

FINAL  
ENVIRONMENTAL ASSESSMENT/  
FINDING OF NO SIGNIFICANT IMPACT

# RECAPITALIZATION PROJECT USCG STATION SANDY HOOK NEW JERSEY

CONTRACT NUMBER: HSCG83-07-D-3WF170  
TASK ORDER NUMBER: HSCG47-13-J-A17010

*Responsible Agency:*

**U.S. Department of  
Homeland Security**

**United States  
Coast Guard**



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*September 2014*

**US COAST GUARD  
FINDING OF NO SIGNIFICANT IMPACT FOR  
RECAPITALIZATION PROJECT USCG STATION SANDY HOOK  
MONMOUTH COUNTY, NEW JERSEY**

The US Coast Guard (USCG) is proposing to recapitalize facilities at USCG Station Sandy Hook, Monmouth County, New Jersey, including constructing a new Multi-Mission Building, Boat Maintenance Facility, and Small Arms Firing Range (SAFR), and dredging and reconstructing the waterfront area. The USCG would also demolish several existing structures, including the non-historic Boathouse, non-historic Building #103 (Former Exchange/ESD Building), the historic Building #123 (Former Recreation Building), the non-historic Station Building, the non-historic SAFR, and twenty-two non-historic Borough Housing Units. In accordance with the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality regulations implementing NEPA, and Department of Homeland Security Management Directive 023-01 and USCG Commandant Instruction M16475.1D, the USCG prepared an Environmental Assessment (EA) for the proposed action. The EA evaluated the Proposed Action and No Action (status quo) alternatives; no other feasible alternatives that met the purpose and need were identified.

No significant adverse impacts were identified for the Proposed Action Alternative the EA analysis. Pursuant to Section 106 of the National Historic Preservation Act of 1966 (36 CFR Part 800), the USCG negotiated a memorandum of agreement with the New Jersey State Historic Preservation Officer and the Advisory Council on Historic Preservation that provides stipulations to avoid and/or mitigate adverse effects on historic properties at the station. Permits and approvals would be required for Proposed Action, which would be secured by the Design-Build Contractor, in accordance with contract specifications, and may be subject to additional conditions for the protection of the environment.

This action has been thoroughly reviewed by the USCG and it has been determined, by the undersigned, that this project will have no significant effect on the human environment. This Finding of No Significant Impact (FONSI) is based on the attached USCG-prepared EA which has been determined to adequately and accurately discuss the environmental issues and impacts of the proposed action and provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required.

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Date	<b>JOHN R. POLAND</b> Environmental Reviewer	Chief USCG SILC Environmental Management Division
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I have considered the information contained in the EA, which is the basis for this FONSI. Based on the information in the EA and this FONSI document, I agree that the proposed action as described above, and in the EA, will have no significant impact on the environment.

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Date	<b>JOHN A. HEALY, P.E.</b> Captain, USCG Responsible Official	Commanding Officer USCG Facilities Design and Construction Center
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**U.S. COAST GUARD  
ENVIRONMENTAL ASSESSMENT  
FOR  
RECAPITALIZATION PROJECT USCG STATION SANDY HOOK  
MONMOUTH COUNTY, NEW JERSEY**

This U.S. Coast Guard Environmental Assessment (EA) was prepared in accordance with Commandant's Manual Instruction M16475.1D and is in compliance with the National Environmental Policy Act of 1969 (P.L. 91-190) and the Council of Environmental Quality Regulations dated 28 November 1978 (40 CFR Parts 1500-1508).

This EA serves as a concise public document to briefly provide sufficient evidence and analysis for determining the need to prepare an Environmental Impact Statement or a Finding of No Significant Impact.

This EA concisely describes the proposed action, the need for the proposal, the alternatives, and the environmental impacts of the proposal and alternatives. This EA also contains a comparative analysis of the action and alternatives, a statement of the environmental significance of the preferred alternative, and a list of the agencies and persons consulted during EA preparation.

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Date	M. JAMES LEWIS Environmental Reviewer	Deputy Chief USCG SILC Environmental Management Division
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In reaching my decision/recommendation on the U.S. Coast Guard's proposed action, I have considered the information contained in this EA on the potential for environmental impacts.

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## Acronyms and Abbreviations

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ACHP	Advisory Council on Historic Preservation
amsl	above mean sea level
BFE	Base Flood Elevation
BMF	Boat Maintenance Facility
BMP	Best Management Practice
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CGC	Coast Guard Cutter
CMP	Coastal Management Program
CRDA	Casino Reinvestment Development Authority
CRMP	Cultural Resources Management Plan
CWA	Clean Water Act
dB	decibel
D-B	Design-Build
DLUR	Division of Land Use Regulation
DNL	Day-Night Average Sound Level
DPS	Distinct Population Segment
EA	Environmental Assessment
EFH	Essential Fish Habitat
EO	Executive Order
EPA	Environmental Protection Agency
ESD	Electronic Support Detachment
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
GHG	Greenhouse Gas
HAPC	Habitat Area of Particular Concern
LNAPL	Light Non-Aqueous Phase Liquid
LOD	Limits of Disturbance
MLLW	mean lower low water
MMB	Multi-Mission Building
MOA	Memorandum of Agreement
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
NAAQS	National Ambient Air Quality Standards
NAVD88	North American Vertical Datum of 1988
NEPA	National Environmental Policy Act

## Acronyms and Abbreviations

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NHL	National Historic Landmark
NHP	Natural Heritage Program
NHPA	National Historic Preservation Act
NJDEP	New Jersey Department of Environmental Protection
NJDOT	New Jersey Department of Transportation
NJ HPO	New Jersey Historic Preservation Office
NJPDES	New Jersey Pollutant Discharge Elimination System
NJRHP	New Jersey Register of Historic Places
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRHP	National Register of Historic Places
NWP	Nationwide Permit
OPCER	Office of Permit Coordination and Environmental Review
ppt	parts per trillion
SAFR	Small Arms Firing Range
SAV	submerged aquatic vegetation
SHPO	State Historic Preservation Office
THPO	Tribal Historic Preservation Office
URS	URS Group, Inc.
USACE	U.S. Army Corps of Engineers
USCB	U.S. Census Bureau
USCG	U.S. Coast Guard
USFWS	U.S. Fish and Wildlife Service
WOUS	Waters of the U.S.
WQC	Water Quality Certificate

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## **1. BACKGROUND**

The 2013 Disaster Assistance Supplemental Act (P.L. 113-2) appropriated funds to rebuild U.S. Coast Guard (USCG) shore facilities damaged by Hurricane SANDY in October 2012 and to reduce damage from future storms by replacing damaged facilities with those that are hurricane and flood resilient.

Hurricane SANDY recapitalization fund requirements state that new structures shall be built to withstand the 500-year flood and that structures be storm-resilient and meet or exceed facility construction requirements from Hurricanes Katrina and Ike. Executive Order (EO) 11988 (Floodplain Management) requires Federal agencies funding "critical facilities" to construct them to withstand a 500-year flood level. Non-critical facilities must be constructed to withstand the 100-year flood level. The Coast Guard also has a mandate to reduce the overall Federal footprint and right-size all facilities.

The USCG's Station Sandy Hook, New Jersey is located on the northwest end of Sandy Hook peninsula in Monmouth County (Figure 1, Appendix A). The entire Sandy Hook peninsula lies within the legislative boundaries of the National Park Service (NPS) Gateway National Recreational Area; all land access to the Station is through NPS property. Station Sandy Hook provides search and rescue, law enforcement, environmental protection, and ports, waterways, and coastal security for the New Jersey shore, Raritan Bay, Sandy Hook Bay, and portions of New York Harbor. The Coast Guard operates several vessels out of the Station: two 25-foot Response Boats, two 47-foot Motor Life Boats, a 110-foot Island Class Patrol Boat (the Coast Guard Cutter [CGC] BAINBRIDGE), and an 87-foot Marine Protector Class Patrol Boat (the CGC SAILFISH). Sector New York Naval Engineering Function is located at the Station and provides small boat and cutter maintenance services for USCG units in the Sector New York Area of Responsibility. Station Sandy Hook is also home to USCG Sector New York Detachment Sandy Hook, USCG Electronic Support Detachment Detail Sandy Hook, and the USCG Exchange System.

The Coast Guard is currently operating out of a Station Building, Boathouse, small arms firing range (SAFR), and waterfront facilities that were damaged by Hurricane SANDY. Immediate repairs were made after the storm to allow Station operations to continue but the Coast Guard has determined that these buildings cannot reasonably be retrofitted to resist wind and flood conditions from future storm events. The Coast Guard has abandoned use of 22 non-historic Borough housing units at the Station that were damaged by Hurricane SANDY.

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, the President's Council on Environmental Quality (CEQ) Regulations (40 CFR parts 1500-1508), and the USCG's NEPA implementing procedures (COMDTINST M16475.1D) to evaluate the environmental impacts of the Proposed Action and the No Action Alternative.

## **2. PURPOSE AND NEED**

Station Sandy Hook plays a vital role in ensuring public safety and providing port/waterway security and environmental protection along the New Jersey and New York coastlines. The Coast Guard has determined that the Station Building, Boathouse, and SAFR are not designed for, nor can reasonably be retrofitted to resist, wind and flood conditions from future storm events. In addition to incurring damage from the hurricane, these buildings are functionally obsolete and

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are no longer suitable for continued use by USCG for operations, maintenance, or storage. Specifically:

- The existing Station Building is located within both the 100-year and 500-year floodplains and is continually subject to storm damage, adversely affecting mission response times.
- The site of the existing boathouse is the only suitable location for a new Boat Maintenance Facility (BMF) due to waterfront access and pier locations and proximity to the boat basin and existing utilities. The existing Boathouse has only one boat maintenance bay that is too small for the larger boats which are part of a new mission requirement at Sandy Hook. Boat bays face the Station Building and the distance between the two buildings is limited, causing maneuverability issues when aligning a truck and trailer with the boat bay. Also, the boat trailers must be backed into the boat bay via an inclined ramp, adding additional challenges for proper alignment into the bay. These issues result in additional time required to get a boat into the boat bay and a significant risk that a boat, trailer, or the building could be damaged when backing a boat into the bay.
- The existing SAFR cannot be modified because it was retrofitted to a historic Casemate structure from the site's past use as an Army battery and is a contributing structure to a National Historic Landmark District. The SAFR's existing outdoor range has five shooting lanes which are inadequate to meet the mission training requirements. Following an inspection in September of 2012, the use of the SAFR was discontinued due to multiple safety and environmental concerns inherent in its structural configuration and lack of ventilation.
- Because the waterfront is operating at 20% capacity due to damages sustained in Hurricane SANDY, USCG vessels have been relocated until facilities can be restored – this has rendered the Coast Guard unable to meet time-critical deployments.

The overall USCG facility footprint will shrink with the proposed recapitalization work; several unnecessary and obsolete non-historic structures will be demolished and new structures that meet the current USCG mission needs will be built to replace them.

The purpose of the project is to improve the Station's resilience to future storms and reduce down time for mission-critical facilities after storm events by constructing a new, hurricane-resistant Multi-Mission Building (MMB), BMF, and SAFR and make repairs to the waterfront, including maintenance dredging. The project will support modern Coast Guard mission requirements and meet Department of Defense Anti-Terrorism/Force Protection criteria.

### **3. ALTERNATIVES**

Two alternatives are evaluated in this EA: the No Action Alternative (status quo) and the Proposed Action. As described below in Section 3.3, Alternatives Considered and Dismissed, no other feasible alternatives that meet the purpose and need were identified.

#### **3.1 No Action Alternative**

Under the No Action Alternative, the Coast Guard would continue to operate from non-hardened operational facilities situated below the base flood elevations for both the 100-year and 500-year

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storms. The existing facilities would continue to flood during future storm events, which would require the Coast Guard to spend significant funding on a recurring basis to mitigate damages. The down time for these mission-critical facilities after storms would reduce operational efficiency, negatively affecting the Coast Guard's ability to fulfill its mission.

### **3.2 Proposed Action**

The existing Station Building, Boathouse, SAFR, and waterfront facilities at Station Sandy Hook are considered critical facilities. Under the Proposed Action, and in accordance with the July 22, 2014, Memorandum of Agreement executed between the Coast Guard, New Jersey Historic Preservation Office (NJ HPO), and the Advisory Council on Historic Preservation (ACHP), with concurrence by the National Park Service (NPS), the Coast Guard would:

- Demolish the existing historic Building #123 (Former Recreation Building), which is a contributing structure to the Fort Hancock and Sandy Hook Proving Ground National Historic Landmark (NHL) District.
- Demolish the existing non-historic Building #103 (Former Exchange/ESD Building) and an adjacent small concrete pad that formerly housed a picnic pavilion. Demolish the existing non-historic Station Building and replace it with a new MMB located in the area of the existing Building #103 and Building #123 structures. A 90-foot, self-supported communications tower would be installed at the northwest corner of the new MMB.
- Demolish 22 non-historic Borough housing units that were abandoned after Hurricane SANDY.
- Demolish the existing non-historic Boathouse and replace with a new BMF in the same location as the existing Boathouse. The proposed facility has two boat maintenance bays; one large boat bay serves boats up to 55 feet in length and one small boat bay serves the 29-foot Response Boat-Small (RB-S). Direct access to the waterfront and concrete wharf to lift boats out of the water and drive the trailered boat into the boathouse is a mission requirement, thus the first floor elevation is below the 100-year flood elevation at an elevation of 7 feet. The second story finished floor elevation is at an elevation of 13 feet, which is above the 100-year flood, but below the 500-year flood, and will provide flood storage of critical USCG equipment.
- Demolish the existing non-historic Small Arms Firing Range (SAFR), which was constructed on top of and around the historic Casemate Structure 541, in a way that shall not damage the historic casemate structure.
- Construct a new SAFR in the area of the former Sycamore Circle housing units and playground, which were demolished immediately following Hurricane SANDY. The new indoor SAFR will include space for administrative functions, classroom space, toilet/shower rooms, virtual range, ammunition/weapon storage, and facility support spaces. The new SAFR would serve all USCG units located in the Sector New York Area of Operations and would have the capacity to serve operational partners.
- Repair and rebuild structures at the waterfront including repairs to or replacement of the wharf, piers, breakwaters, floating docks, groin, utilities, and boat ramp to return them to pre-Hurricane SANDY conditions. Remove a small concrete floating dock that has washed up onto the beach just northwest of the boat basin.

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- Dredge the boat basin to maintenance depths To remove recent and accumulated sands and sediments. Dredging will be within the existing boat basin footprint. The exact dredging areas have not been determined, but dredging is expected to remove up to a maximum of 12,423 cubic yards of material which is greater than 90% sand and contains no contaminants (USCG 2014a). The maintenance dredging will return the water depths in the boat basin to design depths which range from 10 to 14 feet deep at mean lower low water.

A closed clamshell environmental bucket dredge will be used for all mechanical dredging. The dredge will be operated to maximize the bite of the clamshell and reduce the amount of free water in the dredged material and the number of bites required to complete the dredging. The clamshell will be lifted slowly through the water column, generally at a rate of 2 feet per second or less. All dredged material will be placed in a barge of solid hull construction or sealed with concrete to prevent spillage of material. Dredge material will either be used as fill for construction activities on the Station or trucked off-site.

Onshore and nearshore construction activities associated with the Proposed Action may include, but are not limited to, dismantling and removing existing structures by mechanical and/or physical means, constructing new buildings, and driving new piles for the docks and supporting structures.

Figure 2 (Appendix A) shows the location of existing buildings and the Proposed Action elements; elevation renderings of the new MMB, BMF, and SAFR are also included in Appendix A. New buildings would be constructed to withstand the 500-year flood and built to hurricane resistant building codes. Station operations would continue uninterrupted during construction of the new facilities because the Coast Guard would operate out of temporary trailers, existing facilities at the Station, and other nearby USCG stations as needed (e.g., for vessel maintenance) until construction is complete.

