

APPENDIX C  
AGENCY CORRESPONDENCE



FEMA

May 8, 2015

Mr. Christopher M. Dolphin  
Bureau of Coastal Regulation  
Department of Environmental Protection  
Division of Land Use Regulation  
P.O. Box 420  
Trenton, New Jersey 08625-0420

Subject: Coastal Zone Federal Consistency  
South Riverside Drive Outfall Valve and Bulkhead Project  
PDMC-PJ-02-NJ-2011-002  
Township of Neptune, Monmouth County, New Jersey

Dear Mr. Dolphin:

### **Introduction**

In compliance with the National Environmental Policy Act of 1969 (NEPA), the Federal Emergency Management Agency (FEMA) is preparing an Environmental Assessment (EA) for planned upgrades to the bulkhead and outfall valves along the Shark River in Neptune Township, Monmouth County, New Jersey (proposed project). The purpose of the proposed project is to provide storm risk management and flood relief to the low-lying residential areas along the Shark River that experience frequent flooding during storm surges. The Township has requested funding from FEMA's Hazard Mitigation Grant Program for this project.

The original bulkhead that protected the Shark River Hill neighborhood was constructed in the 1930s; it has since deteriorated almost completely and no longer provides even minimal protection from flooding. Sea water enters the existing storm drainage pipe outfalls, reducing the capacity of the storm drainage system to effectively drain water from the low-lying areas along South Riverside Drive from Milford Road south to Sylvan Drive, including side streets. Flooding in these areas occurs approximately two to three times per month, damaging roadways, homes, infrastructure, and utilities, and causing extended road closures and detours. The proposed project would minimize both the frequency and extent of flooding, providing protection to roadway infrastructure, utilities, and private properties.

### **Description of Project**

The project site consists of a 2,000-foot-long, 25- to 50-foot-wide strip of sandy, partially vegetated area between the edge of pavement of South Riverside Drive and the shallow open water areas of Shark River. The proposed project involves construction of a new bulkhead and installation of nine new outfall valves along South Riverside Drive. As depicted on the enclosed

Site Location Map, the new bulkhead would extend for approximately 2,000 linear feet parallel to the shoreline along South Riverside Drive. The new bulkhead would be located approximately 20 feet away from the edge of pavement and approximately 35 feet inland from the remnants of the 1930s bulkhead (see enclosed Concept Plan). The proposed bulkhead would be located approximately 20 feet from the edge of the road to ensure it is outside of the road right-of-way.

The new bulkhead would be comprised of a composite sheetpiles with a 12 to 16 inch header along the top, and a whaler on the waterward face with helical piles as needed for structural support. The composite material would be resistant to weather and water damage and be installed approximately at the mean high water line. No fill or riprap would be placed waterward of the new bulkhead. The top of the bulkhead would be at a height of approximately 10 feet above mean sea level (amsl) (for reference, the roadway of South Riverside Drive is at an elevation of 5 feet amsl). An elevated, cantilevered 6-foot-wide walkway and Americans with Disabilities Act-compliant access ramps would be constructed on the shoreward side of the bulkhead. The walkway does not require the use of pilings.

Along South Riverside Drive, the Township would repair and replace existing deteriorated drainage lines/outfall pipes and install nine duckbill-style check valves to prevent sea water from backflowing into the storm drainage system. The replacement drainage lines would terminate at the waterside of the new bulkhead with a tide flex valve extending through the bulkhead. Existing outfall pipes, which extend to the original bulkhead and many of which are in disrepair, would be removed. No scour protection is anticipated as the existing outfalls currently do not have scour protection.

Construction activities would remove all vegetation in the sandy, partially vegetated project site (about an acre of disturbance) located between the edge of South Riverside Drive and the proposed bulkhead.

The Township of Neptune introduced this project to State and Federal agencies in 2010-2011, with a proposed re-build of the existing bulkhead in its original location. FEMA and the Township evaluated other options such as a USFWS-suggested living shoreline design, but the Township determined that a living shoreline approach was not practicable to fulfill the project's purpose and need, and determined that the bulkhead is the only feasible solution to address the flooding in this area. However, through FEMA's Executive Order 11988-11990 Floodplain Management & Wetlands Protection alternative analysis, FEMA and the Township developed a design alternative to move the bulkhead further inland and avoid direct fill and permanent loss of the tidal fringe marsh in the project area. Additionally, through this process, FEMA and the Township would include the living shoreline approach suggested by the USFWS waterward of the new bulkhead, and would plant saltwater-tolerant species such as high tide bush (*Iva frutescens*) and salt meadow grass (*Spartina patens*) at appropriate elevations in the tidal area.

Please refer to the attached *Application for Federal Coastal Consistency Determination*. With implementation of avoidance measures and appropriate agency coordination, FEMA has determined that the proposed action is consistent with applicable NJDEP coastal policies. FEMA is seeking a general concurrence from NJDEP. Pursuant to 15 CFR 930.41, the NJDEP CMP has 60 days from receipt of this letter in which to concur with, or object to, FEMA's Federal Consistency Determination, or request an extension of 15 days for additional review. NJDEP CMP concurrence with this determination will be presumed if a response is not received within 60 days.

The Township of Neptune shall remain responsible for obtaining any necessary permits.

Please contact me at (212) 680-8802 or [Jonathan.Delaune@fema.dhs.gov](mailto:Jonathan.Delaune@fema.dhs.gov) if you have any questions or require additional information.

Sincerely,

Jonathan Zack DeLaune  
EHP Specialist

Attachments:  
Consistency Determination  
Figures  
Previous Consultations

cc: Barbara J. Smith, FEMA

**NJDEP Application for  
Federal Coastal Consistency Determination**

**South Riverside Drive Outfall Valve and Bulkhead Project  
PDMC-PJ-02-NJ-2011-005  
Township of Neptune, Monmouth County, New Jersey**

**May 2015**

# TABLE OF CONTENTS

<b>1.0 Project Background and Description</b> .....	<b>1</b>
1.1 Introduction.....	1
1.2 Project Description.....	1
1.3 Jurisdictional Areas and Permit Requirements.....	2
<b>2.0 Coastal Compliance Statement</b> .....	<b>3</b>
2.1 Applicability with Coastal Program Regulations .....	3
2.2 Compliance with Special Area Policies (Subchapter 3) .....	3
2.2.1 Special Water Areas.....	3
2.2.2 Special Water’s Edge Areas.....	4
2.2.3 Special Land Areas .....	6
2.2.4 Coastwide Special Areas.....	6
2.3 Compliance with Requirements of Subchapters 3A, 3B and 3C of the Coastal Zone Management Rules .....	7
2.3.1 Standards for Beach and Dune Activities (Subchapter 3A).....	7
2.3.2 Information Required in Wetland and Intertidal and Subtidal Shallows Mitigation Proposals (Subchapter 3B).....	7
2.3.3 Standards for Conducting and Reporting the Results of an Endangered or Threatened Wildlife or Plant Species Habitat Impact Assessment and/or Endangered or Threatened Wildlife Species Habitat Evaluation (Subchapter 3C) .....	8
2.4 Compliance with General Water Area Policies (Subchapter 4).....	8
2.5 Compliance with Requirements for Impervious Cover and Vegetative Cover for General Land Areas and Certain Special Areas (Subchapter 5) .....	9
2.6 General Location Rules (7:7E Subchapter 6) .....	10
2.6.1 Rule on Location of Linear Development (7:7E-6.1).....	10
2.6.2 Basic Location Policy (7:7E-6.2).....	10
2.6.3 Secondary Impacts (7:7E-6.3) .....	10
2.7 Use Rules (7:7E Subchapter 7).....	10
2.7.1 Coastal Engineering (7:7E-7.11) .....	11
2.8 Resource Rules (7:7E Subchapter 8) .....	11
<b>3.0 References</b> .....	<b>13</b>

## Appendices

Appendix A	Figures
	Figure 1
	Site Location Map

Figure 2      Concept Plan  
Figure 3      Wetlands Map  
Figure 4      FEMA Flood Zone Map

Appendix B    Agency Correspondence

## **1.0 PROJECT BACKGROUND AND DESCRIPTION**

### **1.1 Introduction**

In compliance with the National Environmental Policy Act of 1969 (NEPA), the Federal Emergency Management Agency (FEMA) is preparing an Environmental Assessment (EA) for planned upgrades to the bulkhead and outfall valves along the Shark River in Neptune Township, Monmouth County, New Jersey (proposed project). The purpose of the proposed project is to provide storm risk management and flood relief to the low-lying residential areas of the Shark River Hills neighborhood along the Shark River that experience frequent flooding during storm surges. The Township has requested funding from FEMA's Hazard Mitigation Grant Program for this project. Concurrent with and in support of NEPA compliance, FEMA is initiating agency coordination, including coordination with the New Jersey Department of Environmental Protection (NJDEP), regarding project consistency with the State coastal policies in accordance with the Coastal Zone Management Act. The remainder of this section describes the project and summarizes jurisdictional areas and permit requirements.

FEMA has determined that the project is consistent with applicable Coastal policies of the State of New Jersey and is requesting concurrence from NJDEP. Details on project compliance with applicable coastal policies are provided in Section 2.

