

1) FEE (Standard Estate No. 1)

The fee simple title to the land described in Schedule A. Subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines¹.

2) FLOOD PROTECTION LEVEE EASEMENT (Standard Estate No. 9)

A perpetual and assignable right and easement in the land described in Schedule A to construct, maintain, repair, operate, patrol and replace a flood protection levee and floodwall, including all appurtenances thereto; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges in the land as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

3) PIPELINE EASEMENT (Standard Estate No. 13)

A perpetual and assignable easement and right-of-way in, on, over and across the land described in Schedule A for the location, construction, operation, maintenance, alteration; repair and patrol of an underground storm water drainage pipeline; together with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions and other vegetation, structures, or obstacles within the limits of the right-of-way; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

4) ROAD EASEMENT (Standard Estate No. 11)

A perpetual exclusive and assignable easement and right-of-way in, on, over and across the land described in Schedule A for the location, construction, operation, maintenance, alteration replacement of a road and appurtenances thereto; together with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions and other vegetation, structures, or obstacles within the limits of the right-of-way; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

¹ Where an outstanding interest in the subsurface mineral estate is part of a block ownership which is to be excluded from the taking in accordance with paragraph 5 289 (2), the following clause will be added: "excepting and excluding from the taking all interests in the (coal) (oil and gas) which are outstanding in parties other than the surface owners and all appurtenant rights for the exploration, development and removal of said (coal) (oil and gas) so excluded."

EXHIBIT "C" ESTATES

5) TEMPORARY WORK AREA EASEMENT (Standard Estate No. 15)

A temporary easement and right-of-way in, on, over and across the lands described in Schedule A, for a period not to exceed two years beginning with date possession of the land is granted to the United States, for use by the United States, its representatives, agents, and contractors as a work area, including the right to move, store and remove equipment and supplies, and erect and remove temporary structures on the land and to perform any other work necessary and incident to the construction of the South Shore of Staten Island Coastal Storm Risk Management Project, together with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions, and any other vegetation, structures, or obstacles within the limits of the right-of-way; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

6) RESTRICTIVE EASEMENT (Standard Estate No. 16)

A perpetual and assignable easement for the establishment, maintenance, operation and use for a restrictive area in, on, over and across the land described in Schedule A consisting of the right to prohibit human habitation; the right to remove buildings presently or hereafter being used for human habitation; the right to prohibit gatherings of more than twenty-five (25) persons; the right to post signs indicating the nature and extent of the Government's control; and the right of ingress and egress over and across said land for the purpose of exercising the rights set forth herein; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired.

B. NON-STANDARD ESTATES

1) PONDING EASEMENT

The perpetual right, power, privilege and easement to clear, borrow, excavate and remove soil, dirt, control vegetation and build earthen structures with controlled vegetation and other materials to pond the natural overflow, flooding and submerging of the land described in Schedule A, in connection with the operation maintenance of the project as authorized by the Disaster Relief Appropriations Act of 2013, Public Law 113-2 enacted on 29 January 2013, and the continuing right to clear, borrow, excavate, and remove soil, dirt, brush, debris and natural obstructions which, in the opinion of the representative of the United States in charge of the project, may be detrimental to the project, together with all right, title and interest in and to the timber, structures and improvements situate on the land provided that no structures for human habitation shall be constructed or maintained on the land, that no other structures shall be constructed or maintained on the land except as may be approved in writing by the representative of the

EXHIBIT "C" ESTATES

United States in charge of the project, and that no excavation shall be conducted and no landfill placed on the land without such approval as to the location and method of excavation and/or placement of landfill; the above estate is taken subject to existing easements for public roads and highways, public utilities, railroads and pipelines; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used and enjoyed without interfering with the use of the project for the purposes authorized by Congress or abridging the rights and easement hereby acquired; provided further that any use of the land shall be subject to Federal and State Laws with respect to pollution.

