ERRATA SHEET
SOUTH SHORE OF STATEN ISLAND
FORT WADSWORTH TO OAKWOOD BEACH, NEW YORK
HURRICANE SANDY – COASTAL STORM RISK MANAGEMENT
FINAL INTERIM FEASIBILITY REPORT & ENVIRONMENTAL IMPACT STATEMENT
OCTOBER 2016 (REVISED DECEMBER 2016)

This Errata Sheet is included as an insert to the South Shore of Staten Island, Fort Wadsworth to Oakwood Beach, New York, Coastal Storm Risk Management, Final Interim Feasibility Report and Environmental Impact Statement, dated October 2016 (revised December 2016) to: 1) clarify project costs, and 2) clarify environmental compliance.

1. The following provides additional justification of recreation features and associated cost-sharing.

Executive Summary, paragraph ES-5 before 2nd sentence: "The project was formulated and justified for the sole purpose of coastal storm damage reduction, independent of any recreational or ecological benefits. Recreational features indicated in the report are existing features that must be relocated/replaced because of project construction. No new recreation features are proposed to be constructed nor is any new recreation feature included in the project cost. All relocation of recreational features are a 100% non-federal responsibility and creditable towards the non-federal 35% cost-share. Ecological benefits are ancillary to the primary purpose of CSDR and not included in ancillary project justification."

Executive Summary, paragraph ES-21, third bullet, the following replaces last sentence: "From Oakwood Beach to Miller Field, the proposed armored seawall includes a pathway feature necessary to provide access for OMRR&R of the armored seawall. The pathway is a project cost which is cost-shared 65% federal and 35% non-federal. From Miller Field to Fort Wadsworth, there is an existing elevated wooden boardwalk (length 1.5 miles) and an existing at-grade, paved promenade (length 1 mile). The project construction of the armored seawall requires the removal of both these features. Both will be relocated and functional equivalent facilities (relocation) will be reconstructed on the crest of the armored seawall. Relocations are 100% non-federal responsibility and creditable towards their 35% cost-share."

Figure E1 (enclosed) indicates the location of the boardwalk, promenade, pathway and recreation relocations.

Main Report, Page 7-32, replaces last paragraph of paragraph 332: "USACE and NPS mutually agreed that restoring seven acres of forested upland and wetland areas that are partially within Miller Field to include trails and interpretive features for the public will adequately offset for temporary construction impacts on the visitor experience at Miller Field. These ecological enhancements would be shared with the public through installation of a short wooden boardwalk over the forested wetland (minimizing impacts to the restored areas). These features would connect to the existing footpaths, which



would be maintained and upgraded to augment the visitor experience. Installation of interpretive signs, developed by the NPS, would further enrich visitor use and afford educational opportunities to the community and use as an outdoor classroom. Additional fencing would also be provided along the perimeter to limit illegal access and dumping of debris."

2. The following clarifies that no parking is permanently affect by project implementation.

Main Report, last sentence, paragraph 303: "The project does not reduce the current level of public access or parking. There are approximately 2,000 existing parking spaces in addition to street parking. The area is well served by public transit. Any impacts to parking during project construction will be temporary. No parking would be permanently affected by project implementation. "

3. The following clarifies the explanation and treatment of OMRR&R costs

Main Report, page 8-1, 2nd to last sentence, paragraph 368: "Major Rehab costs of \$115,000 as shown in Table 33 represent the cost for emergency repositioning of armor and bedding stone that may be displaced during storm events exceeding the project design and is therefore a non-Federal responsibility. The updated total cost for OMRR&R is \$679,000, which includes the original \$564,000 plus \$115,000 for Major Rehab."

Executive Summary ES-23 (2nd paragraph) and Executive Summary, page xv: OMRR&R total annual cost should read \$679,000.

4. The following details the 2 additional alignments alternatives within Miller Field that were previously only included in the EIS.