### **1.2 Project Description**

The original bulkhead that protected the Shark River Hills neighborhood was constructed in the 1930s; it has since deteriorated almost completely and no longer provides even minimal protection from flooding. Sea water enters the existing storm drainage pipe outfalls, reducing the capacity of the storm drainage system to effectively drain water from the low-lying areas along South Riverside Drive, including side streets. Flooding in these areas occurs approximately two to three times per month, damaging roadways, homes, infrastructure, and utilities, and causing extended road closures and detours. The proposed project would minimize both the frequency and extent of flooding, providing protection to roadway infrastructure, utilities, and private properties.

The project site consists of a 25- to 50-foot-wide strip of sandy, partially vegetated area between the edge of pavement of South Riverside Drive and the shallow open water areas of the Shark River, as shown on Figure 1 in *Appendix A*. The proposed project involves construction of a new bulkhead and installation of nine new outfall valves along South Riverside Drive from Milford Road south to Sylvan Drive. As depicted on Figure 1 (*Appendix A*), the new bulkhead would extend for approximately 2,000 linear feet parallel to the shoreline. The new bulkhead would be located approximately 20 feet away from the edge of pavement, to ensure it is outside of the road right-of-way, and approximately 35 feet inland from the underwater remnants of the 1930s bulkhead (Figure 2, *Appendix A*).

The new bulkhead would be comprised of composite sheetpiles with a 12 to 16 inch header along the top, and a whaler on the waterward face with helical piles as needed for structural support.

The composite material would be resistant to weather and water damage and be installed approximately at the mean high water line. No fill or riprap would be placed waterward of the new bulkhead. The top of the bulkhead would be at a height of approximately 10 feet above mean sea level (amsl) (for reference, the roadway of South Riverside Drive is at an elevation of 5 feet amsl). The proposed bulkhead would tie into adjacent work previously completed by the Shark River Yacht Club and would complete the flood barrier along the river in the Shark River Hills neighborhood.

Along South Riverside Drive, the Township would repair and replace existing deteriorated drainage lines/outfall pipes and install nine duckbill-style check valves to prevent sea water from backflowing into the storm drainage system. The replacement drainage lines would terminate at the waterside of the new bulkhead, with a tide flex valve extending through the bulkhead. Existing outfall pipes, which extend to the original bulkhead and many of which are in disrepair, would be removed. No scour protection is anticipated as the existing outfalls currently do not have scour protection.

Construction activities would remove all vegetation in the sandy, partially vegetated project site (approximately one acre of disturbance) located between the edge of South Riverside Drive and the proposed bulkhead. An elevated, cantilevered, 6-foot-wide walkway and Americans with Disabilities Act (ADA)-compliant access ramps would be constructed on the shoreward side of the bulkhead. The walkway design does not require the use of pilings. Project features are illustrated on the Concept Plan included as Figure 2 (*Appendix A*).

The Township of Neptune introduced this project to State and Federal agencies in 2010-2011, with a proposed re-build of the existing bulkhead in its original location. However, the U.S. Fish and Wildlife Service (USFWS) raised concerns because the proposed bulkhead was located in the tidal area; accordingly, the Township redesigned the project to move the bulkhead landward to its current proposed location. The USFWS suggested a project approach that did not require a hardened shoreline, such as a "living shoreline" or sand renourishment. FEMA evaluated these options, but determined that the bulkhead is the only feasible solution to address the flooding in this area. The Township has incorporated the "living shoreline" concept waterward of the new bulkhead and would plant saltwater-tolerant species such as high tide bush (*Iva frutescens*) and salt meadow grass (*Spartina patens*) at appropriate elevations in the tidal area.

### **1.3 Jurisdictional Areas and Permit Requirements**

The proposed project is located within New Jersey's Coastal Zone, including within NJDEP mapped tidal wetlands, as shown on Figure 3 (*Appendix A*). The project is regulated under the Coastal Area Facilities Review Act (CAFRA) (N.J.S.A. 13:19-1 et seq.), the Waterfront Development Law (N.J.S.A. 12:5-3) and the Tidal Wetlands Act of 1970 (N.J.S.A. 13:9A). In accordance with these statutes, it is anticipated that individual coastal permits would be required from NJDEP Division of Land Use Regulation (DLUR) to authorize the project, as well as Clean Water Act (CWA) Section 401 Water Quality Certification. In addition, a CWA Section 404 permit would be required from the United States Army Corps of Engineers (USACE).

## **2.0 COASTAL COMPLIANCE STATEMENT**

### **2.1 Applicability with Coastal Program Regulations**

The project is required to comply with applicable conditions of the Coastal Permit Program Rules (N.J.A.C. 7:7) and the Rules on Coastal Zone Management (N.J.A.C. 7:7E). This section discusses policies that are applicable and not applicable to the project. For those policies that are believed to not be applicable, justification has been provided, if necessary. For those policies that are applicable, an explanation of the project's compliance with the coastal policy is provided.

### **2.2 Compliance with Special Area Policies (Subchapter 3)**

Special Areas are areas that are naturally valuable, important for human use, hazardous, sensitive to impact, or particular in their planning requirements as to merit focused attention and special management rules. The NJ Rules on Coastal Zone Management (N.J.A.C. 7:7E) identify forty-eight Special Areas in the following four categories: Special Water Areas (see N.J.A.C. 7:7E-3.2 through 3.15), Special Water's Edge Areas (see N.J.A.C. 7:7E-3.16 through 3.32), Special Land Areas (see N.J.A.C. 7:7E-3.33 through 3.35), and Coastwide Special Areas (see N.J.A.C. 7:7E-3.36 through 3.49) (NJDEP, 2015). Project compliance with applicable policies within each of these areas is addressed in the following sections.

#### **2.2.1 Special Water Areas**

The project will not impact any of the Special Water Areas listed below. All activities will be located approximately at and above the mean high water line. Special Water Areas that were evaluated and found not to be directly or indirectly affected by project construction include:

- Shellfish Habitat (7:7E-3.2)
- Surf Clam Areas (7:7E-3.3)
- Prime Fishing Areas (7:7E-3.4)
- Finfish migratory pathways (7:7E-3.5)
- Submerged Vegetation Habitat (7:7E-3.6)
- Navigation Channels (7:7E-3.7)
- Canals (7:7E-3.8)
- Inlets (7:7E-3.9)
- Marina Moorings (7:7E-3.10)
- Ports (7:7E-3.11)
- Submerged Infrastructure Routes (7:7E-3.12)
- Shipwrecks and Artificial Reef Habitats (7:7E-3.13)
- Wet Borrow Pits (7:7E-3.14)

For the following Special Water Area, additional explanation is provided to demonstrate project compliance.

### Intertidal and Subtidal Shallows (7:7E-3.15)

Applicable— The project will not impact subtidal shallows; minimal temporary disturbance to intertidal shallows will occur during new bulkhead construction and removal of existing outfall pipes. Because the new bulkhead will be located at the mean high water line, there will be no loss of intertidal shallows. The project is consistent with this policy.

### **2.2.2 Special Water's Edge Areas**

The project will not impact any of the Special Water's Edge Areas listed below.

- Dunes (7:7E-3.16)
- Overwash Areas (7:7E-3.17) Barrier Island Corridor (7:7E-3.20)
- Bay Islands (7:7E-3.21) Existing Lagoon Edges (7:7E-3.24)
- Note: 7:7E-3.29 and 3.30 are “reserved” and there are no policies to address.
- Coastal Bluffs (7:7E –3.31)
- Intermittent Stream Corridors (7:7E-3.32)

For the following Special Water's Edge Areas, additional explanation is provided to demonstrate project compliance.

### Coastal High Hazard Areas (7:7E-3.18)

Applicable— As depicted on the FEMA Flood Zone map (Figure 4, *Appendix A*), the flood elevations in the project area range from VE12 within the Shark River to AE11 along the shoreline to AE10 landward of South Riverside Drive (FEMA, 2015). “VE” designates a coastal high hazard area flood zone with a velocity hazard due to wave action. The limit of potential wave action extends to the proposed bulkhead location. Please refer below to Flood Hazard Areas (7:7E-3.25) for more information. The project will be designed in accordance with coastal engineering standards to withstand wave forces and will be consistent with this policy.

### Erosion Hazard Area (7:7E-3.19)

Applicable— The project site is located in an Erosion Hazard Area. The site has been highly susceptible to erosion in the past (i.e. original 1930s bulkhead that protected the Shark River Hills neighborhood has since deteriorated almost completely), and with continued exposure from the absence of dunes and bulkhead structures, narrow beach, and exposed shoreline, the project site remains at risk for continued damages due to erosion and wind. The bulkhead design is consistent with other similar structures in the area. No scour protection is anticipated as the existing outfalls currently do not have scour protection. Please refer below to Flood Hazard Areas (7:7E-3.25) for more information. The project will be designed in accordance with coastal engineering standards to withstand wave forces and will be consistent with this policy.

### Beaches (7:7E-3.22)

Applicable— The project site is a narrow strip, approximately 25- to 50- feet wide, of sandy, partially vegetated shoreline, between the edge of pavement of South Riverside Drive and the shallow, open, tidal waters of the Shark River. Project impacts to this narrow beach will be minimized to the extent practicable, in accordance with and consistent with this coastal policy.