2) WETLAND EASEMENT

A perpetual and assignable easement and right-of-way in, on, over and across the land described in Schedule A, for the construction, restoration, establishment, enhancement, and/or preservation of wetlands, streams, or other aquatic resources; together with the continuing right to trim, dispense fertilizer or herbicide, cut, fell, remove and dispose therefrom all trees, underbrush, obstructions, and other vegetation; and to remove and dispose of structures or obstructions within the limits of the right-of-way; and to place thereon dredged, excavated or other clean and appropriate grain size fill material, to shape and grade said land to desired elevation, slopes and contour; and to prevent erosion by structural and vegetative methods; and to do any other work or monitoring necessary and incident to the South Shore of Staten Island Coastal Storm Risk Management Project; together with the right of ingress and egress for such work; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however to existing easements for public roads and highways, public utilities, railroads and pipelines.

EXHIBIT "D" BASELINE COST ESTATE FOR REAL ESTATE

EXHIBIT "D" BASELINE COST ESTIMATE FOR REAL ESTATE

BASELINE COST ESTIMATE FOR REAL ESTATE SOUTH SHORE OF STATEN ISLAND COASTAL STORM RISK MANAGEMENT TOTAL PROJECT

	TOTAL PROJECT										
	TOTAL PROJECT REAL ESTATE COSTS	NON-FEDERAL	FEDERAL	TOTAL COSTS							
01A	INCIDENTAL COSTS	\$2,870,000	\$1,729,040	\$4,599,040							
04.84	Acquisition (Admin Costs)	£420.000	\$22C 000	\$7EC 000							
01A1 01A1A	Acquisition (Admin Costs) By the Non-Federal Sponsor	\$420,000 \$420,000	\$336,000	\$756,000							
01A1B	By Government (Govt) on behalf of NFS	ψ+20,000									
01A1C	By GoVt		\$336,000								
01A2	Survey	\$525,000	\$260,040	\$785,040							
01A2A	By NFS	\$525,000	,,	,,.							
01A2B	By Gov't on behalf of NFS										
01A2C	Review of NFS		\$260,040								
01A3	Appraisal	\$1,400,000	\$383,150	\$1,783,150							
01A3A	By NFS	\$1,400,000	,	¥ 1,100,100							
01A3B	By Govt on behalf of NFS										
01A3C	Review of NFS		\$383,150								
01A4	Title Services	\$525,000	\$336,550	\$861,550							
01A4A	By NFS	\$525,000	+000,000	400.,000							
01A4B	By Govt on behalf of NFS										
01A4C	Review of NFS		\$336,550								
01A5	Other Professional Services	\$0	\$0	\$0							
01A5A	By NFS	\$0	·								
01A5B	By Govt on behzlf of NFS										
01A5C	Review of NFS		\$0								
01A6	PL 91-646 Assistance	\$0	\$0	\$0							
01A6A	By NFS	\$0	**	**							
01A6B	By Govt on behalf of NFS										
01A6C	Review of NFS		\$0								
04 8 0	غالب. ٨	¢o.	£442.200	£442.200							
01A8 01A8A	Audit BY NFS	\$0	\$413,300	\$413,300							
01A9B	By Govt	ΨΟ	\$413,300								
	TOTAL PROJECT REAL ESATE COSTS	NON-FEDERAL	FEDERAL	TOTAL COSTS							
01B	ACQUISITION COSTS	\$27,467,497	\$0	\$27,467,497							
_											
01B1	Land Payments	\$27,467,497	\$0	\$27,467,497							
01B1A 01B1B	By NFS By Govt on behalf of NFS	\$27,467,497									
	•										
01B2	Damage Payments	\$0	\$0	\$0							
01B2A 01C2B	By NFS By Govt on behalf of NFS										
01025	By Govt on benan or Nr 3										
	PL 91-646 Payment	\$0	\$0	\$0							
01B3A	By NFS										
01B3B	By Govt on behalf of NFS										
01B4	Condemnation	\$0	\$0	\$0							
01B4A	By NFS										
01B4B	By Govt on behalf of NFS										
01B5	Disposals	\$0	\$0	\$0							
01B5A	By Government		•	**							
01B5B	By NFS										
01B5C	By Govt on behalf of NFS										
	Subtotal Lands & Damages (01A & 01B)	\$30,337,497	\$1,729,040	\$22 OSS 527							
	Contingency (32.9%)	\$30,337,497	\$1,729,040 \$568,854	\$32,066,537 \$10,549,891							
01	TOTAL LANDS & DAMAGES	\$40,318,534	\$2,297,894	\$42,616,428							
02	TOTAL RELOCATIONS (Facilities & Utilities) (02-Cost Acct.)	\$42,299,000	\$0	\$42,299,000							
	TOTAL PROJECT REAL ESTATE COSTS (01 & 02)	\$82,617,534	\$2,297,894	\$84,915,428							
	TOTAL NFS LEERD COSTS	82,617,534	-	82,617,534							
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EXHIBIT "D" BASELINE COST ESTIMATE FOR REAL ESTATE