Main Report, following paragraph 288: "At Miller Field, two sub-alternatives to the NED Plan were developed in response to NPS concerns with the proposed NED alignment. The alignment of Sub-alternative 1 would be 70 feet landward (west) of Hangar 38. The alignment of Sub-alternative 2 would be through the east bay of Hangar 38 (seaward hangar). The outside façades and roof slabs of the east bay hangar would be removed to expose the structural framing and truss members. Sub-alternative 2 is intended to accommodate the buried seawall yet maintain some sense of the historic hangar (Moffatt and Nichol 2015)."

Main Report, following paragraph 328: "During consultation, the NPS identified the following concerns with the proposed NED Plan alignment at Miller Field: removal of the World War II era fire tower; impacts to character and setting of the Historic District; reduction in park user's viewshed and use of the beach; loss of beach habitat for birds and other biota. The potential impacts from construction of the NED plan and two subalternatives were analyzed in the EIS. The alignment of Sub-alternative 1 would avoid impacts to the fire tower, the existing dunes, and habitats supported by the existing dunes. However, this landward alignment could impact some recreational resources (ball fields and a trail) at Miller Field. The alignment of Sub-alternative 2 would be through the east bay of Hangar 38 (seaward hangar), and would also avoid impacts to the fire tower and existing dunes. Both sub-alternatives would leave the Historic District vulnerable to the effects of future storms. The NED plan would remove the fire tower and alter the setting but would provide protection of the Historic District."



5. The following is provided to clarify alternative impact evaluation:

EIS Section 2.4.2: "While alternatives FM1 and FM4 were economically justified, they did not address the Miller Field to Oakwood Beach portion of the project that experienced significant damages and loss of life during Hurricane Sandy. The outcome of the screening process was the identification of the four alternatives shown on Table 16 of the Main Report. Alternative 4, which provided the most net benefits. Prior to Hurricane Sandy, Alternative 4 was evaluated at four different still water design levels to establish the optimized NED Plan. Subsequent to Hurricane Sandy, the optimization process incorporated post-Hurricane Sandy analyses and design changes. Thus, Alternate 4 was identified as the NED plan that addresses the need for the CSRM Project.

In regards to being carried forward for more-detailed evaluation of potential impacts, Alternative 4 has essentially the same impacts as the other alternatives (#1- #3). Because additional evaluation of Alternatives 1, 2 and 3 would be redundant and unnecessary, only the recommended alternative (#4) was carried forward for comparison with the No Action Alternative."

6. The following is provided to update environmental compliance documentation.

Table E1 (enclosed) replaces Table 38 of the Main Report and Table 1-2 of the EIS.

EIS Section 1.8: "Table 1-2 presents the compliance status for the following environmental laws and executive orders: EFH/MSA (complete, letter received from NMFS 13 October 2015 stating no conservation recommendations required), FPPA (N/A, no prime or unique farmland located in the project area), FAA Memorandum Coordination (N/A, The closest airports to the study area that must comply with these standards are the John F. Kennedy International Airport, Queens County, New York and Newark International Airport, Newark, New Jersey. The natural features in the recommended alternative outside the limits of the 5-mile perimeter of both of these airports, thereby would not be expected to introduce hazardous wildlife attractants to each), and CWA 401 WQC (ongoing, pre-coordination meeting was held with New York State Department of Environmental Conservation (NYSDEC), Region 1 on January 14, 2016. NYSDEC Letter of Support, dated April 20, 2016 states that review of documentation did not identify any issues that would preclude the District being issued a CWQ 401 WQC after the Record of Decision (ROD) is signed and Plans and Specifications are being prepared)."