### Filled Water's Edges (7:7E-3.23)

Applicable— The project is located along the shore of a Filled Water's Edge adjacent to the Shark River. The proposed bulkhead is a “water-dependent” use, as construction of the bulkhead in another location would not accomplish the project objective. With incorporation of the pedestrian walkway, which facilitates public access to the waterfront, the project is consistent with this policy.

### Flood Hazard Areas (7:7E-3.25)

Applicable— The project is located within the Special Flood Hazard Area subject to inundation by the 1 percent annual chance flood event, commonly referred to as the 100-year floodplain, according to the FIRM for this area (Community Panel Number 34025C0341F and 4025C0333F (effective on 09/25/2009, revised Preliminary 01/31/2014). As depicted on the FEMA Flood Zone map (Figure 4, *Appendix A*), the flood elevations in the project area range from VE12 within Shark River to AE11 along the shoreline to AE10 landward of South Riverside Drive (FEMA, 2015). “VE” designates a coastal flood zones with a velocity hazard due to wave action. “AE” designates a 1 percent annual chance of flooding for which the flood elevation has been determined. The limit of potential wave action extends to the proposed bulkhead location. The proposed new bulkhead and outfall valves would be constructed to withstand up to the 500-year flood event. The bulkhead top would be at an elevation of approximately 10 feet amsl, which provides protection against the 100-year storm event. The Proposed Action would reduce risk of future flood damage to residential properties and provide protection to infrastructure and utilities. The Proposed Action would not increase the frequency or depth of inundation to properties upstream or downstream of the project area and would be consistent with floodplain management regulations.

### Riparian Zone (7:7E-3.26)

Applicable— The proposed project is within the riparian zone of the Shark River. The area is underlain by the Kirkwood geologic formation, which is identified by the NJDEP as potentially containing substantial acid-producing deposits (NJDEP, 2008). Based on the potential presence of acid producing soils, a 150-foot wide riparian zone is anticipated, in accordance with the NJ Flood Hazard Area Control Act Rules (NJ FHACA Rules; N.J.A.C. 7:13-4.1(c). Although located in an area with potential for acid-producing soils, the proposed project does not involve any excavation other than minor grading of surface soils. Therefore, no buried acid-producing deposits would be exposed and no impacts to acid-producing soils would occur. Much of the riparian zone is not vegetated, consisting of existing roads and bare land. Upon final design, the project will comply with the limits for disturbance to riparian zone vegetation or, if not feasible, a hardship waiver will be requested from NJDEP during the Land Use Permit application process. Mitigation for riparian zone disturbance in excess of the allowable limit will be conducted; revegetation along the water side of the bulkhead with suitable vegetation is proposed. The project will comply with applicable requirements of the NJ FHACA Rules and will be consistent with this coastal policy.

### Wetlands (7:7E-3.27)

Applicable— There are no state-regulated freshwater wetlands in the project site (NJDEP, 2013). As shown on Figure 3 (*Appendix A*), there are tidal wetlands in the project area; the upper

wetland boundary (UWB) line, which indicates the limit of tidal wetlands as mapped by NJDEP and regulated under the NJ Tidal Wetlands Act of 1970 (N.J.S.A. 13:9), is along the shoreline of the Shark River at the proposed bulkhead location (NJDEP, 2013). Tidal wetlands and open waters would also be regulated by USACE under Section 404 of the CWA. During the Land Use permitting phase, necessary permits to authorize project construction will be obtained by the municipality. A compensatory mitigation plan would be developed for any unavoidable wetland impacts; accordingly, the project is consistent with this coastal policy.

#### Wetland Buffers (7:7E-3.28)

Potentially Applicable— Although wetland buffers may be assigned to tidal wetlands, this is done on a case by case basis. Considering that the uplands adjoining the tidal wetland boundary consist predominantly of a paved public road adjacent to a residential community with maintained lawns, the area does not provide much in the way of a functional wetland buffer. There are no freshwater wetland transition areas in the project area. Because the project would not impact wetland buffers, it is consistent with this policy.

### **2.2.3 Special Land Areas**

None of the Special Land Areas listed below are located in the project area:

- Farmland Conservation Areas (7:7E-3.33)
- Steep Slopes (7:7E-3.34)
- Dry Borrow Pits (7:7E-3.35)

### **2.2.4 Coastwide Special Areas**

The project will not impact any of the coastwide Special Areas listed below.

- Historic and Archaeological Resources (7:7E-3.36)
- Specimen Trees (7:7E-3.37)
- Critical Wildlife Habitat (7:7E-3.39)
- Public Open Space (7:7E-3.40)
- Special Hazard Areas (7:7E-3.41)
- Excluded Federal Lands (7:7E-3.42)
- Special Urban Areas (7:7E-3.43)
- Pinelands National Preserve and Pinelands Protection Area (7:7E-3.44)
- Hackensack Meadowlands District (7:7E-3.45)
- Wild and Scenic Rivers Corridor (7:7E-3.46)
- Geodetic Control Reference Marks (7:7E-3.47)
- Hudson River Waterfront Area (7:7E-3.48)
- Atlantic City (7:7E-3.49)

For the following coastwide Special Areas, additional explanation is provided to demonstrate project compliance.

### Endangered or Threatened Wildlife or Plant Species Habitat (7:7E-3.38)

Applicable— Potential habitat for threatened or endangered wildlife or vegetation species habitat has been identified in the vicinity. However, as described below, the project will not destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species; nor will it jeopardize the continued existence of local populations of a threatened or endangered species.

The enclosed letter from NJDEP NHP (*Appendix B*) states that the great blue heron (*Ardea herodias*), a State species of special concern, occurs on the project site and the State endangered least tern (*Sterna antillarum*) and State threatened osprey (*Pandion haliaetus*) occur within a quarter mile of the project site. A letter from USFWS (*Appendix B*) states “No federally listed or proposed threatened and endangered flora or fauna (terrestrial species only) are known to occur within the vicinity of the project site.”

As part of the EA process, and because the project has been redesigned since consultation was initiated in 2010-2011 (see enclosed letters in *Appendix B*), FEMA is updating coordination with USFWS, National Marine Fisheries Service (NMFS), and the NJDEP NHP; however, FEMA does not anticipate a change in the findings. Based on those prior consultations, it is unlikely that Federal or State-listed species or designated critical habitats occur on the project site. Therefore, no impacts to any Federal or State-listed species or critical habitats are anticipated as a result of the proposed project and the project is consistent with this policy.

### Lands and Waters Subject to Public Trust Rights (7:7E-3.50)

Applicable— The project site is located along the shore of a tidal waterway. The proposed bulkhead design includes a public access pedestrian walkway (see Figure 2, *Appendix A*). The walkway would be accessed by stairs and an ADA-compliant ramp and would provide views of the Shark River. Due to this provision for public access to the shoreline, the proposed project is consistent with this coastal policy.

## **2.3 Compliance with Requirements of Subchapters 3A, 3B and 3C of the Coastal Zone Management Rules**

### **2.3.1 Standards for Beach and Dune Activities (Subchapter 3A)**

None of the policies in Subchapter 3A are applicable to the project. The project scope does not include the maintenance or creation of beaches or dunes.

### **2.3.2 Information Required in Wetland and Intertidal and Subtidal Shallows Mitigation Proposals (Subchapter 3B)**

The project will avoid and minimize impacts to wetland and intertidal shallows to the extent practicable. There will be no impact to subtidal shallows. Mitigation for unavoidable impacts to wetlands and intertidal shallows will be conducted as necessary to comply with coastal polices and permit requirements. A comprehensive mitigation plan, consistent with the requirements of Subchapter 3B, will be developed concurrent with the design phase of the project and will be

submitted by the Township of Neptune to NJDEP as part of the coastal permit application. The project will be consistent with this coastal policy.

### **2.3.3 Standards for Conducting and Reporting the Results of an Endangered or Threatened Wildlife or Plant Species Habitat Impact Assessment and/or Endangered or Threatened Wildlife Species Habitat Evaluation (Subchapter 3C)**

Refer to the discussion in Section 2.2.4 Coastwide Special Areas related to Endangered or Threatened Wildlife or Plant Species Habitat (7:7E-3.38). Because no species or habitats will be affected by the Proposed Action, a habitat impact assessment or species evaluation are not applicable for this proposed project.

## **2.4 Compliance with General Water Area Policies (Subchapter 4)**

The project will not impact any of the General Water Areas listed below:

- Shellfish aquaculture (7:7E-4.2)
- Boat Ramps (7:7E-4.3)
- Docks and piers for cargo and commercial fisheries (7:7E-4.4)
- Recreational docks and piers (7:7E-4.5)
- Maintenance dredging (7:7E-4.6)
- New dredging (7:7E-4.7)
- Dredged material disposal (7:7E-4.8)
- Solid waste or sludge dumping (7:7E-4.9)
- Mooring (7:7E-4.11)
- Sand and gravel mining (7:7E-4.12)
- Bridges (7:7E-4.13)
- Submerged pipelines (7:7E-4.14)
- Overhead transmission lines (7:7E-4.15)
- Dams and impoundments (7:7E-4.16)
- Realignment of water areas (7:7E-4.18)
- Vertical wake or wave attenuation structures (7:7E-4.19)
- Submerged cables (7:7E-4.20)
- Artificial reefs (7:7E-4.21)
- Miscellaneous uses (7:7E-4.22)

For the following General Water Area policies, additional explanation is provided to demonstrate project compliance.