### **3.3 Alternatives Considered and Dismissed**

The Coast Guard conducted an extensive planning process to identify the best means available to restore form and function to the mission-critical USCG Station Sandy Hook facility. Coast Guard mission needs for Search and Rescue and Law Enforcement require an operational USCG facility at the existing Station Sandy Hook site to adequately serve its area of concern in and around the Sandy Hook Bay. There are no other acceptable locations within Station Sandy Hook that meet time critical deployment distances for responses to distress calls.

Three of the significantly damaged structures on the Station are proposed to be demolished and rebuilt; repair costs for these structures would be excessive. The existing Boathouse and the Station Building are obsolete and cannot efficiently support modern USCG operational requirements, and the existing SAFR has been shuttered for the past two years due to safety and environmental violations with continued firing range operations. Two of the three new structures (the MMB and SAFR) are proposed to be rebuilt in different locations than the existing structures in order to utilize the highest elevations at the site for protection from flood waters. The new BMF must be constructed at the location of the existing Boathouse due to its proximity to the waterfront and piers.

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Building the proposed new MMB on the same site as the existing Station Building is too costly and disruptive to critical USCG missions, as temporary facilities to relocate the functions would be necessary for the duration of the work. Temporary facilities would be required to keep the Station operational during demolition of the existing Station Building and construction of a new MMB; this would represent a large added construction cost. By selecting a new site for the MMB the cost of temporary facilities is avoided and only the cost of one move would be incurred. Additionally, furnishings and electronics will have less damage and will have a greater potential for reuse which reduces project cost.

If the MMB was reconstructed in the location of the existing Station Building, the new BMF and MMB would be in extremely close proximity to each other and would present a huge building mass on the waterfront. Positioning the new MMB behind the new BMF would also block a clear view of the USCG mooring area, which is a mission critical operational design feature. The BMF is a drive-through facility for boats which requires wide driveway areas accessing the rear of the building. If the new MMB was built on the existing Station Building site, there would not be sufficient room for the needed boat driveway space and two structures.

Additional considerations for the new MMB and new SAFR sites include constructing the new structures in previously disturbed areas to reduce the chance of disturbing underground archeological artifacts and an attempt to avoid building on vacant, unencumbered land. In addition, the proposed sites utilize the best available higher ground, which substantially reduces the building foundation costs. Proposed site development costs are also less as there are existing utilities and parking that may be utilized with the selected locations, and no need for temporary facilities during demolition and construction phases. In the proposed new building configuration, the existing geothermal wells may be reused as well, which allows USCG to utilize a renewable energy resource and provides continuous cost savings to USCG operations.

The proposed SAFR needs to be relocated because the existing SAFR site was retrofitted to a historic Casemate structure from the site's past use as an Army battery. The existing outdoor range has five shooting lanes which are inadequate to meet the mission training requirements. Due to safety concerns from bullet ricochets into the marked channel, the USCG ceased training operations in 2012. The existing SAFR site is designated as a historical site and as such is not available for construction of the new SAFR building. Other possible sites were generally not acceptable due to their locations, issues with utilities, loss of existing habitat, proximity to historic structures, proximity to sensitive archaeological areas, and appropriate proximity to parking. In order to reduce construction costs and utilize existing infrastructure, USCG has attempted to reuse existing parking areas and build on previously disturbed areas rather than develop open areas. The Sycamore Circle site, which was previously a developed housing cul-de-sac, met these conditions and had utilities readily available.

USCG considered repairing Building #123, which was used as a Recreational Center by the Station. However, the structural integrity of Building #123 was lacking even prior to Hurricane SANDY. The foundation system design suggests that the building was intended to be temporary; it consists of brick piers reinforced with wooden beverage kegs filled with concrete. Hurricane SANDY displaced the building from its primitive foundation system when approximately one foot of water flooded through the structure. Additionally, sink holes around the exterior foundation indicate a compromised foundation and washout of surrounding soils. Following Hurricane SANDY, the interior of the structure has been stripped to the wall studs up to three feet due to water damage from flooding. Due to below freezing temperatures in the

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winter of 2013/2014 paired with pressed fit pipe connections, a water pipe froze and broke under the structure, again filling the basement of Building #123 with several feet of water. Building #123 cannot be adequately repaired at a reasonable cost due to the extent of interior and exterior damage, and its inadequate foundation system. Additionally, a Recreation Center is no longer needed at Station Sandy Hook since there will no longer be collocated housing units on the site.

The 22 Borough Housing Units constructed in the mid-1990s were significantly damaged by Hurricane SANDY, and repair costs to bring the structures back to full use would be excessive. USCG considered rebuilding housing structures in this same location, but the low demand for housing at the remote site, combined with the cost to rebuild housing, did not favorably compare with other competing needs for mission critical repair and new construction at Station Sandy Hook. Therefore repair or reconstruction of the housing units was removed from further consideration.

Given the uncertainty of adequate funding for the full extent of work scoped for Hurricane SANDY USCG projects, an effort was made to control construction costs where possible in order to maximize recapitalization potential and be fiscally responsible in this limited budget climate.

Finally, the Coast Guard considered constructing the BMF and MMB at other sites; however, the Coast Guard does not own another facility nearby with waterfront access and geographically separating operations at the Station would result in operational inefficiencies. The Coast Guard also considered leasing space in a nearby facility; however, the Station is surrounded by NPS land and there are no adequate local facilities available for lease.

These alternatives do not meet the purpose and need for the project and are not considered to be feasible; and therefore, they were dismissed from further consideration.

#### **4. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES**

This section describes the existing physical, socioeconomic, transportation, natural, and cultural resources in the project area and the effects the Alternatives are expected to have on these resources.

##### **4.1 Socioeconomic Environment**

###### **4.1.1 Land Use and Zoning**

Station Sandy Hook is located on the western side of Sandy Hook peninsula. The majority of the peninsula is managed by the NPS as part of the Gateway National Recreation Area (NPS 2013a). Land use at the Station includes station buildings, residential housing, open space, and beaches. Land use surrounding the Station consists of open space, open water, public roads, and buildings owned by the NPS, many of which are not in use. Beaches are located on both sides and within the boat basin and docks, as well as along all Station coastlines.

No Action Alternative – Under the No Action Alternative, land use on and around the Station would remain the same; therefore, there would be no impacts on land use.

Proposed Action – Under the Proposed Action, although building configurations and footprints would change slightly, the land uses at and around the Station would not change. The Proposed Action would have no impact on land use.

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#### 4.1.2 Local Economy

There are 70 active duty and 50 reserve personnel assigned to Station Sandy Hook, 10 of whom reside at the Station; the others live in nearby communities (McCabe personal communication). There are 37 rooms available in the Station Building to house personnel during 48-hour duty rotations; currently approximately 15 USCG personnel stay in the Station Building during duty rotations. A small exchange is located in the Exchange/ESD Building #103 (USCG 2012).

No Action Alternative – Under the No Action Alternative, USCG personnel would continue to live on or near the Station and contribute to the local economy.

Proposed Action – Under the Proposed Action, the Exchange/ESD Building #103 would be demolished. This would have minor adverse impacts on Station personnel, who would have to shop in the local community or travel to another USCG facility to use a military exchange. To maintain Station functionality during construction, the Coast Guard would provide temporary facilities for personnel on duty rotation; the new MMB would provide duty berthing for 18 personnel. Construction jobs may be available to the local community and non-local construction workers would also contribute to the local economy by dining at restaurants, shopping at local businesses, and staying at hotels/motels. The Proposed Action would create a minor, temporary beneficial impact on the local economy. There would be no long-term impacts on the local economy.

#### 4.1.3 Environmental Justice

On February 11, 1994, President Clinton signed EO 12898, entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." This EO requires that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations..." (Subsection 1-101). If such effects are identified, appropriate mitigation measures must be implemented.

In Highlands Borough, the closest town to the Station, 14.1 percent of individuals live below the poverty level, compared to 6.5 percent in Monmouth County. The percentage of minority individuals in Highlands Borough is 7 percent compared to 17.4 percent in Monmouth County (USCB 2013). Because the impoverished and minority percentages of the Highlands Borough population are each less than 50 percent overall, and are not meaningfully higher than the reference populations of Monmouth County, Highlands Borough is not considered a low-income or minority population as defined by CEQ regulations (CEQ 1997).

No Action Alternative – Under the No Action Alternative, there would be no impact on low-income or minority populations.

Proposed Action – No individuals, including those from low-income or minority communities, would be displaced by the Proposed Action, nor will traffic, noise, and air quality impacts disproportionately affect low-income or minority communities. There would be no disproportionate impacts to low-income or minority populations under the Proposed Action. All populations would benefit from improved efficiency and resilience of USCG operations after storms.

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#### 4.1.4 Transportation

Station Sandy Hook is accessed via Hartshorne Drive, which extends along the Sandy Hook peninsula and is classified by the New Jersey Department of Transportation (NJDOT) as an urban local street. Hartshorne Drive is used primarily by USCG personnel and visitors to Gateway National Recreation Area. Route 35 is approximately 4 miles away from the Station on the mainland, provides access to Hartshorne Drive, and is considered an urban principal arterial road (NJDOT 2004).

No Action Alternative – Under the No Action Alternative, because no construction would occur, there would be no impact on traffic flow on or near the Station.

Proposed Action – During demolition and construction, there would be minor temporary adverse impacts on traffic flow at the Station and along Hartshorne Drive due to additional construction-related vehicles accessing the Station (e.g., haul trucks, construction worker vehicles, and heavy equipment transport trucks). This additional traffic may result in minor temporary inconveniences to visitors to the Gateway National Recreation Area. However, per stipulations as identified in the 22 July 2014 National Historic Preservation Act Section 106 Memorandum of Agreement (MOA, see Appendix E), USCG will create a mutually agreed upon traffic and construction plan with NPS and integrate it into the Design-Build (D-B) construction plan to reduce impacts to Gateway National Recreation Area from construction activities. Routes of ingress and egress will be identified, work during weekends of peak tourist season will be forbidden, and hauling restrictions will be employed.

Impacts to traffic flow on Route 35 would be negligible because it has the capacity to accommodate the additional construction traffic without congestion. No long-term impacts on traffic would result from the Proposed Action.

## 4.2 Physical Environment

### 4.2.1 Geology and Soils

The Station lies in the Outer Lowland portion of the Atlantic Coastal Plain physiographic province (USGS 2013). The region is underlain by layers of sand and gravels that gently dip seaward. The Station topography is relatively flat with surface elevations varying between about 6 feet to 11 feet North American Vertical Datum of 1988 (NAVD88). In general, elevations across the majority of the Station vary between 6 and 9 feet NAVD88. The geologic formation on the project site is the recent Beach and Nearshore Marine Sand and is generally found to consist of very pale brown to light gray sand and pebble gravel. The bedrock underlying the site is known as the Englishtown formation of the Upper Cretaceous period, which consists of fine to coarse-grained quartz sand with thin to thick beds of clay (NJDEP 2013a).

Soils at the Station in the areas where the Proposed Action would occur are mapped as udorthents, 0-8 percent slopes, which is a sandy, poorly developed soil (NRCS 2013). Soils in the areas where the Proposed Action would occur have been previously disturbed and may contain a layer of fill at the surface.

Subsurface exploration at the site included 12 land borings and 2 marine borings to analyze conditions and support foundation design for the project. Borings were advanced to an estimated depth of 77 feet below ground surface for land borings or below the mud line elevation for marine borings. No bedrock was encountered in any of the borings. Geotechnical borings were

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backfilled with controlled, clean, engineered fill. General soil properties of soil layers encountered consisted of (in order of descending elevation), fill materials and granular deposit (USCG 2014b). The Farmland Protection Policy Act (FPPA) states that federal agencies must "minimize the extent to which federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses..." Soils that are already committed to urban development are not considered prime or unique farmland (7 CFR Part 658.2); therefore, because the Station is developed and it is not used for agriculture, the FPPA does not apply.

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts on geology or soils.

Proposed Action – Under the Proposed Action, no impacts to geology would occur because construction activities would not be deep enough to affect geological resources. Construction activities would disturb approximately 18 acres of soils at the Station. Discharges to surface water, including stormwater runoff from construction activities, is regulated under Section 402 of the Clean Water Act (CWA), with implementation by authorized States through the National Pollutant Discharge Elimination System (NPDES) permit program.

Because the land-based construction limits meet the NPDES permit requirement threshold of 1 acre, a State NPDES (NJPDES in New Jersey) general permit for construction activity from the NJDEP Division of Water Quality, Bureau of Nonpoint Pollution Control would be required. The D-B contractor specifications state that the contractor must obtain a NJPDES permit prior to construction. The D-B specifications also require implementation of appropriate erosion and sediment control best management practices (BMPs) during construction.

Maintenance dredging of the boat basin would remove approximately 12,423 cubic yards of material that is more than 90% sand and contains no contaminants (USCG 2014a). Disposal options for the dredged material include using it as fill material for construction activities on the Station or trucking it off-site for proper reuse or disposal. The D-B specifications require implementation of appropriate erosion and sediment control BMPs during dredging activities.

#### 4.2.2 Air Quality

The Environmental Protection Agency (EPA), in accordance with the Clean Air Act, as amended in 1990, has set National Ambient Air Quality Standards (NAAQS). The NAAQS are the primary guidelines used to measure air quality in regions or basins with respect to ozone, carbon monoxide, particulate matter less than 10 microns and less than 2.5 microns, nitrogen oxides, sulfur dioxide, and lead. Areas that cannot attain compliance with the NAAQS are designated as non-attainment, while those areas that meet the NAAQS are designated as attainment. Areas that were previously in non-attainment and are redesignated to attainment are known as maintenance areas (EPA 2013). According to the EPA, Monmouth County is in marginal non-attainment for ozone and is a maintenance area for particulate matter less than 2.5 microns (NJDEP 2013b). NJDEP has its own State Implementation Plan for air quality and has been delegated the authority to implement and enforce emission standards for criteria and hazardous air pollutants (NJDEP 2013c).

There is scientific consensus that some human activities, such as fuel combustion, are causing changes in Earth's weather patterns, climate, and the atmosphere chemical composition through the creation of greenhouse gases (GHGs). GHGs include water vapor, carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons). In 2007, New Jersey enacted the *Global Warming*

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*Response Act* which requires a statewide reduction in GHG emissions to 1990 levels by 2020 and a further reduction of 80 percent below 2006 levels by 2050 (NJDEP 2012b).

The Coast Guard requested project review from NJDEP in a letter dated October 21, 2013.

No Action Alternative – Current operation of vehicles, vessels, and stationary fuel-burning equipment as part of USCG activities would continue under the No Action Alternative with no impacts on air quality.

Proposed Action – Under the Proposed Action, operation of construction equipment would cause temporary additional short-term and localized effects on air quality from point and fugitive emission sources. Because no change in the number of vehicles and vessels operated at the Station post-construction will occur, there would be no changes to air quality from mobile source impacts; therefore the Proposed Action would have no impacts on air quality.

Existing stationary sources indicate that comfort heat and cooling in the proposed SAFR and MMB will likely be provided by electric units, which do not affect air quality. In the proposed BMF, comfort heat will likely be provided by oil-fired units. New or modified oil-fired equipment, such as boilers, may be subject to permit issuance by NJDEP, depending on the size of the new or modified unit. It is anticipated that overall emission contributions from new or modified oil-fired equipment would be negligible; therefore, the Proposed Action would have no adverse impacts on air quality.

Because no changes in the number of vehicles and vessels operated on site post-construction and minimal changes to stationary sources are anticipated, climate change contributions would be minimal and the Proposed Action would have no adverse impact on climate change.