<u>EIS Section 4.4.2</u>: "The District received a letter from National Marine Fisheries Service on 13 October 2015 (presented in Final EIS Appendix G Project Correspondence) documenting completion of coordination. NMFS letter states that the only portion of the project may affect aquatic resources or EFH is the tidal wetland and the installation of the tide gates and slide gates. The work proposed in these areas will have a minimal impact to EFH, and the best management practices to minimize turbidity using turbidity curtains and other methods will further reduce the adverse effects. The proposed tidal wetland, by restoring and improving tidal exchange will outweigh the impacts created by the tide gates and slide gates, provided that the gates are operated in a manner that does not preclude tidal exchange and fish access. It will also restore and enhance EFH for a

number of federally managed species including summer flounder, bluefish and their prey species. As a result EFH conservation recommendations are not needed to minimize adverse effects to EFH."

<u>EIS Section 4.7</u>: "The Programmatic Agreement was finalized and signed by all parties on 25 August 2016."

EIS Section 4.11: "The letter of determination was received on 30 March 2016 and included in Appendix G."

EIS Section 3.12 deletes the following and adds into Section 4.1.2: "In the PED phase, a scope of work will be prepared to conduct specific testing for HTRW in the project area including the interior drainage areas and the line of protection. If it is determined, during sampling that HTRW contamination exists, the District will assess if the project can be realigned to avoid the contaminated site. In accordance with ER 1165-2-132, if the project alignment cannot be revised, the project's non-Federal sponsor would be responsible for the removal of any contaminants to allow the construction of the alignment. The non-federal sponsor will conduct, at 100% their expense, those remedial activities necessary to remove contaminated materials in accordance with ER 1165-2-132. USACE will continue to coordinate with all parties, including the State of New York, City of New York, NPS and various elected officials regarding remediation efforts at Great Kills Park."

EIS Section 4.1.3: "Federal Aviation Administration Airport Compatibility Analysis: Due to the increasing concern regarding aircraft-wildlife strikes, the Federal Aviation Administration (FAA) has implemented standards, practices, and recommendations for holders of Airport Operating Certificates issued under Title 14, CFR, Part 139, Certification of Airports, Subpart D (Part 139), to comply with the wildlife hazard management requirements of Part 139. Airports that have received Federal grant-in-aid assistance must use these standards.

In accordance with the FAA Advisory Circular 150/5200-33B and the Memorandum of Agreement with FAA to address aircraft-wildlife strikes, when considering proposed flood risk management measures and mitigation areas, USACE must take into account whether the proposed action could increase wildlife hazards. The FAA recommends minimum separation criteria for land-use practices that attract hazardous wildlife to the vicinity of airports. These criteria include land uses that cause movement of hazardous wildlife onto, into, or across the airport's approach or departure airspace or air operations area (AOA).

These separation criteria include:

- Perimeter A: For airports serving piston-powered aircraft, hazardous wildlife attractants must be 5,000 feet from the nearest AOA;
- Perimeter B: For airports serving turbine-powered aircraft, hazardous wildlife attractants must be 10,000 feet from the nearest AOA; and
- Perimeter C: Five-mile range to protect approach, departure, and circling airspace.

The closest airports to the study area that must comply with these standards are the John F. Kennedy International Airport, Queens County, New York and Newark International Airport, Newark, New Jersey. The natural features in the recommended alternative are outside the limits of the 5-mile perimeter of both of these airports, and therefore would

not be expected to introduce hazardous wildlife attractants to either. Therefore, coordination with the FAA is not required."

7. To provide a clear identification of the criteria of ecological monitoring success consistent with Section 2039a of WRDA 2007.

EIS Appendix J: Monitoring Plan:

- Successful establishment of each habitat type (low marsh, high marsh, mudflat, and
- upland forest/scrub-shrub, and tidal creek) relative to similar habitats in the region
- Vegetation should occur in proper zones (e.g., hydric species in wet sites) in all layers
- (tree, shrub, herbaceous) and have adequate characteristics compared to similar habitats in the region
- Water quality, general landscape, sinuosity, and water depth should be similar to natural tidal creeks occurring in the region

The criteria for success will be 85% cover in planted area, indicating a healthy wetland that would reach threshold for flood storage and drainage.