#### Filling (7:7E-4.10)

Not Applicable— No use of fill material is proposed; the project is consistent with this policy.

### Outfalls and Intakes (7:7E-4.17)

Applicable— Nine stormwater outfalls are proposed; most are replacement of existing deteriorated outfalls. The proposed outfalls will include tide flex valves; seven will be located within the bulkhead, two will be located along the shoreline east and north of the new bulkhead, as shown on the Concept Plan (Figure 2). In-water portions of the existing outfall pipes will be removed. Because there is no change from existing conditions in the stormwater conveyance from adjoining residential areas, the project is consistent with this coastal policy.

### Living Shorelines (7:7E-4.23)

Applicable— The project would use a “Living Shorelines” concept of shoreline stabilization in conjunction with the bulkhead. The Living Shorelines stabilization effort would consist of planting saltwater tolerant species at suitable elevations waterward of the bulkhead, which is a method promoted by the NJDEP DLUR. The plantings will likely consist of high tide bush (*Iva frutescens*) and salt meadow chordgrass (*Spartina patens*).

## **2.5 Compliance with Requirements for Impervious Cover and Vegetative Cover for General Land Areas and Certain Special Areas (Subchapter 5)**

Subchapters 5A and 5B detail impervious cover and vegetative cover percentages in the upland waterfront development area, and provide the details for determining requirements of Subchapter 5. The project is not “development” per se, but consists of bulkhead construction to provide flood risk management to an existing residential community. New impervious cover consists of the new bulkhead only; no additional areas of impervious cover are proposed. As described in the following paragraph, vegetation disturbance will be temporary and where feasible, vegetation will be re-established. Vegetation disturbance will be minimized to the extent practicable. Accordingly, the project is consistent with to the extent practicable with the policies detailed in Subchapter 5.

Under the Proposed Action, most of the vegetation between the edge of South Riverside Drive and the proposed bulkhead would be removed prior to or damaged during construction. Following construction, the disturbed area between the new bulkhead and edge of pavement would be re-vegetated with a mix of native herbaceous and shrub species similar to the existing vegetation, such as panic grass, seaside goldenrod, groundsel tree, and northern bayberry. Additionally, as part of a “Living Shorelines” concept of shoreline stabilization, saltwater tolerant species would be planted at appropriate elevations waterward of the bulkhead, which is a method promoted by the NJDEP DLUR. The plantings would likely consist of high tide bush (*Iva frutescens*) and salt meadow grass. The Proposed Action would result in minor, temporary impacts to vegetation from construction and long-term beneficial impacts on vegetation from implementation of the Living Shorelines plantings.

## **2.6 General Location Rules (7:7E Subchapter 6)**

### **2.6.1 Rule on Location of Linear Development (7:7E-6.1)**

Not Applicable— “Linear development” refers to a development with the basic function of connecting two points, such as a road, drive, public walkway, railroad, sewerage pipe, stormwater management pipe, gas pipeline, water pipeline, or electric, telephone or other transmission lines.” This project is not linear development; therefore, coastal policies related to such are not applicable.

### **2.6.2 Basic Location Policy (7:7E-6.2)**

There is no alternative location available for the project as the basic purpose of the project is to provide flood risk mitigation to the adjoining community.

### **2.6.3 Secondary Impacts (7:7E-6.3)**

Not Applicable— The project will not result in the types of secondary impacts described in this policy.

## **2.7 Use Rules (7:7E Subchapter 7)**

The purpose of this Subchapter is to ensure the proposed construction is consistent with the use rules and conditions. The proposed project will not alter the existing land use; therefore, most of the rules within Subchapter 7 are not applicable, including the following:

- Housing use rules (7:7E-7.2)
- Resort/recreational use (7:7E-7.3)
- Marina development (7:7E-7.3A)
- Energy facility use rule (7:7E-7.4)
- Transportation use rule (7:7E-7.5)
- Public facility use rule (7:7E-7.6)
- Industry use rule (7:7E-7.7)
- Mining use rule (7:7E-7.8)
- Port use rule (7:7E-7.9)
- Commercial facility use rule (7:7E-7.10)
- Dredge material placement on land (7:7E-7.12)
- National defense facilities use rule (7:7E-7.13)
- High rise structures (7:7E-7.14)

Policies related to the coastal engineering use rule are the only applicable components of this subchapter for the proposed project.

### **2.7.1 Coastal Engineering (7:7E-7.11)**

Applicable— The proposed project includes a combination of hard structure (bulkhead) and living shoreline (vegetation plantings waterward of the bulkhead). The project will be designed to withstand wave runup forces in accordance with relevant coastal engineering design standards and policies of this section. The bulkhead is essential to mitigate flood risk to adjoining residential communities. It incorporates public access to the waterfront, minimizes impacts to the shoreline and estuarine resources to the extent feasible and is consistent with this policy.

## **2.8 Resource Rules (7:7E Subchapter 8)**

The purpose of this Subchapter is to analyze the proposed project in terms of its potential effects on various resources in the coastal zone, including the project site and surrounding area. As described in previous sections, no impacts outside of those discussed will be caused by the proposed project.

The proposed bulkhead project will not impact any of the coastal resources listed below.

- Marine Fish and Fisheries (7:7E-8.2)
- Note 7:7E-8.3 is reserved
- Surface Water Use (7:7E-8.5)
- Groundwater Use (7:7E-8.6)
- Stormwater Management (7:7E-8.7)
- Air Quality (7:7E-8.10)
- Scenic Resources and Design (7:7E-8.12)
- Buffers and Compatibility (7:7E-8.13)
- Traffic (7:7E-8.14)
- Subsurface Sewage Disposal Systems (7:7E-8.21)

For the following coastal resources, additional explanation is provided to demonstrate project compliance with coastal policies.

### Water Quality (7:7E-8.4)

Applicable— Construction of the new bulkhead would cause temporary adverse minor impacts to water quality in the Shark River from localized increases in turbidity during construction. Best Management Practices would be implemented to minimize impacts, including soil erosion controls standards established by the State of New Jersey and enforced by the Freehold Soil Conservation District. There would be no long term or permanent impacts to water quality. A CWA Section 401 Water Quality Certificate would be obtained from the NJDEP DLUR, in conjunction with other land use permits, prior to project construction. All work would be conducted in accordance with permit conditions. The project will be consistent with this coastal policy.

### Vegetation (7:7E-8.8)

Applicable— Under the Proposed Action, most of the vegetation in the project area would be disturbed during construction of the bulkhead. The area to be disturbed is an approximately 20

foot wide by 2,000 foot long strip of land between the edge of pavement of South Riverside Drive and the proposed location of the bulkhead.

The majority of this sandy strip is above the mean high tide line and consists of herbaceous and shrub species that are typical in the uplands adjacent to the aquatic habitats in the back bay areas of New Jersey. Vegetation in the lower elevations of the project site regularly inundated by the tide include species typical of salt marsh habitats such as smooth cordgrass (*Spartina alterniflora*) and salt meadow grass; the higher elevations not regularly inundated by the tide contain groundsel tree (*Baccharis halimifolia*), northern bayberry (*Morella pensylvanica*), seaside goldenrod (*Solidago sempervirens*), switch grass (*Panicum virgatum*), mugwort (*Artemisia vulgaris*), common reed (*Phragmites australis*), and a few small eastern red-cedar (*Juniperus virginiana*).

The habitat that would be disturbed is not considered a rare or unique habitat type. Following construction, the disturbed areas between the new bulkhead and edge of pavement will be re-vegetated with a mix of native herbaceous and shrub species similar to what is present currently, such as panic grass, seaside goldenrod, groundsel tree and northern bayberry. The proposed action would result in a minor, temporary impact to vegetation.

#### Public Access to the Waterfront (7:7E-8.11)

Applicable— The project site is located along a public road adjacent to a residential area. The proposed bulkhead design includes a public pedestrian walkway, which will have both stairs and an ADA-compliant ramp for access. This project feature would provide views of the Shark River. Accordingly, the project is consistent with this coastal policy.

#### Solid and Hazardous Waste (7:7E-8.22)

Applicable— The deteriorated outfall pipes, and any other construction debris, would be disposed of in accordance with all applicable State and Federal regulations, standards and guidelines for the handling and disposal of solid wastes, including the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., the Solid Waste Management rules, N.J.A.C. 7:26, and the Recycling rules, N.J.A.C. 7:26A. Hazardous waste would not be generated by the project. The project is consistent with this coastal policy.