In a letter dated December 18, 2013 (Appendix C), the NJDEP Office of Permit Coordination and Environmental Review (OPCER) stated that a general conformity applicability analysis and possibly a conformity determination will be required in accordance with the EPA's Federal General Conformity regulation at 40 CFR Part 93, Subpart B, Determining Conformity of General Federal Actions to State or Federal Implementation Plans. For Federal or federally funded actions proposed in a non-attainment or maintenance area, the General Conformity Rule requires a determination of whether the action interferes with State plans to meet or maintain the NAAQs.

Because the proposed project is a Federal action in a non-attainment and maintenance area, the Coast Guard will require the construction contractor to complete a general conformity applicability analysis prior to beginning construction to ensure that the project meets the NAAQS; this requirement has been included in the D-B contractor specifications. If the conformity applicability analysis determines that the emissions are not exempt or above the minimum conformity thresholds (specified in 40 CFR 93.153 or NJDEP regulations), then the construction contractor would be required to complete a conformity determination.

In a letter dated September 5, 2014, the NJDEP Bureau of Air Quality Planning stated that it would not be submitting any comments on the draft EA (Appendix G).

#### 4.2.3 Noise

Noise is generally defined as unwanted sound. Sound is most commonly measured in decibels (dB) on the A-weighted scale, which is the scale most similar to the range of sounds that the human ear can hear. The Day-Night Average Sound Level (DNL) is an average measure of

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sound. The DNL descriptor is accepted by Federal agencies as a standard for estimating sound impacts and establishing guidelines for compatible land uses. EPA guidelines, and those of many other Federal agencies, state that outdoor sound levels in excess of 55 dB DNL are "normally unacceptable" for noise-sensitive land uses including residences, schools, or hospitals (EPA, 1974).

Sounds at the Station are typical of an urban environment (e.g., vehicles, voices, heating, ventilation, and air conditioning units) and also include boat noise. Ten USCG personnel currently live in Station housing and additional USCG personnel stay overnight at the Station while on duty.

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts on noise levels.

Proposed Action – Under the Proposed Action, minor and short-term increases in noise levels would occur during the construction period. Reconstructing the piers may require pile driving that produces loud noise and may be heard up to 0.5 mile away; however, the noise would be intermittent and short-term. Construction noise would affect Station personnel and visitors and may also be audible to visitors to the adjacent Gateway National Recreation Area. To reduce noise level impacts, especially to personnel staying at the Station overnight or living in Station housing, construction activities would take place during normal business hours. Equipment and machinery used at the construction sites would meet all local, State, and Federal noise regulations.

The Proposed Action would have short-term, minor impacts on noise levels during the construction period, but would have no long-term impacts on noise levels.

#### 4.2.4 Hazardous Materials/Hazardous Waste

The Station has a Spill Prevention, Control and Countermeasures (SPCC) Plan that includes procedures for hazardous materials management and outlines emergency procedures in the event of a hazardous waste spill or incident. The SPCC Plan includes BMPs and standard operating procedures that Station personnel follow to reduce the chances accidental releases of hazardous materials. All hazardous materials and waste generated by the Coast Guard are transported to and disposed of at a permitted facility.

On December 5, 2012, approximately 200 gallons of diesel fuel were released from an aboveground storage tank associated with an emergency generator adjacent to the existing Boathouse. The release was caused by a malfunction in the automatic fill system and the diesel fuel flowed out of the generator onto the soil surrounding the concrete tank pad on which the generator sits. Absorbent material was placed on the affected area; the absorbent material and soil were hand-excavated from the area immediately surrounding and slightly beneath the concrete pad to depths ranging from approximately 12-18 inches. The faulty aboveground storage tank has since been replaced (McCabe personal communication).

The NJDEP was notified of the release on March 22, 2013. Monitoring wells were installed and soil and groundwater samples were collected for laboratory analysis. On May 24, 2013, NJDEP was notified that light non-aqueous phase liquid (LNAPL) was present on the site. Initial LNAPL recovery activities were conducted in June 2013. Recovery wells were installed, soil and groundwater samples were collected for laboratory analysis, a high vacuum extraction event was conducted on the recovery wells, and absorbent socks were deployed in the recovery wells. The

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results of the field investigations to date indicate that the contamination is localized within the immediate vicinity of the concrete tank pad and, as of the last monitoring event in 2013, has not migrated offsite. The volatile organic compound plume in groundwater is localized and groundwater adjacent to the building was not affected. The Remedial Investigation Work Plan outlines plans for further monitoring and remediation activities until the site is officially released by NJDEP (Watermark 2013a, 2013b, 2014).

No Action Alternative – Under the No Action Alternative, waste streams generated by the Station would continue to be handled and disposed of in compliance with local, State, and Federal regulations.

Proposed Action – No changes in the use or disposal of hazardous materials related to Station operations would occur as a result of the Proposed Action. Construction activities would include the use and generation of hazardous materials (e.g., solvents, hydraulic fluid, oil, and antifreeze). The Coast Guard will determine specific hazardous materials that may be present or stored in the facilities/buildings to be demolished (e.g., lead-based paint, asbestos-containing materials, solvents, degreasers) and whether any above-ground or underground storage tanks are present within the areas affected by the Proposed Action.

The contamination from the accidental fuel release adjacent to the Boathouse is contained within the immediate area of the concrete tank pad. Standard procedures to avoid exposure of personnel to contaminated soil in the immediate area around the concrete tank pad and BMPs to prevent runoff that may contain contaminated material will be required for construction activities.

In accordance with NJDEP regulations (NJDEP 1997), the boat basin sediments were sampled and analyzed to determine proper reuse or disposal options for the dredged material. Samples were collected from five locations to provide representative information on the volume, potential contamination, grain size, total organic carbon, and percent moisture of the sediments to be dredged. The sampling and analysis found that the sediments proposed for dredging are greater than 90 percent sand and are not contaminated (USCG 2014a).

Any hazardous materials discovered, generated, or used during demolition and construction would be disposed and handled in accordance with applicable local, State, and Federal regulations. With implementation of safety measures and proper procedures for the handling, storage, and disposal of hazardous materials and wastes during demolition and construction, no adverse impacts are anticipated.

## **4.3 Natural Environment**

### **4.3.1 Flora and Fauna**

Gateway National Recreation Area surrounds the Station and supports a wide variety of coastal plant and wildlife species. More than 325 different bird species have been observed in Gateway National Recreation Area, many of which stop over during migration or are summer residents (NPS 2013b).

Most of Station Sandy Hook is developed. Habitats include mowed lawns, scattered areas of scrub/shrub vegetation, open spaces with coastal vegetation, and beaches. Common wildlife species in the more developed areas of the Station include squirrels, rabbits, raccoon, opossum, songbirds, and herptiles; crabs, insects, shore birds, and plant species adapted for more saline environments are found in the beach areas.

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Aquatic biota such as barnacles and a variety of fish species are found in the marine environment surrounding the Station. The benthic (bottom-dwelling) ecosystem in the boat basin and surrounding underwater area is populated by organisms commonly found on muddy, sandy bottoms including invertebrates such as clams and other shellfish, crustaceans (e.g., crabs and shrimp), annelids (e.g., worms), and echinoderms (e.g., starfish). There is no submerged aquatic vegetation in the shallow marine environment within or surrounding the boat basin. The existing underwater environment in the vicinity of the Station experiences frequent noise and physical disturbance from boat traffic.

On October 21, 2013, the Coast Guard submitted a letter requesting project review to NJDEP.

No Action Alternative – Under the No Action Alternative, there would be no impacts on flora and fauna because no construction would occur.

Proposed Action – Activities under the Proposed Action would occur in developed areas and no impacts on flora and fauna would occur, although resident wildlife would be subject to construction noise.

The 90-foot, self-supported communications tower to be installed at the northwest corner of the new MMB is not likely to affect migratory birds. Bird collisions with towers are most likely to occur with lighted guy-wired towers taller than 199 feet above ground level. In its Interim Guidelines For Recommendations On Communications Tower Siting, Construction, Operation, and Decommissioning, USFWS recommends that new towers not be more than 199 feet above ground level and not include guy wires (USFWS 2000).

Temporary direct impacts on the marine environment would occur during reconstruction of the waterfront and include physical disturbances such as increases in turbidity and waves created by pile drivers, and noise from construction activities. Since there is already a human presence in the area and post-construction Station operations would be the same as existing conditions, no long-term impacts on fish or aquatic biota would result from the Proposed Action. The Coast Guard would implement erosion and sediment control measures to minimize sediment transported into marine waters; implement spill prevention and control measures to minimize potential for and impacts of a spill of pollutants such as fuel; and minimize the time working in the water to the maximum extent practicable. The Coast Guard would also implement erosion and sediment controls on land to minimize sediment reaching the water.

Pile driving may cause acoustic impacts on fish and aquatic biota. The extent of acoustic impacts would depend on the depth of the water, the size of the piles, and the type of hammer to be used, which will be determined by the D-B contractor. If the steel pipe piles will exceed 24 inches in diameter, NMFS may request that a wood cushion block be used to absorb sound energy and attenuate underwater noise (Marrone, personal communication). In its letter dated August 26, 2014, NMFS reiterated this request (Appendix G). This mitigation measure, if needed, will be incorporated into the D-B contractor specifications. However, given the limited extent of in-water project area within an active USCG facility, the impact to marine fauna is expected to be temporary and negligible.

Disruption of the benthic environment during demolition, repair, and reconstruction of waterfront facilities, and maintenance dredging of the boat basin would result in temporary impacts on species that are unable to swim away, and would also result in temporary adverse impacts on habitat quality due to increases in turbidity. Benthic species would recolonize the

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area from adjacent undisturbed area after the project is completed; therefore, no long-term impacts are anticipated. Temporary direct impacts on marine species would occur from underwater noise during demolition, repair, and construction activities.

The options for disposal of dredged materials (using it as fill material for construction activities on the Station or trucking it off-site) would have no impact on flora or fauna.

The Proposed Action would have short-term, minor impacts on aquatic resources and no impact on terrestrial species.

In a letter dated September 5, 2014, the NJDEP Division of Fish and Wildlife (DFW) Endangered and Non-Game Species Program stated that if demolition will occur during shorebird nesting season and if NPS staff determines there is a disturbance to nesting shorebirds, the Coast Guard shall have a contingency mechanism to address the issue (Appendix G). With the exception of the removal of a beached concrete dock on the southernmost tip of the long beach to the west of the boat basin, most of the project activities will occur in the boat basin or further inland, not on or near the beach; therefore, no impacts to nesting shorebirds are anticipated. The Coast Guard will have a qualified biologist monitor removal of the beached concrete dock to avoid any potential adverse effects to nesting shorebirds. This measure has been incorporated into the D-B contractor specifications.

#### 4.3.2 Floodplains

EO 11988 (Floodplain Management) requires that Federal agencies avoid direct or indirect support of development in the 100-year floodplain whenever there is a practicable alternative. After Hurricane SANDY, the Federal Emergency Management Agency Region 2 updated flood maps for several counties in New Jersey including Monmouth County; the updated map for the Station shows all areas of the Proposed Action are in the 100-year and 500-year floodplain. The waterfront/boat basin area is in zone VE (coastal high hazard area) with a flood elevation of 16 feet above mean sea level (amsl), while all existing facilities are in zone AE (areas subject to storm surge flooding from the 1 percent annual chance coastal flood) with flood elevations between 11 and 13 feet amsl (FEMA 2013).

No Action Alternative – There would be no impacts on floodplains under the No Action Alternative. Station facilities would continue to be flooded during major storms because the first floor elevations of the existing buildings are below the 100-year and 500-year flood elevations.

Proposed Action – Areas included in the Proposed Action are located entirely within the 100-year and 500-year floodplains; therefore, no practicable alternatives to work in the floodplain exist. Station buildings and operations need to be in close proximity to the waterfront, which makes construction in the floodplain unavoidable. New buildings would be constructed to withstand the 500-year flood. The functionality of the floodplain at the Station would not be changed or reduced by the Proposed Action.

EO 11988 requires public review and completion of the Eight-Step Planning Process for Floodplains and Wetlands to identify, minimize, and mitigate floodplain impacts for federally funded and authorized construction in the 100-year floodplain. Because the Proposed Action is located within the 100-year floodplain (as well as the 500-year), this EA serves as the Coast Guard's means of public review and includes the Eight-Step Planning Process (Appendix B) as required by EO 11988.

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The Proposed Action would have no impacts on the 100-year or 500-year floodplains.

#### 4.3.3 Coastal Zone

The Coastal Zone Management Act enables coastal states to designate state coastal zone boundaries and develop coastal management programs to improve protection of sensitive shoreline resources and guide sustainable use of coastal areas. The New Jersey Coastal Management Program (CMP) is administered by NJDEP. Station Sandy Hook is in the CMP-designated coastal zone (NJDEP 2013d). The USCG requested project review from NJDEP in a letter dated October 21, 2013.

No Action Alternative – Under the No Action Alternative, there would be no impacts on coastal zone resources managed under the New Jersey CMP because no construction would occur.

Proposed Action – In a letter dated December 18, 2013, the NJDEP OPCER stated that the project activities would require a Waterfront Development Permit (in-water activities) and a Coastal Area Facility Review Act permit (upland activities), or a Federal Consistency Determination (Appendix C).

The Coast Guard has evaluated the proposed project for consistency with New Jersey's Coastal policies and determined that the Proposed Action, with implementation of avoidance measures and appropriate agency coordination, is consistent with NJDEP regulations. On January 10, 2014, the Coast Guard submitted a consistency determination to the NJDEP Division of Land Use Regulation (Appendix C). NJDEP issued its conditional concurrence with the consistency determination for the project in a letter dated March 4, 2014 (Appendix C). The conditional consistency determination includes all project activities and a Water Quality Certificate (WQC) for those activities, with the exception of the maintenance dredging in the boat basin, until a detailed dredging plan can be provided by the D-B contractor.

A closed clamshell bucket dredge will be used for all mechanical dredging and the dredge will be operated to maximize the bite of the clamshell and reduce the amount of free water in the dredged material and the number of bites required to complete the dredging. The clamshell will be lifted slowly through the water column, generally at a rate of 2 feet per second or less. All dredged material will be placed in a barge of solid hull construction or sealed with concrete to prevent spillage of material. The dredged material will be used as fill material for construction activities on the Station or trucked off-site for reuse or disposal. In a letter dated September 5, 2014, the NJDEP DLUR Office of Dredging and Sediment Technology stated that the Coast Guard will need to provide the location where the dredge material will be placed; if the dredged material will be taken off-site, a letter from the receiving site accepting the material must be submitted to DLUR for approval (Appendix G). This requirement is included in the D-B contractor specifications. Appropriate best management practices will be used to minimize sedimentation and maintain water quality. Periodic maintenance dredging is regularly conducted in the boat basin, with the last dredging occurring in 2007/2008; the NJDEP has previously determined that maintenance dredging at Station Sandy Hook is consistent with the NJDEP Rules on Coastal Zone Management. Once the Coast Guard provides additional information on the proposed maintenance dredging and disposal that complies with NJDEP's Coastal Zone Management Rules, NJDEP will modify the permit to incorporate the dredging.

The Proposed Action would have no impact on coastal zone resources.

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#### 4.3.4 Waters of the U.S., including Wetlands

The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged and fill material into waters of the U.S., including wetlands, pursuant to Section 404 of the CWA. Projects that require a Federal Section 404 permit also require a State Water Quality Certification under Section 401 of the CWA. EO 11990 (Protection of Wetlands) requires Federal agencies to avoid, to the extent possible, adverse impacts to wetlands. Discharges to surface water, including stormwater runoff from construction activities, is regulated under the NPDES permit program for construction projects that disturb more than 1 acre of soils.

The Station waterfront along Sandy Hook Bay is considered waters of the U.S. (WOUS). The waterfront is primarily lined with beaches except where the Station docks have been constructed. The shallow marine waters are classified as estuarine and marine wetlands (USFWS 2013a). During a site visit on October 4, 2013, a URS Group, Inc. (URS) biologist and environmental scientist confirmed that there are no surface water features, including wetlands, in the footprints of or close to the Proposed Action areas on land.