BASELINE COST ESTIMATE FOR REAL ESTATE SOUTH SHORE OF STATEN ISLAND COASTAL STORM RISK MANAGEMENT CONTRACT 1

CONTRACT 1										
	TOTAL PROJECT REAL ESTATE COSTS	NON-FEDERAL	FEDERAL	TOTAL COSTS						
01A	INCIDENTAL COSTS	\$906,100	\$489,630	\$1,395,730						
01A1	Acquisition (Admin Costs)	\$132,600	\$106,080	¢220 600						
01A1A	By the Non-Federal Sponsor	\$132,600	\$100,000	\$238,680						
01A1B	By Government (Govt) on behalf of NFS	ψ.02,000								
01A1C	By Govt		\$106,080							
01A2	Survey	\$165,750	\$87,600	\$253,350						
01A2A	By NFS	\$165,750								
01A2B	By Gov't on behalf of NFS		#07.000							
01A2C	Review of NFS		\$87,600							
01A3	Appraisal	\$442,000	\$143,650	\$585,650						
01A3A	By NFS	\$442,000								
01A3B	By Govt on behalf of NFS									
01A3C	Review of NFS		\$143,650							
01A4	Title Services	\$165,750	\$26,400	\$192,150						
01A4A	By NFS	\$165,750								
01A4B	By Govt on behalf of NFS Review of NFS		Pac 400							
01A4C	Review of INFS		\$26,400							
01A5	Other Professional Services	\$0	\$0	\$0						
01A5A	By NFS	\$0	·	·						
01A5B	By Govt on behzlf of NFS									
01A5C	Review of NFS		\$0							
01A6	PL 91-646 Assistance	\$0	\$0	\$0						
01A6A	By NFS	\$0	Ψ.	40						
01A6B	By Govt on behalf of NFS									
01A6C	Review of NFS		\$0							
01A8	Audit	\$0	\$125,900	\$125,900						
01A8A	BY NFS	\$0	ψ123,300	ψ123,300						
01A9B	By Go√t		\$125,900							
045	TOTAL PROJECT REAL ESATE COSTS	NON-FEDERAL	FEDERAL	TOTAL COSTS						
01B	ACQUISITION COSTS	\$11,291,659	\$0	\$11,291,659						
01B1	Land Payments	\$11,291,659	\$0	\$11,291,659						
01B1A	By NFS	\$11,291,659	7.	¥11,=01,000						
01B1B	By Gov't on behalf of NFS									
01B2	Damage Payments	\$0	\$0	\$0						
01B2A	By NFS	40	ΨΟ	ΨΟ						
01C2B	By Govt on behalf of NFS									
01B3	PL 91-646 Payment	\$0	\$0	\$0						
01B3A 01B3B	By NFS By Gov't on behalf of NFS									
01000	by cort on bondin or the									
01B4	Condemnation	\$0	\$0	\$0						
01B4A	By NFS									
01B4B	By Govt on behalf of NFS									
01B5	Disposals	\$0	\$0	\$0						
01B5A	By Government									
01B5B	By NFS By Coult on hohelf of NES									
01B5C	By Govt on behalf of NFS	+								
	Subtotal Lands & Damages (01A & 01B)	\$12,197,759	\$489,630	\$12,687,389						
	Contingency (32.9%)	\$4,013,063	\$161,088	\$4,174,151						
01	TOTAL LANDS & DAMAGES	\$16,210,822	\$650,718	\$16,861,540						
02	TOTAL RELOCATIONS (Facilities & Utilities) (02-Cost Acct.)	\$1,923,000	\$0	\$1,923,000						
	TOTAL PROJECT REAL ESTATE COSTS (01 & 02)	\$18,133,822	\$650,718	\$18,784,540						
	TOTAL NFS LERRD COSTS	18,133,822	-	\$18,133,822						