### 3.0 REFERENCES

- Federal Emergency Management Agency (FEMA). 2015. Preliminary Flood Insurance Rate Map, Monmouth County, New Jersey. Panel number 34025C0341F and 4025C0333F (effective on 09/25/2009). Accessed March 20, 2015. Available at: <https://hazards.fema.gov/femaportal/prelimdownload/prelim/ProductsDownloadServlet?pfiProdId=30567>.
- NJDEP. February 2, 2015 (last amended). Coastal Permit Program Rules (N.J.A.C. 7:7). N.J.S.A. 13:19-1 et seq.; 12:3-1 et seq., 12:5-3; 13:9A-1 et seq. [http://www.nj.gov/dep/rules/rules/njac7\\_7.pdf](http://www.nj.gov/dep/rules/rules/njac7_7.pdf). Accessed April 1, 2015.
- NJDEP. (2013).NJ-GeoWeb. <http://njwebmap.state.nj.us/NJGeoWeb/WebPages/Map/MapView.aspx?THEME=Surf&UH=True&RIDZ=635380981065425666>. Accessed March 20, 2015.
- NJDEP. July 15, 2013 (last amended). Rules on Coastal Zone Management (N.J.A.C. 7:7E). N.J.S.A. 13:19-1 et seq.; 12:3-1 et seq., 12:5-3; 13:9A-1 et seq. [http://www.nj.gov/dep/rules/rules/njac7\\_7e.pdf](http://www.nj.gov/dep/rules/rules/njac7_7e.pdf). Accessed April 1, 2015.
- NJDEP (New Jersey Department of Environmental Protection), 2008. Draft Technical Manual: Flood Hazard Area Control Act Rules N.J.AC. 7:13. Division of Land Use Regulation. December.

Path: Q:\Environmental\FEMA-Neptune\_EAMaps\Figures\Site.mxd



### Legend

-  Outfall (Proposed Tideflex Location)
-  Proposed Bulkhead Location
-  Staging Areas
-  Project Area

Site Location Map  
South Riverside Drive Outfall and Bulkhead Project  
Neptune, NJ

Source:  
New Jersey 2013 High Resolution  
Orthophotography, Web Map  
Service (WMS), NJIT, OGIS,  
<http://njwebmap.state.nj.us/njimagery>, 2013

Figure 1



Path: Q:\Environmental\FEMA-Neptune\_EAMaps\Figures\Wetlands.mxd



**Legend**

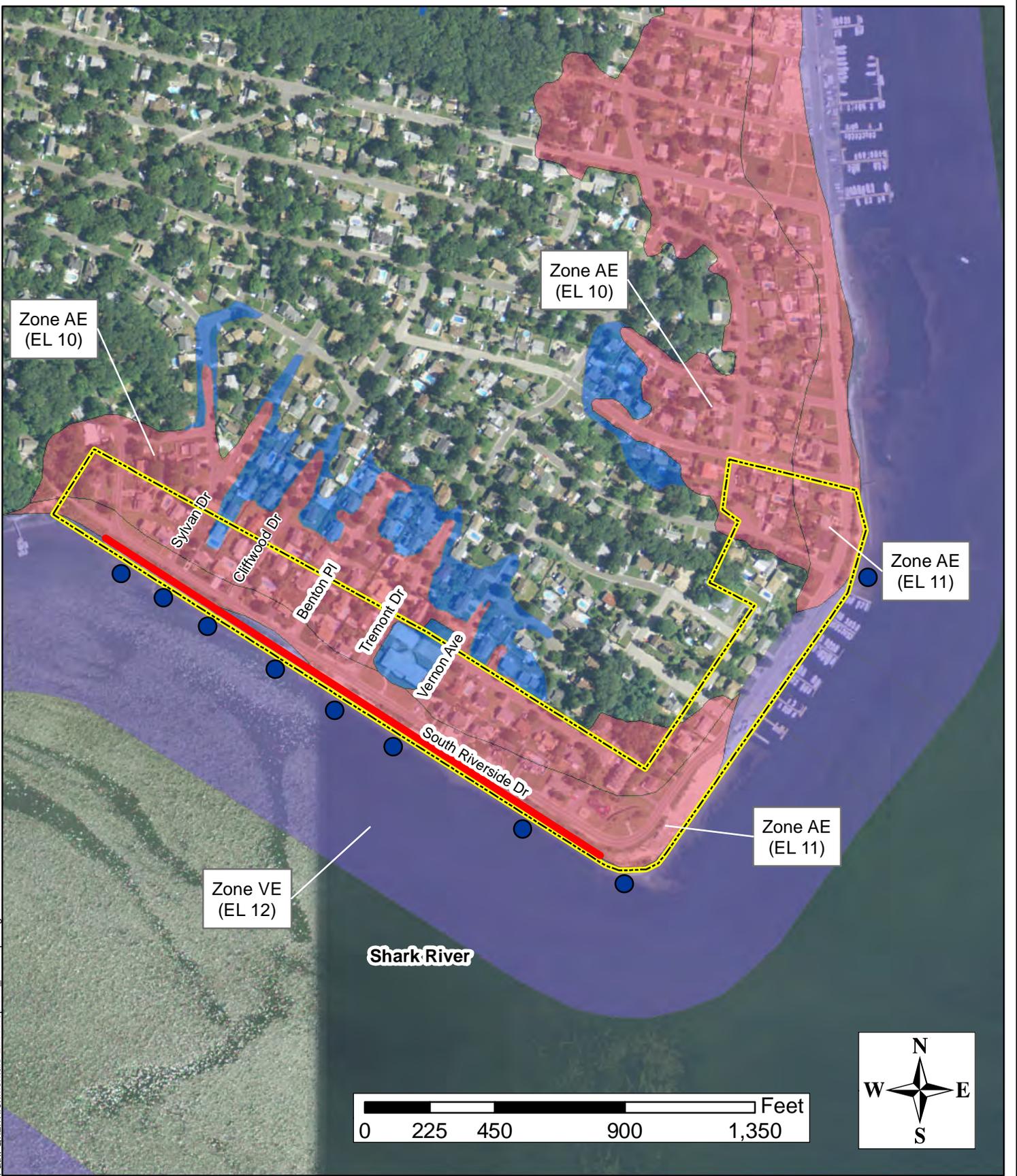
- Outfall (Proposed Tideflex Location)
- Proposed Bulkhead Location
- Estuarine and Marine Deepwater
- Project Area
- Upper Wetland Boundary
- Tidelands Claim Area

**NWI Wetlands Map**  
**South Riverside Drive Outfall and Bulkhead Project**  
**Neptune, NJ**

Source:  
 NJDEP Upper Wetlands Boundary/Upper Wetlands  
 Limit for New Jersey;  
 US Fish and Wildlife 2007 CONUS\_wet\_poly;  
 New Jersey 2013 High Resolution  
 Orthophotography, Web Map  
 Service (WMS), NJIT, OGIS,  
<http://njwebmap.state.nj.us/njimager>, 2013

**Figure 3**

Path: Q:\Environmental\FEMA-Neptune\_EAMaps\Figures\FEMA.mxd



**Legend**

- Outfall (Proposed Tideflex Location)
- Proposed Bulkhead Location
- Project Area
- 0.2% Annual Chance Flood Hazard
- 1% Annual Chance Flood Hazard
- Zone VE

**FEMA Flood Map**  
**South Riverside Drive Outfall and Bulkhead Project**  
**Neptune, NJ**

Source:  
 FEMA DFIRM Preliminary Mapping Data  
 Vertical Datum NAVD88, January 2015  
 New Jersey 2013 High Resolution  
 Orthophotography, Web Map  
 Service (WMS), NJIT, OGIS,  
<http://njwebmap.state.nj.us/njimager>, 2013

Figure 4



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Parks and Forestry
Office of Natural Lands Management
Natural Heritage Program
P.O. Box 404
Trenton, NJ 08625-0404
Tel. #609-984-1339
Fax. #609-984-1427

CHRIS CHRISTIE
Governor

BOB MARTIN
Commissioner

KIM GUADAGNO
Lt. Governor

August 3, 2010

Leanne R. Hoffmann, PE, PP, CME
Township of Neptune
25 Neptune Boulevard
Neptune, NJ 07753

Re: Shark River - South Riverside Area

Dear Ms. Hoffmann:

Thank you for your data request regarding rare species information for the above referenced project site in Neptune Township, Monmouth County.

Searches of the Natural Heritage Database and the Landscape Project (Version 3 for the highlands region, Version 2.1 elsewhere) are based on a representation of the boundaries of your project site in our Geographic Information System (GIS). We make every effort to accurately transfer your project bounds from the topographic map(s) submitted with the Request for Data into our Geographic Information System. We do not typically verify that your project bounds are accurate, or check them against other sources.

We have checked the Natural Heritage Database and the Landscape Project habitat mapping for occurrences of any rare wildlife species or wildlife habitat on the referenced site. Please see Table 1 for species list and conservation status.

Table 1 (on referenced site).

Table with 6 columns: Common Name, Scientific Name, Federal Status, State Status, Grank, Srank. Row 1: great blue heron, Ardea herodias, SC/S, G5, S3B,S4N

We have also checked the Natural Heritage Database and the Landscape Project habitat mapping for occurrences of any rare wildlife species or wildlife habitat within 1/4 mile of the referenced site. Please see Table 2 for species list and conservation status. This table excludes any species listed in Table 1.

Table 2 (additional species within 1/4 mile of referenced site).