On October 21, 2013, the Coast Guard submitted a letter requesting project review to the USACE New York District. No response has been received to date.

No Action Alternative – The No Action Alternative would not affect WOUS or wetlands because no construction would occur.

Proposed Action – Under the Proposed Action, minor impacts to WOUS would result from reconstruction of waterfront facilities and boat basin dredging, and would also result in increased, localized turbidity and minor, temporary adverse impacts on water quality in Sandy Hook Bay. The Coast Guard would implement erosion and sediment control measures to minimize sediment transported into marine waters; implement spill prevention and control measures to minimize potential for and impacts of a spill of pollutants such as fuel into marine waters; and minimize the time working in the water as much as possible.

The Coast Guard would obtain the necessary permits for work in WOUS; this work would likely be authorized under the USACE Nationwide Permit (NWP) program, specifically NWP#3 for repair of existing structures and NWP#35 for maintenance dredging of the existing boat basin. The D-B specifications require the contractor to obtain the applicable permits prior to construction. Work under the NWPs would be subject to Department of the Army general conditions, as applicable, as well as any regional or case-specific conditions imposed by the USACE.

NWP#35 prohibits dredge disposal in WOUS. Options under consideration for disposal of the dredged material include using it as fill material for construction activities on the Station or trucking it off-site for proper reuse or disposal. Neither of these disposal options would affect WOUS, including wetlands. A CWA Section 401 WQC from the NJDEP Division of Land Use Regulation (DLUR) would also be required for the dredging activities.

Because the land-based construction limits meet the NPDES permit requirement threshold of 1 acre, a NJPDES general permit for construction activity would also be obtained from NJDEP Division of Water Quality, Bureau of Nonpoint Pollution Control (see Section 4.2.1, Geology and Soils).

A conditional WQC was authorized as part of the Coastal Zone Consistency Determination issued by NJDEP DLUR in a letter dated March 4, 2014 (Appendix C). The WQC is subject to these conditions:

- All in-water work is prohibited from January 1 through May 31 in any given year to protect winter flounder.
- All materials and equipment shall be staged on existing paved/developed areas. The beach north of the boat basin shall not be used for staging or accessing the boat basin.
- No dredging of the boat basin shall occur until additional information is provided to NJDEP showing that the dredging portion of the project complies with NJDEP's Coastal Zone Management Rules and NJDEP issues a modification to the WQC.

#### 4.3.5 Essential Fish Habitat and Other NOAA Trust Resources

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), established procedures designed to identify, conserve, and enhance Essential Fish Habitat (EFH), those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity, for those species regulated under a Federal Fisheries Management Plan. EFH guidelines require Federal agencies to prepare EFH Assessments to evaluate the effects of proposed actions on EFH and Federally managed fish species. An EFH Assessment details effects to EFH and offers ways to minimize adverse effects of a proposed action.

On October 21, 2013, the Coast Guard requested project review from the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS). The Habitat Conservation Division responded in an email dated December 2, 2013; the Protected Resources Division responded in a letter dated December 19, 2013 (Appendix C). As requested by NMFS, the EFH Assessment has been incorporated into the EA. The EFH Assessment has been prepared pursuant to the MSFCMA implementing regulations (50 CFR Part 600) and consists of three sections: Summary of EFH Designations; EFH Assessment Worksheet for Federal Agencies; and EFH Assessment Impact Determination.

#### **Summary of Essential Fish Habitat Designation**

10' x 10' Square Coordinates:

Boundary	North	East	South	West
Coordinate	40°30.0'	74° 00.0'	40° 20.0'	74° 10.0'

Square Description (i.e., habitat, landmarks, coastline markers): The waters within the square within southeastern Raritan Bay including Sandy Hook Bay around Sandy Hook, NJ, and northeast New Jersey from Pt. Comfort north of Keansburg, NJ, southeast to Navesink Park, NJ. These waters are all north of the following: Port Monmouth, NJ, Atlantic Highlands, NJ, western Rumson Neck. Also, these waters are within the western part of the Navesink River, the northwest 1/4 of the Shrewsbury River, and surround Rumson, NJ, Fair Haven, NJ, including

those waters in Little Silver Creek east of Little Silver, NJ, and Claypit Creek southeast of Navesink, NJ.

Life History Stages for Managed Species with EFH Designations at Station Sandy Hook				
Species	Eggs	Larvae	Juveniles	Adults
Atlantic cod ( <i>Gadus morhua</i> )				
haddock ( <i>Melanogrammus aeglefinus</i> )				
pollock ( <i>Pollachius virens</i> )				
whiting ( <i>Merluccius bilinearis</i> )				
offshore hake ( <i>Merluccius albidus</i> )				
red hake ( <i>Urophycis chuss</i> )		X	X	X
white hake ( <i>Urophycis tenuis</i> )				
redfish ( <i>Sebastes fasciatus</i> )	N/A			
witch flounder ( <i>Glyptocephalus cynoglossus</i> )				
winter flounder ( <i>Pseudopleuronectes americanus</i> )	X	X	X	X
yellowtail flounder ( <i>Limanda ferruginea</i> )				
windowpane flounder ( <i>Scophthalmus aquosus</i> )	X	X	X	X
American plaice ( <i>Hippoglossoides platessoides</i> )				
ocean pout ( <i>Macrozoarces americanus</i> )				
Atlantic halibut ( <i>Hippoglossus hippoglossus</i> )				
Atlantic sea scallop ( <i>Placopecten magellanicus</i> )				
Atlantic sea herring ( <i>Clupea harengus</i> )		X	X	X
monkfish ( <i>Lophius americanus</i> )				
bluefish ( <i>Pomatomus saltatrix</i> )			X	X
long finned squid ( <i>Loligo pealeii</i> )	N/A	N/A		
short finned squid ( <i>Illex illecebrosus</i> )	N/A	N/A		
Atlantic butterfish ( <i>Peprilus triacanthus</i> )		X	X	X
Atlantic mackerel ( <i>Scomber scombrus</i> )			X	X
summer flounder ( <i>Paralichthys dentatus</i> )		X	X	X
scup ( <i>Stenotomus chrysops</i> )	N/A	N/A	X	X
black sea bass ( <i>Centropristis striata</i> )	N/A		X	X

Life History Stages for Managed Species with EFH Designations at Station Sandy Hook				
Species	Eggs	Larvae	Juveniles	Adults
surf clam ( <i>Spisula solidissima</i> )	N/A	N/A		
ocean quahog ( <i>Artica islandica</i> )	N/A	N/A		
spiny dogfish ( <i>Squalus acanthias</i> )	N/A	N/A		
tilefish ( <i>Lopholatilus chamaeleonticeps</i> )				
king mackerel ( <i>Scomberomorus cavalla</i> )	X	X	X	X
Spanish mackerel ( <i>Scomberomorus maculatus</i> )	X	X	X	X
cobia ( <i>Rachycentron canadum</i> )	X	X	X	X
dusky shark ( <i>Carcharhinus obscurus</i> )		X		
sandbar shark ( <i>Carcharhinus plumbeus</i> )		X	X	X
Clearnose skate ( <i>Raja eglanteria</i> )			X	X
Littlenose skate ( <i>Raja erinacea</i> )			X	X
Winter skate ( <i>Leucoraja ocellata</i> )			X	X
<p>Summary of EFH designation obtained from <a href="http://www.nero.noaa.gov/hcd/index2a.htm">http://www.nero.noaa.gov/hcd/index2a.htm</a></p> <ul style="list-style-type: none"> <li>• X = EFH has been designated within the square for a given species and life stage</li> <li>• N/A = Either there is no data available on the designated life stages for that species or those life stages are not present in the species' reproductive cycle</li> <li>• HAPC= Habitat Area of Particular Concern. An EFH that is judged to be particularly important to the long-term productivity of populations of one or more managed species, or partially vulnerable to degradation, and should be provided additional focus for conservation efforts</li> </ul>				

**EFH Assessment Worksheet for Federal Agencies (Modified 08/04)**

**Project Name:** Station Sandy Hook Recapitalization Project

**Date:** August 2014

**Project No.:** 5090

**Location:** USCG's Station Sandy Hook, New Jersey is located on the northwest end of Sandy Hook peninsula in Monmouth County, New Jersey. The entire Sandy Hook peninsula is part of the National Park Service (NPS) Gateway National Recreational Area. Station coordinates are: N 40° 28' W 74° 0'.

**Preparer:** URS Group, Inc. (on behalf of USCG)

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**Activities:** Most of the Station improvements consist of new building construction and other activities which will be conducted in upland areas and will not affect fisheries habitat (Figure 2, Appendix A). Two aspects of the planned improvements at the Station involve in-water/shoreline work:

- Repair and rebuild structures at the waterfront including repairs to or replacement of the wharf, piers, breakwaters, floating docks, groin, utilities, and boat ramp to return them to pre-Hurricane SANDY conditions. A beached concrete floating dock and concrete pad will also be removed. Project elements are shown on Figure 2 in Appendix A.
- Dredge the boat basin to maintenance depths only. The existing boat basin will be dredged to remove recent and accumulated sands and sediments. Periodic maintenance dredging is regularly conducted in the boat basin, with the last dredging occurring in 2007/2008. The NJDEP has previously determined that waterfront repairs and maintenance dredging at Station Sandy Hook are consistent with the Rules on Coastal Zone Management and New Jersey's federally approved Coastal Management Program.

A closed clamshell bucket dredge will be used for all mechanical dredging and the dredge will be operated to maximize the bite of the clamshell and reduce the amount of free water in the dredged material and the number of bites required to complete the dredging. The clamshell will be lifted slowly through the water column, generally at a rate of 2 feet per second or less. All dredged material will be placed in a barge of solid hull construction or sealed with concrete to prevent spillage of material. Options under consideration for disposal of the dredged material include using it as fill material for construction activities on the Station or trucking it off-site. Appropriate best management practices will be used to minimize sedimentation and maintain water quality.

All dredging will be within the existing boat basin and will be to maintenance depths only, removing up to a maximum of 12,423 cubic yards of material which is greater than 90% sand and contains no contaminants (USCG 2014a). The maintenance dredging will return the water depths in the boat basin to design depths, which range from 10 to 14 feet deep at mean lower low water (MLLW) and are not deep enough for EFH species to regularly inhabit. Also, populations of the fish species listed in the EFH Assessment Worksheet generally do not occur this close to shore or around and below the docks. All construction materials which may come into contact with the water, including new piles, will be free of toxic materials (no creosote-coated or pressure-treated lumber will be used).

Appropriate best management practices, including soil erosion and sediment control measures (e.g., silt fences), will be used at all times to minimize sedimentation and maintain water quality during all construction activities. Unset concrete will not come into contact with surface waters. Vibratory hammers will not be used for driving of foundation piles due to the presence of loose granular deposits and high water table, which may increase the likelihood of sediment liquefaction.

**Existing Project Area Environment:** Station Sandy Hook is located on the northwest end of Sandy Hook peninsula in Monmouth County. The entire Sandy Hook peninsula is part of the NPS Gateway National Recreational Area; all land access to the Station is through NPS property.

The shallow marine waters are classified as estuarine and marine wetlands (USFWS 2013a). Water depths in the boat basin are maintained at 10 to 14 feet deep at mean lower low water. Sandy Hook Bay is within the seawater salinity zone, with salinity generally above 25 parts per trillion (ppt) (NOAA 1985); however, due to dynamic freshwater inputs from the Raritan River and the Hudson River/New York Bay complex and tidal flows, salinity can be quite variable. The Station is located in a Special Restricted Area as identified on the 2012 State of New Jersey Shellfish Growing Waters Classification Charts and is not subject to seasonal shellfish restrictions (NJDEP 2012c).

Existing structures at the Station include two wharfs, multiple breakwaters, and numerous floating docks. Much of the shoreline within the boat basin consists of timber bulkheads with some remnant steel sheet piling.

A description of the Station's geology and soils is provided in Section 4.2.1.

<b>1. INITIAL CONSIDERATIONS</b>		
<b>EFH Designations</b>	<b>Yes</b>	<b>No</b>
Is the action located in or adjacent to EFH designated for eggs?	X	
Is the action located in or adjacent to EFH designated for larvae?	X	
Is the action located in or adjacent to EFH designated for juveniles?	X	
Is the action located in or adjacent to EFH designated for adults?	X	
Is the action located in or adjacent to EFH designated for spawning adults?	X	
<b>If you answered no to all questions above, then EFH consultation is not required - go to Section 5. If you answered yes to any of the above questions proceed to Section 2 and complete remainder of the worksheet.</b>		

<b>2. SITE CHARACTERISTICS</b>	
<b>Site Characteristics</b>	<b>Description</b>
<b>Is the site intertidal, sub-tidal, or water column?</b>	The boat basin consists of subtidal areas and adjoins intertidal shallows and sand beaches at the shoreline. Intertidal and shallow subtidal mudflats and sandflats extend out an average of 1/4 mile offshore from the project area.
<b>What are the sediment characteristics?</b>	The sediments of Sandy Hook Bay are primarily sand. Based on prior maintenance dredging operations, sand substrate is anticipated in the project area.
<b>Is Habitat Area of Particular Concern (HAPC) designated at or near the site? If so what type, size, characteristics?</b>	No, there are no HAPCs designated at or near the site.

2. SITE CHARACTERISTICS	
Site Characteristics	Description
Is there submerged aquatic vegetation (SAV) at or adjacent to project site? If so describe the spatial extent.	No, there is no SAV at or adjacent to the project site.
What is typical salinity and temperature regime/range?	Sandy Hook Bay is within the seawater salinity zone, with salinity generally above 25 ppt (NOAA 1985).  Approximate temperature range (approximate): 35.6°F (January 2013) to 78.3°F (August 2013)
What is the normal frequency of site disturbance, both natural and man-made?	The existing underwater environment in the vicinity of the Station experiences frequent noise and physical disturbance from boat traffic. The project area has been dredged previously, most recently in 2007, and prior to that, in 1988, 1994 and 1999. Natural disturbances are infrequent, with normal littoral processes predominating and periodic extreme storm events.
What is the area of proposed impact (work footprint & far afield)?	The total basin footprint area is approximately 10,950 square feet. All dredging will be within the existing boat basin and will be to maintenance depths only, removing up to a maximum of 12,423 cubic yards of material which is greater than 90% sand and contains no contaminants (USCG 2014a).

3. DESCRIPTION OF IMPACTS			
Impacts	Y	N	Description
Nature and duration of activity(s)			<p>The proposed activities include:</p> <ul style="list-style-type: none"> <li>Repair and rebuild structures at the waterfront including repairs to or replacement of the wharf, piers, breakwaters, floating docks, groin, utilities and boat ramp to return them to pre-Hurricane SANDY conditions, with added resiliency. A beached concrete floating dock and a concrete pad will also be removed. These activities are expected to take approximately 4 to 6 months to complete.</li> <li>Dredge the boat basin to maintenance depths. Dredging will take approximately 2 months to complete.</li> </ul>

<b>3. DESCRIPTION OF IMPACTS</b>			
<b>Impacts</b>	<b>Y</b>	<b>N</b>	<b>Description</b>
<b>Will benthic community be disturbed?</b>	<b>X</b>		The benthic community within the dredge area will be displaced, with mortality of those species unable to relocate. Benthic species would recolonize the area from adjacent undisturbed areas after the project is completed. Recolonization within 18 months is anticipated. Impacts to the benthic community would be short-term and limited to the immediate area of disturbance.
<b>Will SAV be impacted?</b>		<b>X</b>	No, there is no SAV at this site.
<b>Will sediments be altered and/or sedimentation rates change?</b>		<b>X</b>	Sediments underlying the dredge material are expected to be consistent with material to be removed; no change in sediments is anticipated. The project will not result in changes to sedimentation rates.
<b>Will turbidity increase?</b>	<b>X</b>		Yes, turbidity will increase, but only for the duration of the dredging and construction activities. As sediments are expected to be primarily sand which settles quickly, turbidity increases are expected to be minimal. Demolition of existing waterfront facilities, dredging, and repair or new construction of waterfront facilities would result in increased localized turbidity and minor, temporary adverse impacts on water quality in the work area.  Because the post-dredge depth in the boat basin will minimize the re-suspension of sediments from propeller wash, there will be an overall decrease in turbidity during normal station operations.
<b>Will water depth change?</b>	<b>X</b>		Yes, the water depth will change as safe navigation depths are reestablished at depths authorized under maintenance dredging activities.
<b>Will contaminants be released into sediments or water column?</b>		<b>X</b>	No, the proposed activities are designed to avoid or minimize the release of contaminating substances. The sediments in the basin are 90% sand and contain no contaminants (USCG 2014a).
<b>Will tidal flow, currents or wave patterns be altered?</b>		<b>X</b>	No, there will be no alterations of tides, currents, or wave patterns.
<b>Will ambient salinity or temperature regime change?</b>		<b>X</b>	No, the work will not alter salinity or temperature.
<b>Will water quality be altered?</b>		<b>X</b>	No, water quality will be unaffected by the project activities.