8. The following clarifies the necessity for lands, easements, right-of-ways, relocations and disposal (LERRD)

<u>Executive Summary, page xvi, insert table reference #6 for "LERR"</u> total: "The project does not include a requirement for disposal. There are no excavated material disposal requirements for the Project and such, no real estate interests required for excavated material disposal. Therefore, all pertinent references to lands, easements, right-of ways, relocations and disposal (LERRDs) all are presented as LERR."



Figure E1

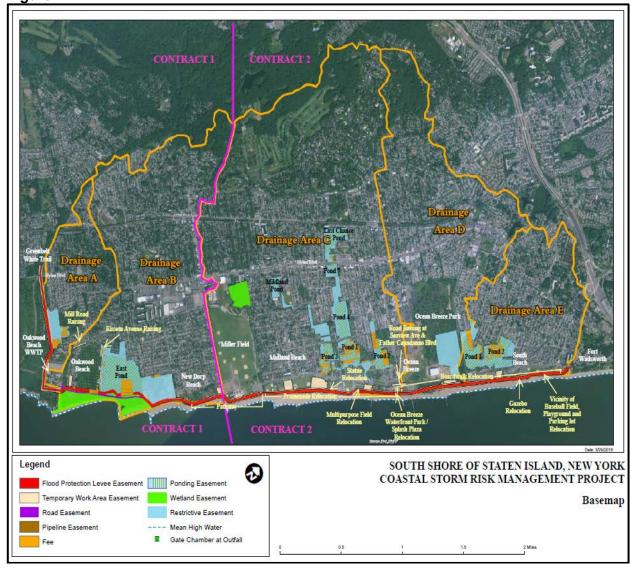


Table E1		
Federal Statutes	Compliance Status	Summary Determinations/Conclusions
Clean Air Act, as amended	In Compliance	Complete. A RONA based on de-minimums emissions was completed 12 Jun 2015
Clean Water Act of 1977, as amended	In Compliance	Ongoing. The New York District and the New York State Department of Environmental Conservation (NYSDEC), Region 1 held a CWQ 401 WQC pre-coordination meeting on January 14, 2016. NYSDEC, also the Project's non-Federal Sponsor, states in their Letter of Support, dated April 20, 2016 that review of documentation did not identify any issues that would preclude the District being issued a CWQ 401 WQC after the Record of Decision (ROD) is signed and Plans and Specifications are being prepared. Section 404(b)(1) Water Quality Evaluation completed (Appendix B of Final EIS)
Coastal Zone Management Act of 1972, as amended	In Compliance	Complete. NYD received a letter from NYSDOS on 30 March 2016 concurring with NYDs Consistency Determination.
Endangered Species Act of 1973, as amended	In Compliance	Complete. A 31 March 2016 letter from USFWS concludes the ESA Coordination. The Service concurs with NYDs determination that the proposed project may affect, but is not likely to adversely affect the Red Knot; with the implementation of best management practices. The Service acknowledges NYDs determination that the project will have no effect on the northern long-eared bat, due to the lack of known occurrence and lack of suitable habitat in the proposed project area.
Essential Fish Habitat/ Magnusson Stevens Act	In Compliance	Complete. A letter received from NMFS 13 October 2015 stating no conservation recommendations required.
Farmland Protection Policy of 1981	Not Applicable	N/A. No Prime or Unique farmland is located in the project area.
FAA Memorandum on Wildlife	Not Applicable	N/A The closest airports to the study area that must comply with these standards are the John F. Kennedy International Airport, Queens County, New York and Newark/Liberty International Airport, Newark, New Jersey. The natural features in the recommended alternative are outside the limits of the 5-mile perimeter of both of these airports, thereby would not be expected to introduce hazardous wildlife attractants to either airport.
Fish and Wildlife Coordination Act, as amended	In Compliance	Complete. A final Planning Aid Letter (PAL) was received on 15 Mar 2016 concluding coordination. The proposed action will not have significant adverse impacts on F&W resources in the project area.
Marine Mammal Protection Act of 1972, as amended	Not Applicable	N/A. Based on the District's October 2015 coordination with Daniel Marrone of NOAA Protective Resource Division and since there is no in-water work proposed and the construction is utilizing land-based



