

**FEMA**  
**FINDING OF NO SIGNIFICANT IMPACT**  
**BAY PARK SEWAGE TREATMENT PLANT: HAZARD MITIGATION –**  
**FLOODWALL AND BERM CONSTRUCTION**  
**EAST ROCKAWAY, NASSAU COUNTY, NEW YORK**  
**FEMA-4085-DR-NY**

**BACKGROUND**

On October 29, 2012 Hurricane Sandy caused storm damage to several areas of Long Island New York including the Bay Park Sewage Treatment Plant (STP) in East Rockaway, Nassau County, New York. President Barack Obama declared Hurricane Sandy a major disaster on October 30, 2012. The declaration authorized federal public assistance to affected communities and certain non-profit organizations per Federal Emergency Management Agency (FEMA) 4085-DR-NY and in accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974 (42 U.S.S. 5172) as amended; the Sandy Recovery Improvement Act (SRIA) of 2013 and the accompanying Disaster Relief Appropriations Act, 2013. The Nassau County Department of Public Works (Subgrantee) has applied to FEMA for financial assistance with the construction of a berm and floodwall to serve as perimeter flood protection for the Bay Park Sewage Treatment Plant (STP). The Nassau County DPW owns, manages, finances, promotes, improves and expands the wastewater system of Nassau County. The New York State Division of Homeland Security and Emergency Services (NYSDHSES) is the Grantee partner for the proposed action.

As a result of Hurricane Sandy approximately 50 structures, numerous mechanical and electrical systems and operating equipment were damaged at the facility. The most significant impact of the flood damage resulted in raw sewage backing up into the neighboring residential community and the release of untreated and partially treated sewage into Hempstead Bay. The proposed berm and floodwall are part of a plant-wide design to not only restore plant facilities, but also incorporate storm damage risk reduction features to enhance the resiliency of the structure for the future. The hazard mitigation features proposed are cost eligible through FEMA's 406 hazard mitigation funding. The berm and floodwall will be constructed around the perimeter of the plant and together with floodgates and local stormwater pumping stations will protect critical plant infrastructure in the event of a future flooding event. This would greatly reduce the risk of plant loss of services and would protect the surrounding community wastewater overflows during these events.

The National Environmental Policy Act of 1969 (NEPA), the President's Council on Environmental Quality regulations implementing NEPA (40 CFR 1500 – 1508) and FEMA's implementing regulations at 44 Code of Federal Regulations (CFR) Part 10, require FEMA to review the environmental effects of the proposed action prior to making a funding decision. FEMA prepared an Environmental Assessment (EA) and a Final Environmental Assessment to analyze potential human and natural environmental impacts of the proposed action against a series of alternatives. FEMA used the NEPA evaluation capture in both documents to inform this Finding of No Significant Impact (FONSI).

**PROJECT DESCRIPTION**

The proposed flood mitigation alternative for the Bay Park Sewage Treatment Plant includes the construction of a combination earthen berm and concrete floodwall structure around the perimeter of the plant as the primary defense against flooding. The total length of the floodwall

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will be approximately 6,700 linear feet and the total length of the earthen berm will be approximately 1,800 linear feet. The concrete floodwall and earthen berm will have a top elevation of +17 feet North American Vertical Datum of 1988 (NAVD88), an elevation above the 500-year floodplain. The design elevation includes a safety factor (freeboard) of two (2) feet. The floodwall and berm on average would be approximately +10 feet in height above existing grade.

The barrier alignment will include two closure gates, on the north and south sides which will be closed and sealed during flooding events. Two new pumping stations will be installed to ensure stormwater would continue to flow off site during storm events. The floodwall will be constructed with 18 inch and 24 inch diameter auger cast piles, a vibratory slurry wall and footings. The vertical slurry wall will be installed per the Vibrated Beam Method. Marjorie Lane and the adjacent county park will be impacted during the construction of the earthen berm. The project includes realigning Marjorie Lane from its present location along the eastern bulkhead to along the perimeter of the floodwall and berm. Improvements to the park will include self-draining fields and reconfiguration of the park amenities.