Table with 6 columns: Common Name, Scientific Name, Federal Status, State Status, Grank, Srank. Row 1: least tern, Sterna antillarum, E, G4, S1B,S1N. Row 2: osprey, Pandion haliaetus, T/T, G5, S2B

We have also checked the Natural Heritage Database for occurrences of rare plant species or ecological communities. The Natural Heritage Database does not have any records for rare plants or ecological communities on or within 1/4 mile of the site.

A list of rare plant species and ecological communities that have been documented from Monmouth County can be downloaded from http://www.state.nj.us/dep/parksandforests/natural/heritage/countylist.html. If suitable habitat is present at the project site, the species in that list have potential to be present.

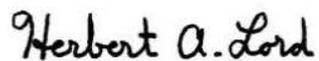
Status and rank codes used in the tables and lists are defined in EXPLANATION OF CODES USED IN NATURAL HERITAGE REPORTS, which can be downloaded from http://www.state.nj.us/dep/parksandforests/natural/heritage/nhpcodes\_2008.pdf.

If you have questions concerning the wildlife records or wildlife species mentioned in this response, we recommend that you visit the interactive I-Map-NJ website at the following URL, http://www.state.nj.us/dep/gis/depsplash.htm or contact the Division of Fish and Wildlife, Endangered and Nongame Species Program at (609) 292 9400.

PLEASE SEE 'CAUTIONS AND RESTRICTIONS ON NHP DATA', which can be downloaded from <http://www.state.nj.us/dep/parksandforests/natural/heritage/newcaution2008.pdf>.

Thank you for consulting the Natural Heritage Program. The attached invoice details the payment due for processing this data request. Feel free to contact us again regarding any future data requests.

Sincerely,



Herbert A. Lord  
Data Request Specialist

cc: Robert J. Cartica  
NHP File No. 10-4007421-5401

(by Patricia Sziber)

Megan



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE



In Reply Refer To:  
11-CPA-0215

New Jersey Field Office  
Ecological Services  
927 North Main Street, Building D  
Pleasantville, New Jersey 08232

Tel: 609/646 9310

Fax: 609/646 0352

<http://www.fws.gov/northeast/njfieldoffice>



Dr. Kelly M. Britt, Regional Archeologist  
Environmental and Historical Preservation  
FEMA – Region II  
26 Federal Plaza, 13<sup>th</sup> Floor  
New York, New York 10278

Dear Mr. Britt:

The U.S. Fish and Wildlife Service (Service) has reviewed your letter dated May 20, 2011 for construction of bulkheads and outfall valves in the Township of Neptune, Monmouth County, New Jersey.

### **AUTHORITY**

This response is pursuant to Section 7 of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to ensure the protection of federally listed endangered and threatened species, the Migratory Bird Treaty Act (MBTA) (40 Stat. 755 as amended; 16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (48 Stat. 401; 16 U.S.C. 661 *et seq.*). These comments do not preclude separate review and comments by the Service if an individual permit is required from the U.S. Army Corps of Engineers (Corps) pursuant to the Clean Water Act of 1977 (33 U.S.C. 1344 *et seq.*) nor do they preclude comments on any forthcoming environmental documents pursuant to the National Environmental Policy Act of 1969 as amended (83 Stat. 852; 42 U.S.C. 4321 *et seq.*).

### **FEDERALLY LISTED SPECIES**

No federally listed or proposed threatened or endangered flora or fauna (terrestrial species only) are known to occur within the vicinity of the project site. If additional information on federally listed endangered or threatened species becomes available, this determination may be reconsidered.

## **MIGRATORY BIRDS**

Migratory birds are a Federal trust resource responsibility of the Service pursuant to the MBTA. Many species of migratory birds have experienced population declines in recent decades, largely due to direct and indirect destruction and fragmentation of their habitats (Dunne 1989). The Shark River is an important staging area for shorebirds and waterfowl wintering habitat within the Atlantic Flyway. The Shark River is a tidally influenced bay consisting of mudflats and salt marsh within the confluence of four freshwater streams and the inlet connecting the bay to the Atlantic Ocean.

Brown *et al.* (2001) provided the following summarized recommendations for shorebird and waterfowl management.

- Manage shorebird habitats as dynamic systems. Managed wetland systems should be designed to perpetuate natural functions and local habitat dynamics. Identify and protect critical food resources.
- Understand historical conditions at local sites for successful management of shorebirds. Managers need to understand how current and projected habitat conditions match or differ from historical conditions, and then evaluate management actions that can provide the missing resources.
- Coordinate shorebird management among multiple agencies and programs. Successful management for shorebird habitats requires cooperative and coordinated efforts.

Based on the above, the Service recommends that the Federal Emergency Management Agency provide a non-hardening alternative (*e.g.*, living shorelines or sand nourishment) that is compatible with foraging shorebirds and wintering waterfowl.

### **Hard Structures**

The bayside coast of New Jersey is characterized by extensive tidal salt marsh, overwash zones, mud flats, and sandy beaches. Historically, in many developed areas, salt marsh wetlands, overwash zones, and mud flats were extensively filled and hardened by bulkheads, sea walls, rip-rap, stone revetments, and articulated concrete mats to increase the amount of developable land; sandy beaches were lined with houses and docks. These activities have permanently eliminated reproductive and/or foraging habitat for many coastal and marine avian species.

Overall, hard structures have adversely altered the character and natural function of New Jersey's coastline and significantly curtail the formation of highly productive habitats for migratory shorebirds. Increasing the amount of hard-structured shoreline adds to these adverse impacts in a cumulative fashion. Placement of hard structures, when occurring updrift of undeveloped areas, has disrupted the natural longshore transport of sand, effectively starving downdrift beaches, and resulted in shoreline retreat and loss of beach and dune habitats. Conversely, living shorelines

and sand nourishment projects occurring updrift of undeveloped areas have increased the longshore sand transport, often resulting in shoreline accretion and an increase of available dune and beach habitats. The Service generally recommends against hard structure stabilization if other stabilization techniques (*e.g.*, living shorelines or sand re-nourishment) are feasible.

The Service appreciates the opportunity to review the proposed project. Should you have any questions, please contact Carlo Popolizio at (609) 383-3938, extension 32.

Sincerely,



J. Eric Davis Jr.  
Field Supervisor

#### LITERATURE CITED

Brown, S., C. Hickey, B. Harrington, and R. Gill (Editors). 2001. United States shorebird conservation plan. Manomet Center for Conservation Sciences, Manomet, Massachusetts. Available at: <http://www.Manomet.org/USSCP/files.htm>.

Dunne, P. (Editor). 1989. New Jersey at the crossroads of migration. New Jersey Audubon Society, Franklin Lakes, New Jersey. 74 pp.

*fax to Alison Mosebrum*



**UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE**

Habitat Conservation Division  
James J. Howard Marine Sciences Laboratory  
74 Magruder Road  
Highlands, New Jersey 07732

August 3, 2010

TO: Leanne R. Hoffman  
Township of Neptune  
25 Neptune Boulevard  
Neptune, New Jersey 07753

SUBJECT: Township of Neptune  
Hazard Mitigation Grant Application to FEMA  
Shark River  
Monmouth County, New Jersey 07753

*Bm* Brian May  
(Reviewing Biologist)

We have reviewed the information provided to us regarding the above subject project and we offer the following preliminary comments pursuant to the Endangered Species Act, the Fish and Wildlife Coordination Act and the Magnuson-Stevens Fishery Conservation and Management Act:

**Endangered Species Act**

With the exception of occasional transients, no threatened or endangered species under the jurisdiction of the NMFS are known to occur in within the project area. As a result, further consultation by the federal action agency is not required. However should project plans change that would alter the basis for determination, or if new species or critical habitat is designated, consultation should be reinitiated.

**Fish and Wildlife Coordination Act**

A wide variety of resources under NMFS jurisdiction occur within the project area and the surrounding Shark River, including summer flounder, scup, black sea bass, bluefish, Atlantic herring, windowpane flounder, winter flounder. The Shark River is also mapped moderate density shellfish habitat for hard clams by the State of New Jersey. However, based upon the nature of the work proposed, impacts to these species and their habitats are expected to be minimal and no special conditions are necessary. As long as no in-water work takes place in the Shark River that would adversely impact the species and habitat no further consultation by the federal action agency is required. Should project plans change that would alter the basis for determination, consultation should be reinitiated.

**Magnuson-Stevens Fishery Conservation and Management Act  
Essential Fish Habitat**

The project area has been identified as Essential Fish Habitat (EFH) for one or more species. However, based upon the project design and its location, no more than minimal short-term adverse effects to EFH are expected provided compensatory mitigation is completed for the fill. Otherwise further consultation by the federal action agency will be required as part of the federal permit process. Should project plans change or if new information becomes available that changes the basis for this determination, or new species are listed, consultation should be reinitiated. For a listing of EFH and further information, please go to our website at: <http://www.nero.noaa.gov/hcd>. If you wish to discuss this further, please call 732-872-3116.