		equipment), ESA-listed species under NMFS jurisdiction will not be exposed to any effects of the proposed project. Therefore, no ESA Section 7 consultation is necessary.
National Historic Preservation Act of 1966, as amended	In Compliance	Complete. Unavoidable impacts to NRHP-eligible resources and need for additional survey addressed though PA executed 25 Aug 2016
National Environmental Policy Act of 1969, as amended	In Compliance	Ongoing. Draft EIS filed with EPA and published for public and agency review in June 2015. Final EIS, including comment-responses on Draft EIS, filed with EPA and published in September 2016. On 17 Oct 2016 The District received a letter from EPA of stating that the Final EIS addressed all of the EPA concerns. Publication of ROD will complete NEPA compliance activity.
Rivers and Harbors Appropriation Act of 1899, as amended	In Compliance	N/A. No Harbor or River Navigation or navigation feature is created, altered or affected by this project
Executive Orders, Memorandum, etc.		
Executive Order 11988, Floodplain Management	In Compliance	Addressed in EIS Section 4.2.4 <u>Tidal Influences and Floodplains</u>
Executive Order 11990, Protection of Wetlands	In Compliance	Addressed in EIS Section 4.3.2 Wetlands
Executive Order 12989, Environmental Justice in Minority and Low-Income Populations	In Compliance	Addressed in EIS Section 4.6.4 Environmental Justice and the Protection of Children
Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks	In Compliance	Addressed in EIS Section 4.6.4 Environmental Justice and the Protection of Children
Executive Order 11593, Cultural Resources	In Compliance	Addressed in EIS Section 4.7 <u>Cultural Resources</u>
2006 NPS Management Policies and Gateway National Recreation Area General Management Plan (NPS 2014)	In Compliance	Addressed in EIS Section 1.6 <u>Planning Objectives</u> .
State and Local Statutes and Requirements		
NYSDEC permits for activities in wetlands and adjacent areas as per Article 24 6NYCRR Part 663 Freshwater Wetlands	on-going/design phase	



Permits and Article 25 6NYCRR Part 661 Tidal Wetlands		
NYSDEC permits for activities within coastal erosion hazard area that is designated along the Lower Bay shoreline as per	on-going/design phase	
Article 34 6NYCRR Part 505 (variance under subsection 505.13)		
NYSDEC State Pollution Discharge Elimination System (SPDES) permits for surface water outlets and discharges in accordance with Article 17 6NYCRR Part 750-757	on-going/design phase	
NYSDEC permits for use of herbicides in and around wetlands (to control invasive plant species)	on-going/design phase	
Construction on NYSDEC property requires NYSDEC approval in accordance with all applicable regulations, including the granting of an easement for the use of State property	on-going/design phase	
Licenses and agreements with New York State Department of Transportation (NYSDOT) for activities that may impact state roadways	on-going/design phase	
Permits, licenses and agreements with NYCDPR for activities in City parkland including tree clearing	on-going/design phase	
NYC Planning Commission (NYCPC) authorizations for work in the Special South Richmond Development	on-going/design phase	

District and the Staten Island Special Natural Area District, as well as coastal zone consistency review		
Review by Staten Island Community Boards 2 and 3, the Staten Island Borough President, NYCPC, and the City Council for future street de-mappings and acquisition of easements as per the requirements of the Uniform Land Use Review Procedure (ULURP)	on-going/design phase	
New York City Department of Transportation (NYCDOT) approval for any City in-street work	on-going/design phase	
License agreements or other forms of approvals with private landowners for any temporary work on private lands and sewer easements for any permanent infrastructure that would be on private lands and also require maintenance access	on-going/design phase	