**SUMMARY OF POTENTIAL IMPACTS AND MITIGATION**

The critical action is located within the 100-year floodplain. FEMA conducted an Eight-Step Decision-making process in accordance with Executive Order 11988 and 44 CFR Part 9 and determined that there are no practicable alternatives to relocate the facility outside the 500-year floodplain. The floodwall/berm will reduce risk of future flood damage, providing protection to above the 500-year floodplain elevation and minimizing future potential of service disruption and wastewater releases into the surrounding area. The relocation of Majorie Lane to an alignment further setback from water's edge would also reduce risk of flood damage to the transportation route. New and replacement recreational fields will be designed and constructed with subsurface drainage enhancements. The risks of federal investment in the floodplain are outweighed by the public benefits the project implementation would provide. The potential impact of the floodwall on the floodplain was modeled and it was determined that the project would not increase the water surface elevation of the base flood more than one foot at any point within the community. The design will also include stormwater drainage features along the berm to minimize risk of inducing flooding on neighboring properties. The Subgrantee will be responsible to coordinate the project with the local floodplain administrator.

The facility site is located in New York State defined coastal zone and the proposed action was subject to review in accordance with the Coastal Zone Management Act and New York State Coastal Zone Management Program and Policies. A Federal Coastal Zone Consistency Determination was submitted to the NYS Department of State (NYSDOS) on May 23, 2014 and NYSDOS provided concurrence on June 11, 2014. The proposed project was reviewed in accordance with the Clean Air Act. Based on the proposed emissions controls and proposed maximum annual operation of the standby power system, annual emissions for the proposed

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action will be in compliance with applicable NYS Department of Environmental Conservation (NYSDEC) and U.S. Environmental Protection Agency (EPA) requirements. The construction emissions were estimated to be below threshold levels.

The action will not adversely affect federally-listed or proposed threatened and endangered species or critical habitat. Small mammals and passerine birds may be displaced during construction; however, landscape restoration will restore habitat for wildlife found in the area. FEMA determined the proposed action would not have No Effect on Historic Properties; however, an archaeological study will be conducted as outlined in the Conditions section of this FONSI. Noise, dust and potential traffic disruptions associated with construction will be avoided and minimized to the extent practicable through adherence to work hours, adherence to noise ordinance/regulation and through use of best management practices during construction. Aesthetic impacts of the floodwall will be minimized with landscaping and aesthetic treatments to the floodwall such as concrete stamping, coloration or signage to minimize the visual impact of the structure. The park enhancements will provide recreational benefits to the community.

#### **PUBLIC INVOLVEMENT**

The public review and comment period for the EA was advertised in the *Newsday-Nassau County* newspaper on June 20, 2014, commencing an initial fifteen day public review and comment period. FEMA met with the U.S. Department of Housing and Urban Development (HUD) Region 2 and U.S. Environmental Protection Agency Region 2 during the initial public review and comment period and incorporated agency comments into the Final EA. EPA correspondence with comments is dated July 7, 2014 and is available upon request. A Final EA was released on July 15, 2014 and the public was notified of the final project notice via a legal notice in *Newsday-Nassau County* newspaper on the 15<sup>th</sup>. The fifteen day comment period for the final notice ended July 30, 2014. No comments were received to date in response to the Final EA or from the public during the initial comment period. The NEPA documents were made available at three local public repositories and on the web as follows: Lynbrook Village Public Library, East Rockaway Public Library, Hewlett-Woodmere Public Library and Nassau County's website: <http://www.nassaucountyny.gov/agencies/DPW/Wastewater.html>.

#### **PERMITS & PROJECT CONDITIONS**

The Subgrantee is responsible for obtaining all applicable Federal, State, and local permits and other authorizations for project implementation prior to construction and adherence to all permit conditions. Any substantive change to the approved scope of work will require re-evaluations by FEMA for compliance with NEPA and other laws and EOs. The Subgrantee must also adhere to the following conditions during project implementations and consider the below conservation recommendations. Failure to comply with grant conditions may jeopardize Federal funds:

- 1) The Best Available Data (BAD) must be used to determine the 500-year floodplain elevation for final engineering design in accordance with 44 CFR Part 9. At the time of this

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publication, the Flood Insurance Rate Map Community-Panel Number 36039C0158F dated May 16, 2008 is the BAD.