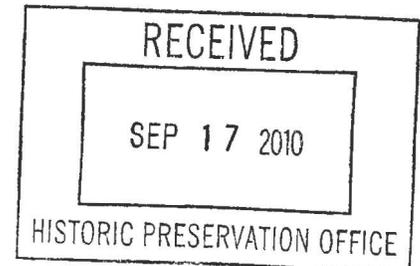


Mary Beth Jahn, Mayor  
Kevin B. McMillan, Deputy Mayor  
Dr. Michael Brautley  
J. Randy Bishop  
James W. Manning, Jr.  
Kevin McMillan

Philip D. Huhn, M.P.A., CPM  
Business Administrator  
Richard J. Cuffrell, R.M.C.  
Municipal Clerk  
Michael J. Bascom, C.M.F.O., C.T.C.  
Chief Financial Officer  
Economic Development Director

September 15, 2010

Deputy State Historic Preservation Officer  
Department of Environmental Protection  
Division of Parks & Forestry  
Historic Preservation Office  
P.O. Box 404  
Station Plaza 5  
501 East State Street, 4<sup>th</sup> Floor  
Trenton, NJ 08625-0404



**Re: Township of Neptune, New Jersey  
Tideflex Valve and Bulkhead Project  
HMA Application to FEMA**

10-2302-1 W.  
HPO - K2010-137

To Whom It May Concern:

The Township of Neptune is submitting a grant application to the Federal Emergency Management Agency (FEMA), through the New Jersey Office of Emergency Management, for a Tideflex valve and bulkhead replacement/installation project along the Shark River in Shark River Hills, along South Riverside Drive from Milford Road to Sylvan Drive, to mitigate chronic tidal flooding in the neighborhood and provide a 10-year level of protection to the project area.

FEMA has requested that we initiate consultation with your office regarding cultural resource impacts pursuant to Section 106 of the National Historic Preservation Act. Below is a project description and enclosed is a map and photographs of the project location for your review.

In summary, this project does not directly impact any historic structures. However, we are consulting with your office to determine if there will be any indirect impacts that may affect nearby historic properties (i.e., introduction or removal of elements into the existing visual landscape) proximate to the project area. Thus far, an advanced search was conducted on the National Register of Historic Places website and there are no properties within the database listed within the Township (<http://nrhp.focus.nps.gov/natregadvancedsearch.do?searchtype=natregadvanced>).

Description of Problem: Currently, the outfall pipes are located along the Shark River are at or below the water elevation. They are mostly accessible from the shoreline. Water continuously backs up into the storm water system, seeking its own level, thereby flooding and causing damage to streets and low lying areas. The bulkhead is in a state of disrepair and almost nonexistent in some areas. The bulkhead itself has been compromised over the years, due to tidal influences, storm surges and in general the original material has outlived its useful life expectancy. In addition, the marine life has also led to the deterioration of some of the bulkhead in this area. Due to the lack of bulkheading left, existing at or above the flood elevation, this allows the tides and ground water levels to rise above the bulkhead and compromise the existing infrastructure and adjacent roadways.

This chronic flooding occurs two-to-three times per month, each high tide, and has become a regular occurrence in the lives of the residents of this neighborhood. This area is hit even harder with damages when a Nor'Easter, heavy rain or other storm event (hurricane/tropical storm) passes through the area.

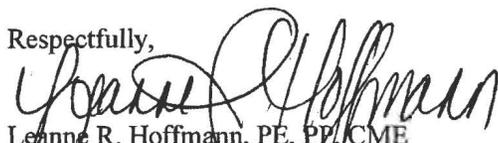
Proposed Solution: The proposed solution, since the Township of Neptune cannot elevate the roadway or adjoining properties to a height that will alleviate the situation, is to reestablish existing deteriorated bulkheading with new composite bulkheading, backfill, repair drainage pipes and install Tideflex valves or approved equal valve at the outfall pipe ends (see enclosed map). The reestablishment of bulkheading in this area will prevent some flooding event that overtop the existing deteriorated bulkhead and also storm surges. In addition, it will protect existing infrastructure and roadways in this area, minimizing the need for detours. The repair and replacement of existing deteriorated drainage lines in conjunction with the installation of Tideflex valves will minimize the flooding along local roadways due to storm surge or tidal influences where currently the water just flows freely up the system. This will allow additional storage capacity in the existing piping under the roadway. Once the water reaches a certain level it will flow out of the Tideflex valves under minimal head.

The construction phase of the project involves the selected contractor to mobilize and set up staging area(s); set up barging and cofferdam as necessary to reestablish new bulkheading; install Tideflex valves (SR11, SR13 thru SR21 that are not located in existing bulkheading); reestablish existing bulkhead line +/- 2000 linear feet with new composite bulkheading in conjunction with drainage work; backfill bulkheading; restore site, plant and establish vegetation; commence construction/installation of valves within bulkhead area; evaluate and review outfall pipes and integrity of piping, replace broken sections.

We would appreciate your response by 30 days from date of letter. If you have any questions, please call the undersigned at 732-988-5200 ext. 228.

Thank you.

Respectfully,

  
Leanne R. Hoffmann, PE, PP, CME  
Director of Engineering and Planning

c: Philip Huhn, Business Administrator  
Michael J. Bascom, CFO  
Richard Cuttrell, Clerk  
Tim O'Connor, Engineering Technician, Marina Supervisor

10-2302-1  
HPO K2010-137

I concur with your finding that there are no historic properties affected within the project's area of potential effects. Consequently, pursuant to 36 CFR 800.4(d)(1), no further Section 106 consultation is required unless additional resources are discovered during project implementation pursuant to 36 CFR 800.13.

 11/19/10  
DANIEL D. KAUNONEN Date  
Deputy State Historic Preservation Officer NP

---

**From:** Popolizio, Carlo [[mailto:carlo\\_popolizio@fws.gov](mailto:carlo_popolizio@fws.gov)]  
**Sent:** Wednesday, May 06, 2015 4:12 PM  
**To:** Popowski, Ron; Delaune, Jonathan  
**Subject:** Re: Renewed Consultation Bulkhead Mitigation Grant Project Neptune, NJ

Hi Zack,

please consider this e-mail our formal review and response. I will be in tomorrow and then on annual leave till May 27.

Under the no effect determination, FEMA is not required to consult with us.

Under MBTA, we appreciate the seasonal restriction you propose for migratory birds.

Under the Fish and Wildlife Coordination Act, well FEMA states to be exempt from incorporating our comments under the Act for grants (something we should all discuss in greater detail at some point), but our comment would be on the proposed material for the bulkhead (you say it s a composite but it is unclear whether it has been treated with toxic substances or not). If our comments were to the Corps, we would recommend against using polluting materials. There are readily available non-polluting alternatives.

We appreciate that the bulkhead would be set back although we originally recommended against it. The reason why we are generally opposed to hardening structures it is because they replace shorelines. Also, please note that we are not sure a living shoreline in front of a bulkhead would last. It would likely be money wasted. Perhaps you may provide Ron Popowski some clarifications such as:

The existing vegetation will be removed prior to constructing the bulkhead..

The bulkhead will be constructed where water currently meets the land.

How does moving the bulkhead from the intertidal or subtidal (as previously proposed) to shoreline (as currently proposed) minimize direct loss of tidal salt marsh and intertidal areas used by birds for foraging?

thanks, Carlo

On Wed, May 6, 2015 at 1:07 PM, Popowski, Ron <[ron\\_popowski@fws.gov](mailto:ron_popowski@fws.gov)> wrote:

FYA

----- Forwarded message -----

**From:** Delaune, Jonathan <[Jonathan.Delaune@fema.dhs.gov](mailto:Jonathan.Delaune@fema.dhs.gov)>

**Date:** Wed, May 6, 2015 at 1:02 PM

**Subject:** Renewed Consultation Bulkhead Mitigation Grant Project Neptune, NJ

**To:** "Ron Popowski ([Ron\\_Popowski@fws.gov](mailto:Ron_Popowski@fws.gov))" <[Ron\\_Popowski@fws.gov](mailto:Ron_Popowski@fws.gov)>

Cc: "Smith, Barbara J" <[Barbara.Smith@fema.dhs.gov](mailto:Barbara.Smith@fema.dhs.gov)>, "Richert, Suzanne ([suzanne.richert@aecom.com](mailto:suzanne.richert@aecom.com))" <[suzanne.richert@aecom.com](mailto:suzanne.richert@aecom.com)>

Mr. Popowski:

Attached is our renewed consultation, addressing scope-of-work changes to a FEMA Pre-Disaster Mitigation grant application for installation of a bulkhead in Neptune, NJ. The scope of work changes were designed to address USFWS comments on the original scope of work. Please let me know if you have any questions or need any additional information.

Thanks,

Zack DeLaune

EHP Specialist

FEMA Region II

Desk: (212) 680-8802

BB: (917) 587-3917

[jonathan.deaune@fema.dhs.gov](mailto:jonathan.deaune@fema.dhs.gov)

--

**Ron Popowski**  
**Asst. Supervisor**  
**U.S. Fish and Wildlife Service**  
**New Jersey Field Office**  
**Ecological Services**  
**927 N. Main Street, Bldg. D**  
**Pleasantville, New Jersey 08232**

**609.241.7065**  
**609.646.0352 FAX**

[Celebrate the 40th anniversary of the Endangered Species Act!](#)

--

**Carlo Popolizio, Biologist**  
**USFWS-NJFO**  
**927 N. Main Street, Pleasantville NJ 08232**  
**Phone: (609) 383-3938 x 32**

1 .....