4. EFH ASSESSMENT			
Functions and Values	Y	N	Describe habitat type, species and life stages to be adversely impacted
Will functions and values of EFH be impacted for:			
Spawning		X	No, with implementation of a seasonal restriction on dredging from January 1 to May 31, the temporary disturbance of the subtidal area will not have an identifiable adverse impact on EFH needed for spawning by any of the managed species that might occur in the project area.
Nursery		X	No, the proposed activities will not have an identifiable adverse impact on the functions and values provided by the project area's habitats.
Forage		X	No, the proposed activities' footprint will not have an identifiable adverse impact on habitats necessary for forage.
Shelter		X	No, the proposed activities will not diminish the habitat values, as it will restore the authorized depths in the project area.
Will impacts be temporary or permanent?			The impacts that may occur will be minor and temporary. No EFH will be permanently displaced or destroyed.
Will compensatory mitigation be used?		X	No compensatory mitigation is necessary, as there is no identifiable significant adverse impact to the designated EFHs within the project footprint.

5. DETERMINATION OF IMPACT		
		Federal Agency's EFH Determination
Overall degree of adverse effects on EFH (not including compensatory mitigation) will be: (check the appropriate statement)		There is no adverse effect on EFH EFH Consultation is not required
	X	The adverse effect on EFH is not substantial. This is a request for an abbreviated EFH consultation. This worksheet is being submitted to NMFS to satisfy the EFH Assessment requirement.
		The adverse effect on EFH is substantial. This is a request for an expanded EFH consultation. A detailed written EFH assessment will be submitted to NMFS expanding upon the impacts revealed in this worksheet.

<b>6. OTHER NOAA-TRUST RESOURCES IMPACT ASSESSMENT</b>	
<b>Species known to occur at site (list others that may apply)</b>	<b>Describe habitat impact type (i.e., physical, chemical, or biological disruption of spawning and/or egg development habitat, juvenile nursery and/or adult feeding or migration habitat).</b>
<b><i>For all fish and other species, see the table/discussions presented below.</i></b>	
Shortnose Sturgeon	Populations of federally endangered shortnose sturgeon ( <i>Acipenser brevirostrum</i> ) occur in New Jersey in the Delaware River from the lower bay upstream to at least Lambertville, New Jersey, and in the Hudson River from upper New York Harbor to the Troy Dam. The action area at Sandy Hook has never supported a historical population of shortnose sturgeon, and to date, no shortnose sturgeon have been observed in this system. Therefore, shortnose sturgeon are not anticipated to occur in the project area.
Atlantic Sturgeon	Populations of the federally endangered Atlantic sturgeon ( <i>Acipenser oxyrinchus oxyrinchus</i> ) occur in estuarine and marine waters along the U.S. Atlantic coast and may be present in the action area. The New York Bight, Chesapeake Bay, South Atlantic, and Carolina Distinct Population Segments (DPSs) of Atlantic sturgeon are endangered; the Gulf of Maine DPS is threatened. Individuals originating from any of these DPSs could occur in the project area. In a letter dated August 26, 2014, NMFS noted that a "hotspot" for wintering Atlantic sturgeon is located along the east coast of Sandy Hook. Atlantic sturgeon spawns in the Hudson River and then overwinters near Sandy Hook from November through March, although some sturgeon can still be found in this area during the winter and summer months (Appendix G). Because Atlantic sturgeon may occur in the action area, they could experience temporary effects from the project including increases in turbidity, loss of prey, and acoustic impacts from pile driving. However, given the limited extent of in-water work proposed within an active USCG facility, the impact on Atlantic sturgeon is expected to be temporary and negligible.
<b>Several listed species of whales occur seasonally in the waters off of New Jersey.</b>	
North Atlantic right whales	Federally endangered North Atlantic right whales ( <i>Eubalaena glacialis</i> ) are found off the coast of New Jersey from September 1 – March 31. However, due to the shallow depths and near shore location of the project site, these whales are extremely unlikely to occur in the action area, and therefore, would not be impacted by the project.
Humpback whales	Federally endangered humpback whales ( <i>Megaptera novaeangliae</i> ) are found off the coast of New Jersey from February- April and from September – November. Due to the shallow depths and near shore location of the project site, these whales are extremely unlikely to occur in the action area, and therefore, would not be impacted by the project.
Fin whales	Fin ( <i>Balaenoptera physalus</i> ) whales are seasonally present in waters off of New Jersey, but due to the shallow depths and near shore location of the project site, these whales are extremely unlikely to occur in the action area, and therefore, would not be impacted by the project.

<b>6. OTHER NOAA-TRUST RESOURCES IMPACT ASSESSMENT</b>	
<b>Species known to occur at site (list others that may apply)</b>	<b>Describe habitat impact type (i.e., physical, chemical, or biological disruption of spawning and/or egg development habitat, juvenile nursery and/or adult feeding or migration habitat).</b>
<b>Several species of threatened and endangered sea turtles occur seasonally in New Jersey waters, including many bays and harbors, during the warmer months, typically from May to mid-November. The sea turtles in nearby waters are typically small juveniles.</b>	
Loggerhead sea turtles	The most abundant species occurring in New Jersey waters is the federally threatened Northwest Atlantic Distinct Population Segment (DPS) of loggerhead ( <i>Caretta caretta</i> ). This species may occur in the action area for this project and could experience temporary effects including increased turbidity, loss of prey, and acoustic impacts from pile driving.
Kemp's Ridley sea turtle	The second most abundant species occurring in New Jersey waters is the federally endangered Kemp's Ridley ( <i>Lepidochelys kemp</i> ). This species may occur in the action area for this project and could experience temporary effects including increased turbidity, loss of prey, and acoustic impacts from pile driving.
Green sea turtle	The federally threatened green sea turtle ( <i>Chelonia mydas</i> ) may occur in nearby waters from June through October. Therefore, this species may occur in the action area for this project And could experience temporary effects including increased turbidity, loss of prey, and acoustic impacts from pile driving.
Leatherback sea turtle	The federally endangered leatherback sea turtle ( <i>Dermochelys coriacea</i> ) is not likely to occur in the action area because it is typically found in more offshore waters. Therefore, the project activities are not anticipated to affect leatherback sea turtles or their habitats.
Hard and soft clams	Waters adjoining Station Sandy Hook are classified as a Special Restricted Area for shellfish growing. These waters are condemned for shellfish harvesting, except with special permit from NJDEP; however, harvesting is prohibited in all marina and boat docking areas. Considering the small footprint of in-water work, any impact to shellfish habitat would be minimal and would not affect commercial populations.

There is no designated critical habitat for NOAA species within the project area (USFWS 2013d).

**EFH Assessment Impact Determination**

No Action Alternative – The No Action Alternative would not affect EFH because no construction would occur.

Proposed Action – The Coast Guard has determined that there will be no substantial adverse effect on EFH from the Proposed Action because any impacts will be temporary and negligible to minor. Temporary impacts on EFH may include increased turbidity, loss of prey, and acoustic impacts from pile driving.

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Construction activities will incorporate best management practices to comply with New Jersey's Surface Water Quality Standards, pursuant to Section 401 of the CWA. As part of its Coastal Zone Consistency Determination issued on March 4, 2014, NJDEP also imposed a seasonal restriction of January 1 to May 31 to protect winter flounder (Appendix C); in its response dated December 2, 2013, NMFS referenced the same restriction (Appendix C). In a letter dated September 5, 2014, the NJDEP Bureau of Marine Fisheries noted that it concurred with the EFH Assessment and reiterated this restriction (Appendix G), which has been incorporated into the D-B contractor specifications.

The extent of acoustic impacts would depend on the depth of the water, the diameter of the piles, and the type of hammer to be used, which will be determined by the D-B contractor. NMFS has stated that if the steel pipe piles for the bulkhead replacement will exceed 24 inches in diameter the sound levels start to near the injury threshold for sturgeon and sea turtles. If the steel pipe piles will exceed 24 inches in diameter, NMFS may request that a wood cushion block be used to absorb sound energy and attenuate underwater noise (Marrone, personal communication). In its letter dated August 26, 2014, NMFS reiterated this request (Appendix G). This mitigation measure, if needed, will be incorporated into the D-B contractor specifications.

In-water construction and dredging will displace the benthic community within the boat basin and may temporarily increase turbidity in the immediate vicinity. As the sediments are predominantly sand, the turbidity plume is expected to dissipate quickly and should not affect mobile aquatic species, which are expected to vacate the area. Options under consideration for disposal of the dredged material include using it as fill material for construction activities on the Station or trucking it off-site for reuse or disposal. The repair and rebuilding of structures at the waterfront would generate noise which could deter species from using the area; however, because this is an active marina, anthropogenic disturbance is typical and any impact to aquatic species would be negligible.

### **Other NOAA Trust Resources Impact Determination**

No Action Alternative – The No Action Alternative would not affect other NOAA trust resources because no construction would occur.

Proposed Action – The Coast Guard has made the following determinations regarding effects to other NOAA trust resources:

Shortnose sturgeon does not occur in the project area; therefore, the Coast Guard has determined that the Proposed Action will have no effect on shortnose sturgeon.

Individuals from several federally endangered Atlantic sturgeon DPSs may occur in the action area and could experience temporary effects from the project including increases in turbidity, loss of prey, and acoustic impacts from pile driving. The extent of acoustic impacts would depend on the depth of the water, the size of the piles, and the type of hammer to be used, which will be determined by the D-B contractor. If the steel pipe piles will exceed 24 inches in diameter, NMFS may request that a wood cushion block be used to absorb sound energy and attenuate underwater noise (Marrone, personal communication). In its letter dated August 26, 2014, NMFS reiterated this request (Appendix G). This mitigation measure, if needed, will be incorporated into the D-B contractor specifications. However, given the limited extent of in-water project area within an active USCG facility, the impact to Atlantic sturgeon is expected to

be temporary and negligible. Therefore, the Coast Guard has determined that the Proposed Action may affect, but is not likely to adversely affect Atlantic sturgeon.

North Atlantic right, humpback, and fin whales are unlikely to be found in the project area due to shallow water depths and the nearshore location of the project site. Therefore, the Coast Guard has determined that the Proposed Action will have no effect on listed whales. The Coast Guard will nevertheless include, as a standard specification in the D-B contract, the requirement that a marine species spotter be on-site during all in-water construction and dredging to ensure that, in the unlikely event that a whale enters the area, all construction activities would be halted until the animal swims out of the area.

Loggerhead, Kemp's Ridley, green, and leatherback sea turtles may be found in the project area. Therefore, the Coast Guard has determined that the Proposed Action may affect, but is not likely to adversely affect listed sea turtles. The Coast Guard will include, as a standard specification in the D-B contract, the requirement that a marine species spotter be on-site during all in-water construction and dredging to ensure that, in the event that a sea turtle enters the area, all construction activities would be halted until the animal swims out of the area.

Considering the small footprint of in-water work, any impact to shellfish habitat would be negligible and would not affect commercial populations. Therefore, the Coast Guard has determined that the Proposed Action will have no effect on hard and soft clams.

#### 4.3.6 Threatened and Endangered Species

The U.S. Fish and Wildlife Service (USFWS) lists federally threatened and endangered species that may occur in Monmouth County (Table 1; USFWS 2013b).

**Table 1. Federally Listed Species that May Occur in Monmouth County**

Common Name	Scientific Name	Status
Piping plover*	<i>Charadrius melodus</i>	Threatened
Roseate tern	<i>Sterna dougallii dougallii</i>	Endangered
Knieskern's beaked-rush	<i>Rhynchospora knieskernii</i>	Threatened
Swamp pink	<i>Helonias bullata</i>	Threatened
Seabeach amaranth*	<i>Amaranthus pumilus</i>	Threatened
Northeastern beach tiger beetle*	<i>Cicindela dorsalis dorsalis</i>	Threatened
Shortnose sturgeon**	<i>Acipenser brevirostrum</i>	Endangered
Atlantic sturgeon**	<i>Acipenser oxyrinchus</i>	Endangered
Loggerhead sea turtle**	<i>Caretta caretta</i>	Threatened
Kemp's Ridley sea turtle**	<i>Lepidochelys kempii</i>	Endangered
Leatherback sea turtle**	<i>Dermochelys coriacea</i>	Endangered
Green sea turtle**	<i>Chelonia mydas</i>	Threatened
Bog turtle	<i>Clemmys muhlenbergii</i>	Threatened
* A search of the USFWS Information, Planning, and Conservation System (USFWS 2013c) indicated that these species may exist at Station Sandy Hook.		
** These species are addressed in Section 4.3.5, Essential Fish Habitat and Other NOAA Trust Resources		

On October 21, 2013, the Coast Guard submitted letters requesting project review to NMFS and USFWS. This section addresses the protected terrestrial species identified in the USFWS response letter dated November 15, 2013 (Appendix C). The NMFS Protected Resources Division responded in a letter dated December 19, 2013 (Appendix C) identifying concerns with EFH and protected aquatic species under NMFS jurisdiction; these resources are addressed in Section 4.3.5, Essential Fish Habitat and Other NOAA Trust Resources.

On November 8, 2013, the Coast Guard submitted a data request form to the NJDEP Natural Heritage Program (NHP) to obtain NHP database information on protected species and ecological communities and the potential for state-listed species to occur on the Station and potentially be affected by the proposed recapitalization project. Based on the NHP database information provided in a letter from NHP dated November 19, 2013 (Appendix C), Table 2 lists state-listed species for which habitat may occur on the project site.

**Table 2. State-Listed Species Habitats that May Occur on the Project Site**

Common Name	Scientific Name	State Status	Habitat Type
Least tern	<i>Sterna antillarum</i>	Endangered	Foraging, Nesting
Osprey	<i>Pandion haliaetus</i>	Threatened	Foraging, Nesting
Piping plover	<i>Charadrius melodus</i>	Endangered	Nesting
Northeastern beach tiger beetle	<i>Cicindela dorsalis dorsalis</i>	Endangered	Occupied habitat
Black skimmer	<i>Rynchops niger</i>	Endangered	Foraging, Nesting

The letter from NHP also noted that the beach and undeveloped dune natural communities of the Sandy Hook spit are listed as a Natural Heritage Priority Site.

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts on federally or state-listed species.

Proposed Action – In a letter dated November 15, 2013, USFWS identified four federally protected terrestrial species which occur in the vicinity of the Station – piping plover, seabeach amaranth, and northeastern beach tiger beetle, all listed as federally threatened, and the red knot (*Calidris canutus rufa*) a federal candidate species protected under the Migratory Bird Treaty Act and state-listed as endangered (Appendix C).