EXHIBIT "D" BASELINE COST ESTIMATE FOR REAL ESTATE

BASELINE COST ESTIMATE FOR REAL ESTATE SOUTH SHORE OF STATEN ISLAND COASTAL STORM RISK MANAGEMENT CONTRACT 2

CONTRACT 2										
	TOTAL PROJECT REAL ESTATE COSTS	NON-FEDERAL	FEDERAL	TOTAL COSTS						
01A	INCIDENTAL COSTS	\$1,963,900	\$1,239,410	\$3,203,310						
		¥ 1,000,000	+ 1,_22,110	+						
01A1	Acquisition (Admin Costs)	\$287,400	\$229,920	\$517,320						
01A1A	By the Non-Federal Sponsor	\$287,400								
01A1B 01A1C	By Government (Govt) on behalf of NFS By Govt		\$229,920							
UIAIC	By Govi		\$229,920							
01A2	Survey	\$359,250	\$172,440	\$531,690						
01A2A	By NFS	\$359,250	. ,							
01A2B	By Govt on behalf of NFS									
01A2C	Review of NFS		\$172,440							
01A3	Appraisal Appraisal	\$958,000	\$239,500	\$1,197,500						
01A3A	By NFS	\$958,000	Ψ233,300	ψ1,191,300						
01A3B	By Govt on behalf of NFS	φοσοήσσο								
01A3C	Review of NFS		\$239,500							
01A4	Title Services	\$359,250	\$310,150	\$669,400						
01A4A 01A4B	By NFS By GoVt on behalf of NFS	\$359,250								
01A4B	Review of NFS		\$310,150							
017110	Nonew Grill G		φο το, του							
01A5	Other Professional Services	\$0	\$0	\$0						
01A5A	By NFS	\$0								
01A5B	By Govt on behzlf of NFS									
01A5C	Review of NFS		\$0							
01A6	PL 91-646 Assistance	\$0	\$0	\$0						
01A6A	By NFS	\$0	ų.	***						
01A6B	By Govt on behalf of NFS									
01A6C	Review of NFS		\$0							
		-	A (A (
01A8 01A8A	Audit BY NFS	\$0	\$287,400	\$287,400						
01A9B	By Gov't	Φυ	\$287,400							
017102	2) 5011		Ψ201,100							
01B	TOTAL PROJECT REAL ESATE COSTS ACQUISITION COSTS	NON-FEDERAL	FEDERAL \$0	TOTAL COSTS						
UIB	ACQUISITION COSTS	\$16,175,838	\$ 0	\$16,175,838						
01B1	Land Payments	\$16,175,838	\$0	\$16,175,838						
01B1A	By NFS	\$16,175,838	·							
01B1B	By Govt on behalf of NFS									
01B2 01B2A	Damage Payments By NFS	\$0	\$0	\$0						
01B2A 01C2B	By Govt on behalf of NFS									
01026	By Govt on behalf of Nr 3									
01B3	PL 91-646 Payment	\$0	\$0	\$0						
01B3A	By NFS									
01B3B	By Govt on behalf of NFS									
0404	Condomnation	***		^						
01B4 01B4A	Condemnation By NFS	\$0	\$0	\$0						
01B4A 01B4B	By Govt on behalf of NFS									
01B5	Disposals	\$0	\$0	\$0						
01B5A	By Government									
01B5B	By NFS By Gov't on behalf of NFS									
01B5C	By GOVE ON DENAIL OF INFS									
	Subtotal Lands & Damages (01A & 01B)	\$18,139,738	\$1,239,410	\$19,379,148						
	Contingency (32.9%)	\$5,967,974	\$407,766	\$6,375,740						
01	TOTAL LANDS & DAMAGES	\$24,107,712	\$1,647,176	\$25,754,888						
02	TOTAL RELOCATIONS (Facilities & Utilities) (02-Cost Acct.)	\$40,376,000	\$0	\$40,376,000						
	TOTAL PROJECT REAL ESTATE COSTS (01 & 02)	\$64,483,712	\$1,647,176	\$66,130,888						
	TOTAL NFS LEERD COSTS	\$64,483,712	-	\$64,483,712						