## Federal Interagency Meeting Comment Form

**APPLICANT:** Township of Neptune

**APPL. NUMBER:** FEMA PDMC-PJ-02-NJ-2011-005

**Commenting Agency:** NOAA Fisheries

**Project Manager:** Zach DeLaune

**Waterway:** Shark River

**Location:** Township of Neptune, Monmouth County, New Jersey

**Activity:** Installation of new bulkhead and outfall valves.

### **ESSENTIAL FISH HABITAT (EFH)**

Project may adversely affect EFH.

**ESSENTIAL FISH HABITAT CONSERVATION RECOMMENDATIONS** (Note: EFH crs require a response from the federal action agency within 30 days of receipt or 10 days before a permit is issued if crs are not included as a special condition of the permit)

The NMFS has no objection to this application and no EFH conservation recommendations.

### **FISH AND WILDLIFE COORDINATION ACT COMMENTS**

See EFH above

### **ENDANGERED SPECIES ACT**

No federally listed or proposed threatened or endangered species under our jurisdiction are expected to occur in the vicinity of the proposed project, and thus no direct or indirect effects are expected. NMFS Protected Resources Division does not intend to offer additional comments on this project. Should project plans change or new information become available that changes the basis for this determination, further coordination should be pursued.

### **OTHER**

SIGNATURE: Melissa Alvarez, PWS DATE: 05/14/2015



FEMA

April 10, 2015

10-2302

HPO - E2015-060

Mr. Daniel Saunders  
Administrator and Deputy State Historic Preservation Officer  
New Jersey Department of Environmental Protection  
Historic Preservation Office  
501 Station Plaza  
Building 5 — 4th floor  
Trenton, New Jersey 08625-0404

CC: Delaware Nation  
Delaware Tribe of Indians  
Eastern Shawnee Tribe of Oklahoma  
Shawnee Tribe of Oklahoma

Re: **Grant Name and Number:** PDMC-PJ-02-NJ-2011-005 South Riverside Drive Outfall Valve and Bulkhead Project  
**Grantee/Subgrantee:** New Jersey Office of Homeland Security and Preparedness/Township of Neptune, NJ  
**Undertaking:** Hazard Mitigation, South Riverside Drive, Shark Hills, Neptune, Monmouth County, NJ  
**Determination: No Historic Properties Affected**  
**HPO #:** K2010-137

Dear Mr. Saunders:

The Hazard Mitigation Grant Program (HMA) of the Department of Homeland Security-Federal Emergency Management Agency (DHS-FEMA) is proposing to provide Pre-Disaster Mitigation-Competitive Grant (PDMC) funds to the Township of Neptune, New Jersey (Subgrantee) for a new bulkhead and installation of nine outfall valves along South Riverside Drive, Neptune, Monmouth County, New Jersey (Undertaking, Figure 1). The PDMC provides funds for hazard mitigation planning and projects on an annual basis. The PDM program was put in place to reduce overall risk to people and structures, while at the same time, also reducing reliance on federal funding if an actual disaster were to occur.

The Subgrantee completed a request for consultation with your office in September 2010 in which a No Historic Properties Affect determination was made by your office on 11/19/10, HPO#K2010-137. Since this determination, the project Scope of work has altered slightly to include a living shoreline, installation of only 9 tide-flex valves and a new maximum height of bulkhead to 10 feet.

Due to these changes, FEMA is re-initiating Section 106 consultation for the proposed Undertaking in accordance with 36 CFR Part 800.

### **Undertaking**

The Undertaking consists of constructing a new bulkhead and new outfall valves in the alignment shown in Figure 2. The bulkhead will be made of a composite material and would extend approximately 2,000 linear feet along South Riverside Drive. The bulkhead will be installed approximately 20 feet away from South Riverside Drive and approximately 35 feet inland from the remnants of the deteriorated bulkhead. The bulkhead will be installed immediately above the mean high water line and would have a maximum elevation of 10 feet above mean sea level (amsl). In addition, a six-foot wide walkway will be constructed on the bulkhead at approximately 10 feet amsl, which is approximately five feet above the ground surface of South Riverside Drive. The existing drainage lines would be repaired and replaced with duckbill-style check valves to prevent sea water from backflowing into the storm drainage system. Clean sandy fill will be placed behind the bulkhead and no fill would be placed below the mean high tide line. The area between the roadway of South Riverside Drive and the bulkhead is approximately 1 acre and would be disturbed for construction and then replanted with native vegetation for stabilization using a living shoreline (see figure 2).

### **Area of Potential Effects (APE)**

The APE for standing structures and archaeological resources is the ground that will be disturbed for the Undertaking and any staging areas. The APEs are depicted in Figure 3.

### **Identification and Evaluation**

#### *Known Standing Structure and Archaeological Historic Resources*

FEMA consulted NJ-GeoWeb, the National Register of Historic Places (National Register) database, the New Jersey and National Register Listings, as well as online topographic maps and Historic Map Works. The APE is not located within a historic district that is listed or eligible for listing in the National Register, nor are there any individually listed or eligible properties directly adjacent to the APE.

#### *Standing Structures*

The APE is not located within a historic district that is listed or eligible for listing in the National Register, nor are there any individually listed or eligible properties directly adjacent to the APE.

#### *Archaeological Resources*

A review of the NJ-GeoWeb database indicates that the APE is not located within an archaeological sensitive area and is not located near any listed or eligible for listing historic properties on the National Register of Historic Places (Figure 4). The archaeological APE is abutting Shark River that flows eastward into the Atlantic Ocean (see figures 1). Soils within the area are comprised primarily of Udorthents, 0-8 percent slopes (UdaB) and Klej loamy sand-Urban land complex, 0-5 percent slopes (KkhB) in the eastern portion of the APE. These soils are well-drained (UdaB) somewhat poorly drained (KkhB). In addition, KkhB soils are composed of a portion of urban land that is comprised of disturbed soils. The area has been previously disturbed

by construction activities associated with the former bulkhead and drainage utilities. cursory map research on Historic Map Works did not produce any maps with the APE.

**Assessment of Effects**

Based on FEMA's identification and evaluation efforts, there are no historic properties within the APE. In addition, analysis of the information above indicates the APE has a low sensitivity and low probability for archaeological resources.

**Findings**

Therefore, FEMA has determined a finding of **No Historic Properties Affected** for this Undertaking and is submitting this Undertaking to you for your review and comment. FEMA requests your comments within thirty (30) days. FEMA looks forward to your concurrence with this determination. Should you have any questions or need additional information regarding this Undertaking, please contact me at (212) 680-8816 or at [kelly.britt@fema.dhs.gov](mailto:kelly.britt@fema.dhs.gov). If practicable, we would appreciate an electronic copy of the concurrence letter be emailed to expedite the grant review process.

Sincerely,



Kelly M. Britt, PhD, RPA  
Archaeologist, Region II

KMB/kb

Enc: Attachment

...without finding that there are no historic properties affected within the project's area of potential effects. Consequently, pursuant to 36 CFR 800.4(d)(1), no further Section 106 consultation is required unless additional resources are discovered during project implementation pursuant to 36 CFR 800.13.

 5/5/15  
Daniel D. Squanders Date  
Regional State II Historic Preservation Officer NP



Delaware Tribe Historic Preservation Representatives  
Department of Anthropology  
Gladfelter Hall  
Temple University  
1115 W. Polett Walk  
Philadelphia, PA 19122  
[temple@delawaretribe.org](mailto:temple@delawaretribe.org)

April 27, 2015

U.S. Department of Homeland Security  
FEMA, Region II  
Attn: Kelly M. Britt  
Jacob K. Javits Federal Office Building  
Mitigation Division  
26 Federal Plaza, 13<sup>th</sup> Floor  
New York, NY 10278

Re: PDMC-PJ-02-NJ-2011-005 South Riverside Drive Outfall Valve and Bulkhead Project,  
Neptune, NJ

Dear Kelly M. Britt,

Thank you for notifying the Delaware Tribe of the above referenced project. The Delaware Tribe is committed to protecting sites important to our tribal heritage, culture and religion. Our review indicates that there are no religious or culturally significant sites within the selected project area and we have no objection to the proposed project. We defer further comment to your office.

We ask that if any archaeological remains (artifacts, subsurface features, etc.) are discovered during the construction process that construction be halted until an archaeologist can view and assess the finds. Furthermore, we ask that if any human remains are accidentally unearthed during the course of the project that you cease development immediately and inform the Delaware Tribe of Indians of the inadvertent discovery. If you have any questions, feel free to contact this office by phone at (609) 220-1047 or by e-mail at [temple@delawaretribe.org](mailto:temple@delawaretribe.org).

Sincerely,

A handwritten signature in cursive script that reads "Blair Fink".

Blair Fink  
Delaware Tribe Historic Preservation Representatives  
Department of Anthropology  
Gladfelter Hall  
Temple University  
1115 W. Polett Walk  
Philadelphia, PA 19122