Because the Station contains potential habitat for these species, the Coast Guard prepared a Biological Assessment (BA) to determine whether the Proposed Action would affect these species. The BA is included as Appendix D and is summarized in this section.

URS biologists reviewed the habitat requirements of each species and conducted a site visit on January 17, 2014. Formal field surveys were not conducted, but the biologists did not observe any of these species during the site visit. For the purposes of the BA, suitable habitat is defined as the area that contains natural features associated with known habitat for the species and that could reasonably be expected to be occupied by the species in the reasonably foreseeable future. According to the USFWS critical habitat mapper and critical habitat data portal, no critical habitat has been designated within the project area (USFWS 2014).

Action Area 1 consists of the sand beach adjacent to and northwest of the boat basin, and the foredune and backdune habitats. The intertidal zone and sand beach is devoid of plant life and

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consists of drift material and bare sand. The foredune is the most prevalent habitat. The herbaceous vegetation within the foredune habitat consists of scattered, dense groupings of saltmeadow cordgrass (*Spartina patens*), scattered occurrences of seaside goldenrod (*Solidago sempervirens*), and eastern prickly pear cactus (*Opuntia compressa*). The backdune habitat consists of scattered tree-of-heaven (*Ailanthus altissima*), poison-ivy (*Toxicodendron radicans*) and sumac (*Rhus* sp.). The scrub/shrub habitat of the backdune area is the edge habitat between the beach and the developed areas of the base. This area is dominated by beach plum (*Prunus maritima*) with inclusions of sumac, tree-of-heaven, and poison-ivy.

Action Area 2 is the beach immediately adjacent to the north and east of the boat basin. The tidal zones of the beach are comprised of medium grain sand, tidal debris and cobble-gravel material. The foredune area directly adjacent to Canfield Road and Crispin Road is sparsely vegetated with saltmeadow cordgrass and seaside goldenrod. Action Area 2 is subject to regular foot traffic because of its location between the boat basin and other station operations.

Action Areas 1 and 2 provide suitable habitat for the piping plover, red knot, seabeach amaranth, and northeastern beach tiger beetle; these species, if present, could be affected by project activities. All project activities will be conducted within and in the areas immediately adjacent to the boat basin (the southernmost tip of Action Area 1 and all of Action Area 2), which currently experience significant human disturbances associated with daily station operations.

Effects to protected species from onshore activities would include human disturbance and noise during demolition of the existing Boathouse and Station Building, construction of the new BMF and MMB, and removal of the beached concrete dock. These effects would be temporary and limited to the immediate vicinity of the construction areas. The USCG would prohibit workers from accessing or driving across the beach in Action Area 1, although some worker/equipment access to remove the beached concrete dock on the southern tip of Action Area 1 may be necessary. All construction materials and equipment would be staged on existing paved/developed areas. The USCG would also implement erosion and sediment controls on land to minimize sediment reaching the water during removal of the beached dock.

Nearshore and in-water project activities include repair or replacement of the wharf, piers, breakwaters, floating docks, groin, utilities, and boat ramps, and maintenance dredging of the boat basin. Effects to protected species from these activities could include increased turbidity in nearshore waters and deposition of suspended sediments on the beaches within Action Areas 1 and 2 during high tide. During all nearshore and in-water activities, the USCG would implement appropriate erosion and sediment control measures to minimize sediment released into marine waters; implement spill prevention and control measures to minimize potential for and impacts of a spill of pollutants such as fuel; and minimize the time working in the water to the maximum extent practicable.

Options under consideration for disposal of the dredged material include:

- Fill material for construction activities. Use of dredged material for fill would occur in the immediate vicinity of the new BMF, MMB, and the Exchange/ESD Building 103. All of these buildings are located in upland areas and outside of Action Areas 1 and 2.
- Truck off-site. All dredged materials would be removed from the Station property for proper disposal or reuse.

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The USCG initially considered another disposal option to use the dredged materials for beach nourishment in Action Area 1. However, the USCG dismissed this option because of its potential to adversely affect the four protected species addressed in this section.

At present, the USCG does not know the construction period for the recapitalization work at Station Sandy Hook. The majority of the construction is likely to occur during the summer months; however, for purposes of the effects analysis, it is assumed that elements of the proposed recapitalization work could occur at any time during the year.

The USCG would implement a number of best management practices to avoid or minimize potential effects to sensitive species. These include:

- Prohibit workers from accessing or driving across the beach in Action Area 1, although some worker/equipment access may be necessary remove the beached concrete dock.
- All construction materials and equipment would be staged on existing paved/developed areas.
- During all nearshore and in-water activities, the USCG would implement appropriate erosion and sediment control measures to minimize sediment released into marine waters; implement spill prevention and control measures to minimize potential for and impacts of a spill of pollutants such as fuel; and minimize the time working in the water to the maximum extent practicable.
- All construction materials which may come into contact with the water will be free of toxic materials (no creosote-coated or pressure-treated timber will be used).
- A qualified biologist will monitor the removal of the beached concrete dock to avoid any potential adverse effects if dock removal occurs during sensitive dates for these species: piping plover (March 15 to August 31), red knot (late July through October), seabeach amaranth (May into the fall), and northeastern tiger beetle (year-round) (Popolizio personal communication).

Based on the location and type of onshore activities proposed for this project, and in consideration of species' habits and habitat requirements, the USCG has determined that, with the mitigation measures described above, the project activities may affect, but are not likely to adversely affect the piping plover, red knot, northeastern beach tiger beetle, and seabeach amaranth. On August 12, 2014, the Coast Guard submitted the BA to USFWS, with its determination of effect (USCG 2014c, Appendix D). In a letter dated August 27, 2014, USFWS concurred with the Coast Guard's determination (Appendix D).

In that letter, USFWS also recommended the following conservation measures for the northern long-eared bat (*Myotis septentrionalis*), which is proposed for federal listing as endangered. Data acquired after the USFWS' initial letter of November 15, 2013, indicate that the entire Sandy Hook Peninsula is within the summer range of this bat. Species proposed for listing are not protected under the ESA; however, the USFWS recommends the following conservation measures:

- Avoid removing trees between April 1 and September 30.
- Avoid or minimize the use of pesticides (e.g., rodenticides, sticky traps) in and around structures with roosting bats.

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- Avoid or minimize use of herbicides and pesticides.
  - Retain and avoid impacting potential roost trees, including live or dead trees and snags equal to or greater than three inches in diameter at breast height that have exfoliating bark, cracks, crevices, or cavities.
  - Where possible and not a safety hazard, leave dead or dying trees standing.
  - Clearly demarcate trees to be protected versus cut to help insure that contractors to not accidentally remove more trees than anticipated.
  - Employ a qualified biologist to inspect all buildings proposed for demolition. If bats are found roosting in these buildings, demolitions should be performed outside of the summer maternity season (April 1 to September 30), unless there are human health or safety concerns associated with the structure. If so, consult a nuisance wildlife specialist for humane exclusion techniques.
  - Contact USFWS immediately if a colony of bats is found prior to or during demolition work.

The Coast Guard will implement these conservation measures to the maximum extent practicable. Prior to starting demolition work, USCG shall employ a qualified biologist to inspect all buildings slated for demolition for the presence of roosting bats, and will comply with the summer seasonal work restriction for building demolitions as practicable.

In a letter dated September 5, 2014, the NJDEP Division of Fish and Wildlife (DFW) Endangered and Non-Game Species Program stated that any activity within 1,000 feet of an active nest of the state-threatened osprey must be avoided between March 15 and September 15 (Appendix G). During the site visits to Station Sandy Hook on October 4, 2013, and January 17, 2014, biologists did not observe any osprey nests near the project areas. One nesting platform (vacant at the time of the site visits) is located approximately 1,000 feet north of the beached concrete dock and the boat basin. If the beached dock is proposed for removal between March 15 and September 15, USCG shall have a qualified biologist inspect the nesting platform and the area within 1,000 feet of the beached dock for any active osprey nests. If an active nest is identified, the removal of the dock will be delayed until after September 15.

This requirement is included in the D-B contractor specifications. DFW also noted that if demolition will occur during shorebird nesting season and may disturb nesting shorebirds, the Coast Guard shall have a contingency mechanism to address the issue. With the exception of the removal of the beached concrete dock on the southernmost tip of the long beach to the west of the boat basin, all project activities will occur in the boat basin or further inland, not on or near the beach; therefore, no impacts to nesting shorebirds are anticipated. As noted above, the Coast Guard will have a qualified biologist monitor removal of the beached concrete dock to avoid any potential adverse effects to nesting shorebirds. This measure will be incorporated into the D-B contractor specifications.

#### **4.4 Cultural Resources**

Consideration of effects on cultural resources is mandated both by NEPA and by Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. 470-470w-6). Section 106 requires federal agencies to take into account the effects of their undertakings on

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historic properties and to afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on such undertakings. The procedures for implementing Section 106 are contained in 36 CFR Part 800, *Protection of Historic Properties*.

The New Jersey Historic Preservation Office (NJ HPO) is the State Historic Preservation Office (SHPO) for the State of New Jersey. On June 20, 2013, the Coast Guard submitted a letter initiating Section 106 consultation for the Proposed Action (undertaking) to NJ HPO (Appendix C). On October 21, 2013, the Coast Guard also submitted a letter to NJDEP requesting project review. The NJDEP OPCER responded in a letter dated December 18, 2013, that the HPO was reviewing the undertaking and would provide comments on historic properties (Appendix C).

A specific section of the Section 106 regulations directs federal agencies to notify the Secretary of the Interior when undertakings have the potential to adversely affect National Historic Landmarks. Because the entire Sandy Hook Peninsula is located within an NHL (see Section 4.4.2), on November 26, 2013, the Coast Guard sent a letter to the Secretary of the Interior to participate in the consultation process with the Coast Guard, HPO, Tribal Historic Preservation Officers and Tribal Representatives, and the public. The National Park Service, Northeast Regional Office, on behalf of the Secretary of the Interior, responded in a letter dated June 2, 2014 (Appendix C).

On October 4, 2013, a site visit was conducted by a URS cultural resource specialist meeting the Secretary of the Interior's Professional Qualification Standards in the disciplines of archaeology and architectural history.

A public participation plan was prepared in accordance with 36 CFR Part 800.2, *Participants in the Section 106 process* and submitted by the Coast Guard to NJ HPO in a letter dated October 22, 2013. The plan identified four entities that likely have interest in the effects of the undertaking on historic properties and two agencies entitled to participate as consulting parties. In a letter dated November 18, 2013, NJ HPO replied that the interested and consulting parties identified in the plan are appropriate and should be involved in the consultation process; these parties include:

- Preservation New Jersey
- Nike Historical Society
- The Sandy Hook Foundation
- Monmouth County Historical Association
- Fort Hancock 21<sup>st</sup> Century Advisory Committee
- New Jersey Lighthouse Society

On October 17, 2013, letters describing the project and location maps depicting the project area were sent to these organizations informing them of the opportunity to provide comments.

At the request of the NJ HPO, the Coast Guard added two additional entities – the National Park Service Gateway National Recreation Area and the Middletown Township Historic Preservation Commission – to the list of consulting parties. The Coast Guard sent letters describing the project and location maps depicting the project area to these organizations informing them of the opportunity to provide comments on October 21, 2013, to NPS Gateway National Recreation Area and on October 17, 2013, to the Middletown Township Historic Preservation Commission.

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On October 17, 2013, the Coast Guard also sent letters to 13 Native American Tribe or Recognized Tribal Representatives to inform them of this undertaking and notify them that formal Section 106 consultation will be initiated. The following Tribes and Tribal Representatives were notified:

- Absentee Shawnee Tribe of Oklahoma
- Delaware Tribal Preservation Officer
- Delaware Tribe of Indians
- Nanticoke Lenni-Lenape Indians of New Jersey
- Powhatan Renape Nation
- Ramapough Lenape Indian Nation
- Sand Hill Band of Indians
- Sand Hill Indian Association
- Shawnee Tribe of Oklahoma
- Stockbridge-Munsee Band of the Mohicans
- The Cherokee Nation of New Jersey
- The Cherokee Tribe of New Jersey
- The Delaware Nation

The Stockbridge-Munsee Tribal Historic Preservation Officer responded in a letter dated March 4, 2014, that, although the project is within Mohican territory, no cultural sites are located within the project area (Appendix C). The Delaware Nation responded in an electronic mail message dated November 14, 2014, that the location of the project does not endanger known archaeological sites of interest to the Delaware Nation (Appendix C). No responses were received from the other Tribes or Tribal Representatives.

#### 4.4.1 Archaeological Resources

The URS cultural resource specialist visited the offices of the NJ HPO on September 24, 2013, to research USGS topographic maps and archival files and gather information about known archaeological sites located within one mile of Station Sandy Hook. Archaeological site files and previously completed cultural resource identification and evaluation reports were also reviewed.

One of the most relevant of these earlier reports was an archaeological survey conducted prior to the 1994 construction of the Borough Housing units. As a component of Section 106 consultation for that project, the Coast Guard conducted a Phase I/II archaeological survey of the housing construction site. As a result of that survey, the remains of the Lighthouse Keeper's House, the Western Union marine observatory, and Fort Hancock were identified within and around the location of the proposed housing units. A buried portion of the Star Fort Wall was also located during the survey; this resource had previously been identified as a contributing element of the Fort Hancock and Sandy Hook NHL District. The Coast Guard determined Foundation A as the lighthouse Keeper's House and Foundation B as the Western Union Marine Observatory and associated cultural remains, as part of archaeological site 28-MO-238, as

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eligible for listing in the NRHP. These foundations remain in place and are designated with interpretive signs (G&O 1993).

As described in its letter of September 16, 2013, the NJ HPO identified the areas for the demolition of the 22 Borough housing units, and construction of the new SAFR, MMB, and BMF as areas of high sensitivity for archaeological resources. To determine whether potentially significant archaeological sites are present that may be affected by the proposed undertaking, the Coast Guard conducted a Phase I archaeological survey within the SAFR, MMB, BMF, and Borough Housing impact areas. This survey was conducted between January 7 and 17, 2014, by URS personnel in accordance with the Secretary of the Interior's standards and guidelines for archaeology and the NJ HPO guidelines. No intensive testing took place within previously disturbed areas, paved areas, and areas currently containing buildings. No deep testing beyond the limit of hand excavation (approximately one meter) was conducted.

The Phase I survey consisted of shovel test pit (STP) excavation at intervals no greater than 50 feet within the limits of disturbance (LOD) defined for each of the four areas with high archaeological potential (SAFR, MMB, BMF, and Borough Housing). In total, 115 STPs were excavated, resulting in the recovery of 88 historic artifacts. Most artifacts originated in disturbed fill contexts, although some were recovered from isolated areas of intact natural stratigraphy. Coal and ash deposits were also identified in some locations within the project area; these deposits may represent historic fill.

One archaeological site, designated as 28-MO-409, was identified in the northeast corner of the area proposed for construction of the new MMB. A small quantity of historic artifacts was recovered from intact soils, and additional materials may extend east of the impact area's LOD. This site represents a light historic scatter originating as casual refuse disposal affiliated with late nineteenth to early twentieth century domestic activity. The site was recommended as ineligible for listing in the NRHP. A draft report containing the results of this investigation and the determination for site 28-MO-409 was submitted to the NJ HPO on April 25, 2014 (Morin et al. 2014).

The NJ HPO did not agree with this determination and found site 28-MO-409 eligible for the New Jersey Register of Historic Places (NJRHP) and the NRHP as a contributing resource in the Fort Hancock and Sandy Hook Proving Ground National Historic Landmark district under Criterion A. The NJ HPO determined that the archaeological site is associated with a period of significance and its potential connection to Building #109 (Chemistry Lab), identified as one of four structures with the highest level of significance within the NHL district. The NJ HPO provided its adverse effect determination in a letter dated May 22, 2014 (Appendix C).