EXHIBIT "E" NON-FEDERAL SPONSOR CAPABILITY ASSESSMENT CHECKLIST

ASSESSMENT OF NON-FEDERAL SPONSOR'S REAL ESTATE ACQUISITION CAPABILITY

SOUTH SHORE OF STATEN ISLAND COASTAL STORM RISK MANAGEMENT PROJECT

I. Legal Authority.

- a. Does the sponsor have legal authority to acquire and hold title to real property for project purposes? Yes.
- b. Does the sponsor have the power of eminent domain for this project? Yes.
- c. Does the sponsor have "quick-take" authority for this project? Yes.
- d. Are any of the lands/interests in land required for the project located outside the sponsor's political boundary? No.
- e. Are any of the lands/interests in land required for the project owned by an entity whose property the sponsor cannot condemn? Yes. The Project requires the acquisition of real estate interests over lands owned by the Federal Government.

II. Human Resource Requirements.

- a. Will the sponsor's in-house staff require training to become familiar with the real estate requirements of Federal projects including P.L. 91-646, as amended? No.
- b. If the answer to II.a is "yes," has a reasonable plan been developed to provide such training?
- c. Does the sponsor's in-house staff have sufficient real estate acquisition experience to meet its responsibilities for the project? Yes.
- d. Is the sponsor's projected in-house staffing level sufficient considering its other workload, if any, and the project schedule? Yes.
- e. Can the sponsor obtain contractor support, if required in a timely fashion? Yes.
- f. Will the sponsor likely request USACE assistance in acquiring real estate? No.

III. Other Project Variables.

- a. Will the sponsor's staff be located within reasonable proximity to the project site? Yes
- b. Has the sponsor approved the project/real estate schedule/milestones? Yes

IV. Overall Assessment.

- a. Has the sponsor performed satisfactorily on other USACE projects? Yes
- b. With regard to this project, the sponsor is anticipated to be: highly capable/fully capable/moderately capable/marginally capable/insufficiently capable. If sponsor is believed to be "insufficiently capable," provide explanation. Highly Capable.

V. Coordination.

- a. Has this assessment been coordinated with the sponsor? Yes
- b. Does the sponsor concur with this assessment? Yes

NOREEN DEAN DRESSER

Chief, Real Estate Division,

Real Estate Contracting Officer

EXHIBIT "F" PONDING AREA FLOOD DEPTH CHANGES

EXHIBIT "F"
PONDING AREA FLOOD DEPTH CHANGES

			2-yr Storm Event		10-yr Sto	10-yr Storm Event 50-yr		50-yr Storm Event		orm Event	
Interior Area	Pond Name	Pond Area (± acres)	Existing Flood Depth	With Project Flood Depth	Maximum Increased Flood Depth						
В	East	45.85	0.0	1.9	0.5	2.8	1.0	3.3	1.2	3.5	2.3
С	Pond 1	15.69	0.2	0.5	1.4	1.3	2.3	2.2	2.4	2.5	0.3
	Pond 2	12.01	0.2	0.5	1.4	1.3	2.3	2.2	2.4	2.5	0.3
	Pond 3	16.39	0.2	0.5	1.4	1.3	2.3	2.2	2.4	2.5	0.3
	Pond 4	20.46	0.2	0.5	1.4	1.3	2.3	2.2	2.4	2.5	0.3
	Pond 7	12.08	0.0	0.5	0.4	1.3	1.3	2.2	1.4	2.5	1.2
	Last Chance Midland	18.14	0.0	0.5	0.0	1.3	0.3	2.2	0.4	2.5	2.2
	Pond	5.74	0.0	0.5	0.0	1.3	0.0	2.2	0.0	2.5	2.5
Е	Pond 1	15.64	0	1.1	0.6	2.5	1.16	3.4	1.4	3.8	2.4
	Pond 2	18.7	0.99	1.1	1.6	2.5	2.16	3.4	2.4	3.8	1.4

^{*}See Appendix II, *Interior Drainage Analysis*, for additional information.