- 2) Any proposed construction in the floodplain must be coordinated with the local floodplain administrator and must comply with Federal, state and local floodplain laws and regulations.
- 3) Excavated soil and waste materials shall be managed and disposed of in accordance with applicable Federal, state, and local regulations.
- 4) The Subgrantee shall be responsible to comply with the [NYSDEC State Pollutant Discharge Elimination System \(SPDES\) permit](#) for Stormwater Discharge from Construction Activity or other applicable SPDES permit, in accordance with NYS Environmental Conservation Law. If the NYSDEC General Permit for Stormwater Discharges is determined to cover the proposed action, the Subgrantee shall provide NYSDHSES/FEMA a copy of the Stormwater Pollution Prevention Plan (SWPPP) and a copy of the Notice of Intent Form at grant project close-out or other time identified by NYSDHSES/FEMA Grant Programs Directorate per grant administrative documentation guidance requirements. If an individual SPDES permit is determined to be required, the Subgrantee shall provide a copy of the obtained permit, as well as supporting SWPPP to NYSDHSES/FEMA at grant project close-out or other time identified by NYSDHSES/FEMA Grant Program per grant administrative documentation guidance requirements.
- 5) In the event that unmarked graves, burials, human remains, or archaeological deposits are uncovered, the Subgrantee and its contractors will immediately halt construction activities in the vicinity of the discovery, secure the site, and take reasonable measures to avoid or minimize harm to the finds. The Subgrantee will inform the Grantee, NYSHPO and FEMA immediately. The Subgrantee must secure all archaeological findings and shall restrict access to the area. Work in sensitive areas may not resume until consultations are completed or until an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards determines the extent and historical significance of the discovery. Work may not resume at or around the delineated archaeological deposit until the Subgrantee is notified by the Grantee to proceed.
- 6) The Grantee and Subgrantee must obtain all site fill from a permitted commercial supplier or locally municipally owned soil/gravel borrow area permitted for mining/excavation as fill material. If the Grantee and/or Subgrantee plan to obtain soil or gravel from a non-commercial source or site that is not permitted, the details of the proposed source location must be submitted to FEMA for approval as a scope of work change prior to construction implementation. FEMA would need to conduct a federal agency environmental and historic preservation compliance review of non-permitted/non-commercial sources prior to construction implementation. The environmental concerns would be potential impacts to cultural resources or habitat areas at an excavation site not previously reviewed, permitted and otherwise cleared for use as a borrow area.
- 7) The Subgrantee shall submit copies of all obtained permits to the Grantee/FEMA at or prior to final closeout of the public assistance grant.
- 8) Occupational Safety and Health Administration (OSHA) standards shall be followed during construction to avoid adverse impacts to worker health and safety.

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- 9) The Subgrantee and its contractor are required to use best management practices for construction not limited to sedimentation and erosion control measures, dust control, noise abatement and restriction of work areas to limit vegetation removal and habitat impacts. The following website provides useful tools for stormwater management during construction: [www.dec.ny.gov/chemical/8468.html](http://www.dec.ny.gov/chemical/8468.html).
- 10) As mitigation for potential impacts to archaeological resources, an archaeological study synthesizing previous archaeological research and data on the intertidal estuarine marshes of the region will be conducted to better understand the potential for archaeological resources within the project area of potential effects (APE).
- 11) Subgrantee shall not initiate construction activities until fifteen (15) days after the date that the Finding of No Significant Impact (FONSI) has been signed as “APPROVED.”
- 12) It is recommended that the Subgrantee restore disturbed construction areas of the site with native seed and/or plant species to minimize soil erosion and sedimentation, as well as enhance environmental habitat quality of project site. It is recommended that disturbed soil areas be planted with native plant material, as soon as practicable after exposure, to avoid or minimize growth of undesired and potentially invasive plant species that can potentially take hold without competition of native plant materials. Local landscape plant nurseries and soil conservation offices can assist with identification of suitable native plants for site location type. The following websites may also be useful to identification of native plant material for the proposed project site.