The Coast Guard considered the evaluation provided by the NJ HPO, and changed its NRHP evaluation for site 28-MO-409, agreeing that site 28-MO-409 is eligible for the NJRHP and NRHP as a contributing resource within the Fort Hancock and Sandy Hook Proving Ground National Historic Landmark district.

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no adverse effects on archaeological resources.

Proposed Action – To ensure there will be no adverse effects on archaeological resources, the two NRHP-eligible foundations within the Borough Housing area will be avoided during demolition of the housing units.

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The Coast Guard consulted with the NJ HPO, the National Park Service (NPS), and ACHP to avoid and/or mitigate adverse effects on archaeological resources at the Station. On July 22, 2014, the MOA for the Proposed Action was fully executed by the USCG, NJ HPO, and ACHP, with concurrence by the NPS. MOA stipulations that pertain to archaeological resources include:

- Relocation of the foundation of the MMB to avoid archaeological site 28-MO-409;
- Development of an Archaeological Resource Avoidance Plan for the D-B contractor;
- Development of a Vibration Monitoring Plan;
- Preparation of a SAFR demolition plan;
- Development of a Communications Plan for future project planning/coordination; and,
- Completion of a Cultural Resource Management Plan (CRMP) for Station Sandy Hook.

The stipulations in the MOA are to be carried out within 5 years of the date of execution.

With the mitigation measures provided in the MOA, the Proposed Action's adverse effects on archaeological resources will be avoided, minimized, or offset. Execution of the MOA by the Coast Guard, NJ HPO, and the ACHP, with concurrence by NPS, and implementation of its terms, evidences that the Coast Guard has met all responsibilities under the NHPA for the Proposed Action and has taken into account the effects of the Proposed Action on historic properties.

#### 4.4.2 Historic Architectural Resources

During the visit to the offices of the HPO information was gathered about known historic architectural resources located within 1 mile of the Station. NRHP documentation for other properties in the vicinity was reviewed and duplicated. Previously completed cultural resource identification and evaluation reports were also reviewed to gather additional background information.

Station Sandy Hook was determined eligible for listing in the NRHP in 1978 (Glass 1977). On April 24, 1980, the nearby Fort Hancock and Sandy Hook Proving Ground Historic District was listed in the NRHP; however, the district boundaries do not include the approximately 97-acre area that comprises Station Sandy Hook. On December 17, 1982, the Fort Hancock and Sandy Hook Proving Ground Historic District nomination was amended to include Station Sandy Hook, and the entire peninsula was designated an NHL—the Fort Hancock and Sandy Hook Proving Ground National Historic Landmark District (HPO 2013, G&O1993, NJDEP 1986).

The 1982 NHL nomination describes Station Sandy Hook as consisting of 97 acres "at the north-western part of the Hook, which is under the jurisdiction of the U.S. Coast Guard" and historically part of the Fort Hancock and the Sandy Hook Proving Ground. The NHL District encompasses mid-19<sup>th</sup> century defense structures, Fort Hancock ruins, and subsequent 20<sup>th</sup> century defense structures, including the NIKE Missile Launching Control Area (1859-1974), the Sandy Hook Proving Ground, (1874-1919), the Cold War-era building associated with the development of radar, Spermaceti Cove No. 2 Life-Saving Service Station, and the Sandy Hook Lighthouse (1895-1949), which is also individually designated as an NHL. The District contains "approximately 110 significant historic buildings and 16 batteries dating from the last quarter of the 19<sup>th</sup> through the first half of the 20<sup>th</sup> centuries." Sandy Hook was a vital military defense

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installation that guarded New York City from 1895 through the Cold War era until 1974 (Butowsky 1982).

The Fort Hancock and Sandy Hook Proving Ground are significant in American history as the site of the Federal Reservation that played dual roles in U.S. military history. The Sandy Hook Proving Ground had a key role in the development of the weapons employed by the U.S. Coast Artillery and U.S. Field Artillery when the nation emerged as a world power and is significant as the site of experiments leading to the successful development of radar in the years immediately before World War II. It is also significant as the site of the Spermaceti Cove No. 2 Life-Saving Service Station, which is associated with the earliest federally sponsored effort to save life and property from coastal shipwrecks, and as the site of the Sandy Hook Lighthouse, an NHL. The Fort Hancock Mine Casemate System is a feature of the late 19<sup>th</sup> century Endicott System of Coastal Defense at Sandy Hook. Construction of the foundations began in 1890 and included sites along the eastern shore of the peninsula for the dynamite battery, the mining casemate, a 12-inch lift gun battery, and a seacoast mortar battery that collectively formed a rough semicircle from north to south (Butowsky 1982). Originally, the first mining casemate was located in the remaining bastion of the huge, granite 1874 Fort Hancock. This fort was never completed and the stone bastion suffered from excessive moisture infiltration.

Following World War I, a concrete structure was built to house the mining casemate (Casemate Structure 541). The structure, a contributing resource of the NHL district, is located on the northern tip of the Sandy Hook peninsula and in the 1982 NHL nomination is described as consisting of a "rectangular, single story structure with sloping concrete walls, steel doors, and is covered with earth" (Butowsky 1982). Aerial photography of the Station from 2013 suggests that the casemate retains its historic material, sloping walls, and is covered with earth (Figure 3, Appendix A.). Closer inspection of the structure was not possible during the October 2013 site visit. Although not considered historic, the SAFR is located within Casemate Structure 541. The SAFR occupies an open courtyard between enclosed casemate areas and is below the surrounding grade, with concrete fortification walls forming the perimeter of the range complex, and earth fill above the walls (Levy 2013).



**SAFR**

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The range may date from the 1960s; the armory is newer. The concrete throughout the casemate structure exhibits extensive cracking and spalling, mainly from water damage, although it is structurally sound. Methods of protecting buried concrete from moisture were not well-developed in 1910. In 2002-2003, the range area was excavated and lead-contaminated soil was removed. The area beneath the bullet trap was excavated. The fortification did not extend beneath that area, but there may be large storm drains or small tunnels beneath other areas of the courtyard.

Individual historic architectural resources, located in the portion of Station Sandy Hook where work is proposed, consist of two other buildings that are more than 50 years old, Buildings #103 and #123.

Building #103, the Exchange/ESD Building, was built in 1941. This building has been extensively altered and is no longer considered a contributing resource within the Fort Hancock Sandy Hook Proving Ground NHL Historic District (USCG letter dated June 20, 2013, and NJ HPO letter dated September 16, 2013; Appendix C).



**Former Exchange/ESD Building #103**

The Army constructed Building #123 in 1901 as the First Methodist-Episcopal Church, and it later became the St. Mary's Catholic Chapel. It was later used as the Base's Rod and Gun Club and the Recreation Center. Structural and interior renovations in 1995 and 1996, and subsequent infrastructural and foundation repairs, have removed all original building components, with the exception of the framing. On January 15, 2014, the Coast Guard submitted an addendum letter to the NJ HPO following initial consultation (Appendix C). This letter stated that the building has lost integrity, is no longer able to convey its significance through its physical features, and thus should not be considered a contributing structure within the NHL district. The USCG stated its intention to demolish this building because of its proximity to the proposed MMB. Retention of

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Building #123 would significantly complicate construction of the new MMB, as Building #123 could potentially be directly adjacent or within the staging area needed for construction. In addition, vibration impacts from construction could have the potential to further damage Building #123's structural integrity. The letter concluded by requesting that the NJ HPO consider demolition of Building #123 as part of the station's recapitalization efforts.

In a letter dated March 13, 2014, the Coast Guard provided the National Park Service (NPS) the Coast Guard's NRHP eligibility analysis of Building #123, as well as information about its prohibitive repair cost (Appendix C). During a meeting at NJ HPO offices on April 15, 2014, the NJ HPO notified the Coast Guard that the NPS still considers the building to be NRHP-eligible.



**Former Recreation Center Building #123**

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no adverse effects on historic architectural resources.

Proposed Action – Under the Proposed Action, one building considered to be a contributing element of the Fort Hancock and Sandy Hook Proving Ground NHL District would be demolished. The Proposed Action will directly affect Building #123, a historic architectural resource, and the SAFR will be removed from Casemate Structure 541, an element of the Fort Hancock Mine Casemate System. In a letter dated September 16, 2013, the NJ HPO concurred with the Coast Guard's determination and its plans to remove the bullet traps, baffles, and armory building that make up the SAFR, with minimal disturbance to the historic contiguous casemate. The NJ SHPO concurred with the NPS Eastern Regional Office in Philadelphia that Building #123 is still a contributing resource in the Fort Hancock and Sandy Hook Proving Ground NHL District, and the removal of this building will be an Adverse Effect.

The construction of new buildings within the NHL-designated Fort Hancock and Sandy Hook Proving Ground Historic District, as with any NHL district, is a sensitive process. The Coast

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Guard worked to ensure that the new buildings were designed in a manner that is complementary of the historic buildings and structures that remain at this USCG station.

The Coast Guard's goal is to design these new buildings and structures in a manner that is compatible with the historic materials, features, size, scale, and proportion as well as the historic architectural setting of this NHL District

To aid in this effort, the Coast Guard retained the services of URS Cultural Resources Management (CRM) specialists who meet the *Secretary of the Interior's Professional Qualification Standards* (36 CFR Part 61) in the discipline of architectural history and history. In reviewing design drawings for new construction at Sandy Hook, URS architectural historians kept in mind two important goals:

- Provide design guidance to ensure that the design of new buildings will be compatible with historic materials, features, size, scale and proportion of historic buildings and structures at the station; and,
- Provide guidance to ensure that the design of new buildings will be compatible with the setting of historic buildings and structures at the station.

In early 2014, URS architectural historians received the first draft of design drawings prepared by the architects. In ongoing discussions with the Coast Guard, URS stressed that the goal of this internal "design review" was to ensure that what is designed will fit in, and will be compatible, with the remaining NHL listed buildings and stations. This review emphasized that the new buildings should be neutral in their effect on other resources located in the station. The architectural historians also reinforced the following key messages:

- A Historic District is the resource, not its individual parts.
  - Designated historic districts are significant as a collective whole, and must be considered as such.
  - New construction needs to respond to, and protect the integrity of the entire district, much in the same way that a successful addition does to an individual historic building.
  - "Character-defining" features of historic buildings within the district should inform the design of new construction.
- New construction will reinforce the historic significance of the district.
  - New buildings will strengthen the core characteristics of the historic district.
- New construction will complement and support the historic district.
  - Most historic districts have a discernible rhythm of massing, scale, and siting. New buildings should try to match these design aspects, wherever possible.
  - Style is discouraged from being the primary indicator of differentiation.
- The exterior envelope and patterning of new buildings will reflect district characteristics.
  - Design elements, patterning, texture, and materials should reflect the aesthetic and historic themes of the district.
  - Patterns of fenestration, building divisions, setbacks, and landscapes that are characteristic of the district should inform the design of new buildings.

In early February of 2014, URS architectural historians provided detailed comments on the drawings to the Coast Guard, for consideration by the designers in developing a second set of

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revised drawings. To assist the designers in their goals of completing the new drawing sets by mid-March 2014, URS architectural historians organized comments into a matrix to address design elements of setting, massing, volume, roof profile, materials, fenestration pattern, and specific architectural features.

URS then provided summary information under each of these design elements, for the following areas: 1) existing historic buildings; 2) what the first draft of new construction drawings included, in comparison to extant historic buildings; 3) observations on design elements for new construction; 4) evidence of historic building influences on new design; and 5) recommendations.

The following topic areas identify design elements for the MMB, BMF, and SAFR highlighted by the URS architectural historians as areas where refinement of the design should be considered. The following outlines some of the major comments and revisions to the building designs made under each design element:

### Setting

- The BMF will dominate the setting on waterfront. Changing the fenestration and cladding materials could help mitigate this. The BMF elevations changed and now better articulate wall planes, as well as the openings and levels, creating a less monolithic appearance on the waterfront.
- The SAFR fire and emergency access road should be designed to look less barrier-like. This would be more consistent with the historic setting. As designed, the building itself appears monolithic and will affect the setting of the other surrounding buildings as designed. The SAFR fire and emergency access road was made thinner than the previous design for the drive and includes walkways to the building, creating less of a barrier look. The building plan and volume have been reevaluated. Wall planes are now more articulated, resulting in an appearance that is less monolithic than that shown in the previous design, which makes the building less prominent in the setting.

### Massing

- The BMF's very large boat access door needs to blend in more compatibly with the building instead of dominating it. The revised design includes better articulated BMF garage doors with surrounds and a row of clerestory light panels under the eaves helps make the door look less dominant on the elevation.
- The SAFR building design is over double the massing of existing buildings, and the pier foundations will elevate this largest building in the area above all the surrounding buildings, creating an island effect. The massive blind walls would benefit from being broken up with vertical bands similar to the gable ends found on Building S503. Walls planes need to have the appearance of projecting and receding sections. Redesign of the SAFR Building breaks up the wall planes with vertical bands, and the section with classroom, entry and locker rooms has been lowered.

### Volume

- The BMF's large access door openings create a sense of a larger building volume, as they dominate the elevation. More fenestration would help on the second floor. Redesign includes the large BMF access door openings changed to a lighter color. Fenestration in

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the form of clerestory windows under the eaves has been added to second floor of west elevation and the top of east elevation appendage.

- For the SAFR building, the vertical use of different cladding materials would be beneficial, along with receding and projecting wall planes. The building's current volume is box-like. The redesign of the SAFR building has lessened the box-like appearance by use of different colored cladding materials, lowering of the roof where possible, articulation of the entrance, and tighter incorporation of the stairs and ramp.

### Roof Profile

- The initial design for the SAFR Building had a uniform 2-story height. This was questioned, especially for areas containing the entry, classroom vestibule, and locker rooms. If possible, varying the height could help lessen the large box-like appearance of the building. Redesign included reducing the height of the SAFR entry, classroom, and locker room roofs.

### Materials

- The BMF garage door color should be lightened -- perhaps using a color similar to standing-seam metal roof. This will help to de-emphasize the size of this element, in relation to the size of the elevations. The redesign included a lighter color for the large access doors to help these large elements blend into the wall plane more successfully.
- SAFR Building wall cladding materials present a large monochrome continuous wall. Redesign includes differing colors applied in an irregular pattern that articulates different functions in different areas of the building.

### Fenestration Pattern

- The MMB window and door lintel height is disproportionate. The lintel heights should be reduced by one-third to one-half. Remove internal vertical surround of grouped windows or change to match metal sash frame or wall cladding color. Stairs should access main entry door, and employ a switch-back with landing. Suggest that stairs be integrated into accessibility ramp. Redesign of the MMB included reduction of lintel height by one-third to one-half, changing internal vertical surrounds of group windows to match finish of metal sash and frame, and exterior stairs changed to switch-back pattern that reflects treatment of adjacent accessibility ramp.
- The new BMF's large boat access door openings need vertical surrounds that provide for some articulation and integration into the building's design. The off-center location of the massive doors creates a sense of door surrounded by a building, not a building with a door. The unattached bands of clerestory windows on the sides do not relate to the wall plane and seem isolated. The building appears large in overall volume, and these small windows look disproportionate and make the side elevations appear wider. Lintels over the few windows are disproportionately high, and need to be shortened. The redesigned BMF's large access door type openings now have light colored vertical surrounds that provide for some articulation and integration into the building's design. The previous isolated small bands of clerestory windows on the sides have been removed and are now light panels articulated by a stringcourse sill and roof eave. Disproportionately high window lintels have been shortened.