- <http://plants.usda.gov/java/>
- [www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/plants/](http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/plants/)
- [www.fs.fed.us/wildflowers/nativeplantmaterials/rightmaterials.shtml](http://www.fs.fed.us/wildflowers/nativeplantmaterials/rightmaterials.shtml)

Landscape plans should also take into consideration appropriate buffers from floodwalls and berms. USACE guidance recommends a 15-foot vegetation free zone around floodwalls (w/exception to non-woody grasses/herbaceous materials). Refer to USAE Engineering Technical Letter 1110-2-571.

- 13) The proposed project area serves as potential summer roosting habitat for the Northern long-eared bat (*Myotis septentrionalis*), a proposed species for the federal threatened and endangered s list. Pursuant to section 7(a)(4) of the Endangered Species Act (ESA) and implementing regulations at 50 CFR §402.02 and 50CFR §402.10, FEMA has determined that the proposed action would not be likely to jeopardize the proposed species, or destroy or adversely modify proposed critical habitat. The Subgrantee is requested, as a conservation recommendation, to schedule the removal of trees that are greater than 3” diameter-at-breast-height during the following construction window: October 1<sup>st</sup> – March 31<sup>st</sup>. If the Northern long-eared bat is listed, and if project activities are expected to continue afterwards, this concurrence will serve to satisfy consultation requirements pursuant to Section 7 of the ESA, provided that: (1) the project scope and activities remain unchanged; (2) any proposed conservation recommendations are implemented as conservation measures; and (3) there are no other changes (e.g., to the landscape, habitat, etc.) that may affect the newly-listed species and that have not already been analyzed in this consultation. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available,

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this determination may be reconsidered. The most recent compilation of federally-listed and proposed endangered and threatened species in New York is available for your information. Until the proposed project is complete, the Grantee and Subgrantee are recommended to check the USFWS website every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed project is current. The [U.S. Fish & Wildlife Service \(USFWS\) New York Field Office website](#) provides general information about species. The Information, Planning and Conservation System IPaC [website](#) can be utilized for site specific information. The proposed species could be listed as endangered as early as April 2015, although it is to-be-determined. If the proposed construction action has not been initiated by April 2015 and the species is listed at that time, the Grantee/Subgrantee must contact FEMA to re-open project federal agency environmental compliance review and ESA consultation if the Grantee/Subgrantee cannot adhere to the tree removal window. If the tree window can be adhered to, the Grantee/Subgrantee will be in compliance with ESA. If the Grantee/Subgrantee has any questions concerning this conservation recommendation that is voluntary at this time but could become a conservation measure requirement, please feel free to contact FEMA Region 2 at 212.680.3600. Additional general information about the Northern long-eared bat is available at: [www.fws.gov/northeast/virginiafield/pdf/NLEBinterimGuidance6Jan2014.pdf](http://www.fws.gov/northeast/virginiafield/pdf/NLEBinterimGuidance6Jan2014.pdf) and <http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0JE> of the USFWS.

14) The Subgrantee is recommended to consider sustainable approaches for final design and for construction implementation. The Leadership and Energy and Environmental Design, New York State Energy Research and Development, the Energy Star program and EPA websites below are available for reference:

- [www.usgbc.org/leed/rating-systems/core-shell](http://www.usgbc.org/leed/rating-systems/core-shell)
- [www.nyserda.ny.gov/Energy-Efficiency-and-Renewable-Programs.aspx](http://www.nyserda.ny.gov/Energy-Efficiency-and-Renewable-Programs.aspx)
- [www.energystar.gov/index.cfm?c=pt\\_univ.eeps\\_sites\\_nyserda](http://www.energystar.gov/index.cfm?c=pt_univ.eeps_sites_nyserda)
- [www.epa.gov/retailindustry/energy/buildings/sustainability.html](http://www.epa.gov/retailindustry/energy/buildings/sustainability.html)

## **FINDINGS**

In accordance with NEPA and 44 CFR Part 10, FEMA has determined that the proposed action will have no significant adverse impact on the quality of the human environment. As a result of this Finding of No Significant Impact (FONSI), an Environmental Impact Statement will not be prepared, and the proposed project as described in the Final EA may proceed. This FONSI serves as the final public notice for the proposed project.

## **APPROVED:**

Megan Jadrosich, PMP, CFM  
FEMA Region II Regional Environmental Officer

July 31, 2014