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### Architectural Features

- The MMB window and door lintel height should be reduced. Reconsider window grouping vertical surrounds, main entrance location or door type and orientation of exterior entry stair. Redesign of the MMB includes reduction of lintel height over the windows and doors. Grouped window surrounds have been re-worked to better blend in with the individual window elements.
- The BMF needs surrounds of light stone/masonry finish for large door openings. If possible, add windows on second floor, and consider use of new clerestory lights that are integrated into the wall plane and break up sense of monolithic volume. Redesign of the BMF bay for large door openings does not dominate the wall plane, as much as it did in the previous design, due to the change in color and the introduction of surrounds. The additional clerestory level bands of light panels help break up massiveness of wall planes and the building's overall sense of monolithic volume.
- As designed, the SAFR Building appears out of context with the historic district. Exterior stairs should be redesigned to employ a switch-back design with landing, where possible. A relatively simple change would be to use the dark red brick only for the entire height of the recessed northeast corner and the small recessed area where the main entry is located on the east elevation, which would break up the sense of monolithic volume. Redesign of the SAFR Building articulates walls into vertical sections, and lowers the roof line on the north end. The east elevation continues the lowered height line across most of its length through the use of a different color, creating more visual interest. Exterior stairs have been changed from a perpendicular design projecting from the wall plane to a switch-back design with landing and parallel to the wall planes. The use of the dark red brick cladding for the small recessed area on the east elevation helps decrease the building's large sense of volume.

The NJ HPO concurred with the Coast Guard's plans to design all new buildings and structures in a manner that is compatible with the historic materials, features, size, scale, and proportion as well as the historic architectural setting of the Fort Hancock and Sandy Hook Proving Ground NHL District (Appendix C). In a letter dated December 3, 2013, the Coast Guard requested project review from the NPS NHL Program.

On April 11, 2014, the USCG provided a letter to the NJ SHPO that included a summary of how proposed building designs were reviewed and revised to be more compatible with the historic setting of the NHL district (Appendix C). This letter also transmitted design documents prior to an April 15, 2014, project meeting in at the NJ HPO offices in Trenton, NJ.

On April 15, 2014, the USCG and a URS architectural historian attended a meeting with the NJ HPO to discuss the final Sandy Hook designs and URS' analysis and recommendations. The meeting included a discussion of how the new building designs referenced historic buildings still extant within the historic district. At this meeting, the NJ HPO stated that it is still evaluating the effects of introducing three new, very large buildings within the NHL District boundaries. Coast Guard personnel were informed that the NJ HPO's preliminary determination was that the introduction of these buildings, despite their sensitive design, would constitute an Adverse Effect on the NHL district, based on their incompatibility with the design, size, scale, proportion, and massing of the surrounding historic buildings. The undertaking will diminish the historic district's integrity of design, setting, and feeling, and will alter character-defining spatial

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relationships within the district by introducing large new buildings in new locations and directly adjacent to contributing resources (Appendix C).

Because of the demolition of Building #123 and the introduction of the new MMB, BMF, and SAFR within the NHL District boundaries, the Coast Guard believes that the Proposed Action will have an Adverse Effect on historic above-ground properties, and invited the ACHP and the NPS to participate in the ongoing consultation process. In a letter dated May 22, 2014, the NJ HPO issued an adverse effect determination resulting from the proposed new construction, potential impacts on archaeological resources, and the proposed demolition of Building #123 (Appendix C). NPS issued a letter on June 2, 2014, concurring with the NJ HPO adverse effect determination (Appendix C). Following the adverse effect determinations by NJ HPO and NPS, the ACHP agreed to participate in the consultation effort. The Coast Guard continued to consult with NJ HPO, and discussed the development of mitigation measures with the NJ HPO, NPS, and ACHP, and explored the development of mitigation measures with the NJ HPO and NPS, including, but not limited to, the development of HABS Level II documentation of Building #123. An MOA was developed to ensure that mitigation measures ultimately agreed upon by the Coast Guard, NJ HPO, NPS, and the ACHP will be carried out to offset adverse effects from the Proposed Action on historic architectural resources at the Station.

On July 22, 2014, the MOA regarding the Hurricane SANDY Recapitalization Project at Coast Guard Station, Sandy Hook Monmouth County, New Jersey was fully executed by the USCG, NJ HPO, ACHP, with concurrence of the NPS (Appendix E). A summary of the MOA Stipulations that pertain to Historic Architectural Resources include:

- Continued work with NJ HPO and the NPS on revisions to the architectural design for the MMB, SAFR, and BMF;
- A requirement that the design-build contractor must have on staff a qualified Historical Architect meeting the Secretary of the Interior's Professional Qualification Standards;
- Relocation of the proposed MMB communication tower;
- Documentation of Building #123 to Historic American Buildings Survey (HABS) Level II standards;
- Development and implementation of a Vibration Monitoring Plan for seven historic buildings in the NHL;
- Development of a Communications Plan for future project planning and coordination; and,
- Completion of a CRMP for USCG Station Sandy Hook.

The stipulations in the MOA are to be carried out within five years of the date of execution.

With the mitigation measures provided in the MOA, the Proposed Action's adverse effects on historic architectural resources will be avoided, minimized, or offset. Execution of the MOA by the Coast Guard, NJ HPO, and the ACHP, with concurrence by NPS, and implementation of its terms, evidences that the Coast Guard has met all responsibilities under the NHPA for the Proposed Action and has taken into account the effects of the Proposed Action on historic properties.

#### **4.5 Summary of Impacts**

Impacts on resources from the No Action and Proposed Action are summarized in Table 2.

**Table 3. Summary of Impacts**

<b>Resource</b>	<b>No Action</b>	<b>Proposed Action</b>
Land Use	No impacts on land use.	Building configurations and footprints would change slightly, but no impacts on land use.
Local Economy	No impacts on the local economy.	Minor, temporary beneficial impacts on the local economy due to the potential need for local construction workers and non-local construction workers frequenting area businesses during the implementation of the Proposed Action. No long-term impacts.
Environmental Justice	No impacts on low-income or minority populations.	No disproportionately adverse impacts on minority or low-income populations. All populations would benefit from the Proposed Action.
Transportation	No impacts on transportation or traffic.	Minor, temporary adverse impacts on traffic flow during construction. No long-term impacts on transportation or traffic.
Geology and Soils	No impact on geology or soils.	No impacts on geology. Minor, temporary adverse impacts to approximately 18 acres of soils during construction from ground disturbance and potential erosion. Erosion and sediment control BMPs stipulated in the D-B contractor specifications would minimize these impacts. The D-B contractor specifications also require the contractor to obtain a NJPDES general permit for construction activities that disturb more than 1 acre of soil.
Air Quality	No impacts on air quality.	Minor, temporary, and localized adverse impacts on air quality during construction due to equipment emissions and fugitive dust from construction activities. Because there would be no permanent increase in the number of vehicles and vessels operated at the Station, there would be no change in long-term mobile source impacts. The D-B contractor specifications require the contractor to prepare a general conformity applicability analysis to ensure the project meets the NAAQS.
Noise	No impacts on noise levels or sources.	Temporary, minor impacts due to increases in noise levels from heavy construction equipment. Construction noise would affect Station personnel and visitors and may also be audible to visitors to the adjacent Gateway National Recreation Area. No long-term impacts on noise levels or sources.
Hazardous Materials/ Hazardous Waste	No impacts on or changes to the handling and disposal of hazardous materials and waste.	Any hazardous materials discovered, generated, or used during demolition and construction would be disposed and handled in accordance with applicable local, state, and federal regulations. With implementation of health and safety mitigation measures, no impacts are anticipated.

<b>Resource</b>	<b>No Action</b>	<b>Proposed Action</b>
Flora and Fauna	No impacts on flora and fauna.	No impacts on plants and wildlife, although wildlife would be subject to construction noise. Temporary adverse impacts to aquatic wildlife during the reconstruction of the waterfront from noise and sedimentation. No long-term impacts.
Floodplains	No impacts. Station facilities would continue to be flooded during major storms.	No practicable alternatives to work in the floodplain exist. The new MMB, BMF, and SAFR would be constructed to withstand the 500-year flood and built to hurricane-resilient standards to reduce flooding during future storms. The functionality of the floodplain would not be changed or reduced by the Proposed Action. No impacts on the floodplain.
Coastal Zone	No impacts on coastal zone resources.	No impacts on coastal zone resources. The Proposed Action, except for dredging, is consistent with the NJ Coastal Management Program. Dredge plans must be submitted to NJDEP for finalization of the project's Coastal Zone Consistency Determination. The Coast Guard will need to notify the DLUR Office of Dredging and Sediment Technology of the location where the dredge material will be placed; if the dredged material will be taken off-site, a letter from the receiving site accepting the material must be submitted to DLUR for approval. This requirement is included in the D-B contractor specifications.
Waters of the U.S., including Wetlands	No impacts to WOUS, including wetlands.	Minor, temporary adverse impacts on water quality during construction. Minor impacts to WOUS; the D-B contractor would obtain CWA Section 404 permits prior to construction (NWP#3 for repair of existing structures and NWP#35 for maintenance dredging of the existing boat basin are anticipated to apply). Appropriate BMPs will be used to minimize sedimentation and maintain water quality. A NJPDES general permit for construction activity would also be obtained from NJDEP Division of Water Quality, Bureau of Nonpoint Pollution Control. NJDEP has issued a conditional CWA Section 401 WQC for the project which covers all but the dredging; the WQC will be modified to include the dredging once NJDEP has reviewed the detailed dredge plan.
Essential Fish Habitat and Other NOAA Trust Resources	No impacts on regulated fisheries or protected species under NMFS jurisdiction.	Temporary and negligible to minor impacts on EFH including increased turbidity, loss of prey, and acoustic impacts from pile driving. NMFS may request that a wood cushion block be used to absorb sound energy and attenuate underwater noise; this mitigation measure, if needed, will be incorporated into the D-B contractor specifications.

Resource	No Action	Proposed Action
		<p>Dredging would adhere to the NMFS seasonal restriction, which stipulates no dredging between January 1 and May 31 to protect various species in their early life stages. Dredging will displace the benthic community within the dredge area and may temporarily increase turbidity in the immediate vicinity. As the sediments are predominantly sand, the turbidity plume is expected to dissipate quickly and should not affect mobile aquatic species, which are expected to vacate the area. The repair and rebuilding of structures at the waterfront would generate noise which could deter species from using the area; however, because this is an active marina, anthropogenic disturbance is typical and any impact to aquatic species would be negligible.</p> <p>No impact on shortnose sturgeon or listed whales.</p> <p>Temporary and negligible effect on Atlantic sturgeon and sea turtles including increased turbidity, loss of prey, and acoustic impacts from pile driving, The Coast Guard will include, as a standard specification in the D-B contract, the requirement that a marine species spotter be on-site during all in-water construction and dredging to ensure that, in the event a whale or sea turtle enters the area, all construction activities would be halted until the animal swims out of the area.</p> <p>Negligible impact to shellfish habitat; no effect on hard and soft clams.</p>
Threatened and Endangered Species	No impacts on threatened and endangered species.	<p>The USCG has determined that, with implementation of appropriate mitigation measures, the Proposed Action may affect, but is not likely to adversely affect the piping plover, red knot, northeastern beach tiger beetle, and seabeach amaranth. The USFWS concurred with this determination in a letter dated August 27, 2014 (Appendix C).</p> <p>A qualified biologist will monitor the removal of the beached concrete dock to avoid any potential adverse effects if dock removal occurs during sensitive dates for these species: piping plover (March 15 to August 31), red knot (late July through October), seabeach amaranth (May into the fall), and northeastern tiger beetle (year-round). This will be included in the D-B contractor specifications.</p> <p>No active nests of the state-threatened osprey were identified in the project areas during the October 2013 and January 2014 site visits. One nesting platform (vacant at the time of the site visits) is located approximately 1,000 feet north of the beached concrete dock and the boat basin. If the beached dock is proposed for removal between March 15 and</p>

Resource	No Action	Proposed Action
		September 15, USCG shall have a biologist inspect the nesting platform and the area within 1,000 feet of the beached dock for any active osprey nests. If an active nest is identified, the dock removal will be delayed until after September 15. This requirement will be include in the D-B contractor specifications.
Cultural Resources	No adverse effects on archaeological or historic architectural resources	<p>Adverse effects on archaeological and historic architectural resources in the Fort Hancock and Sandy Hook Proving Ground NHL district, including adverse effects on the NHL district as a whole. Adverse effects include demolition of NRHP-eligible Building #123, and introduction of new construction that is incompatible with the characteristics of the NHL district.</p> <p>To mitigate these adverse effects, an MOA was executed on July 22, 2014, among the USCG, NJ HPO, ACHP, and with concurrence by the NPS, and includes relocation of the foundation of the MMB to avoid archaeological site 28-MO-409; development of an Archaeological Resources Avoidance Plan; development of a Vibration Monitoring Plan; preparation of a SAFR demolition plan; development of a Communications Plan; development of a CRMP; continued coordination with the NJ HPO and NPS on revisions to the architectural design for the MMB, SAFR, and BMF; a requirement that the design-build contractor have a qualified Historical Architect meeting the Secretary of the Interior Professional Qualification Standards; and documentation of Building #123 to HABS Level II standards (Appendix E).</p> <p>With the mitigation measures provided in the MOA, the Proposed Action's adverse effects on archaeological or historic architectural resources will be avoided, minimized, or offset. Execution of the MOA by the Coast Guard, NJ HPO, and the ACHP, with NPS concurrence, and implementation of its terms, evidences that the Coast Guard has met all responsibilities under the NHPA for the Proposed Action and has taken into account the effects of the Proposed Action on historic properties.</p>

## 5. REGULATORY REQUIREMENTS

The following list of potential permits and approvals are likely to be required for the Proposed Action. The D-B specifications require the contractor to ensure that all required permits, licenses, or approvals are obtained prior to construction.

- 
- CWA Section 402/NJPDES Permit, NJDEP Division of Water Quality
  - General Conformity Applicability Analysis (and possibly a Conformity Determination), NJDEP
  - Federal Consistency Determination, NJDEP (conditional determination received March 4, 2014, see Appendix C).
  - CWA Section 404 Permit (Authorization under NWP #3 and NWP#35 anticipated), USACE
  - CWA Section 401 WQC, NJDEP DLUR Office of Dredging and Sediment Technology (conditional WQC dated March 4, 2014, to be finalized upon NJDEP review of dredging details)
  - Memorandum of Agreement, NJ HPO (signed July 22, 2014, see Appendix E).

## **6. CUMULATIVE IMPACTS**

According to CEQ regulations, cumulative impacts represent the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7)." In accordance with NEPA and to the extent reasonable and practical, this EA considered the combined effect of the Proposed Action and other actions occurring or proposed in the vicinity of the project site.

Monmouth County and the entire New Jersey coast are undergoing recovery efforts after Hurricane SANDY caused extensive damages. The recovery efforts include a wide range of demolition and construction projects conducted by Federal, State, and local entities.

NPS Gateway National Recreation Area has a number of proposed projects slated for the Sandy Hook peninsula, including a 1.5-mile extension of a multiuse pathway, a sustainable sand recycling program using a sand slurry pipeline to borrow sand from northern accreting beaches and pump it to the eroding southern beaches, rehabilitation of buildings at historic Fort Hancock, and a dock and pier rehabilitation project (NPS 2014).

Hurricane Sandy restoration projects proposed by USACE and NJDEP include shore protection and dredging projects in many of the coastal NJ counties (NJDEP 2014).

New Jersey will receive \$25.3 million in Federal grants, including \$7.1 million for state-led projects, to help protect coastal communities from future storms through state or local projects using science-based solutions. NJDEP and the Governor's Office of Recovery and Rebuilding studied county and municipal projects that may be eligible for the program, as well as state projects (State of New Jersey 2014). Approved DEP projects for program funding include:

- Reusing Dredged Material to Restore Salt Marshes and Protect Communities: Reuse dredge materials to restore 90 acres of salt marsh for Avalon, Stone Harbor and Fortescue. Enhanced salt marsh will provide wildlife habitat and reduce flooding and erosion impacts on nearby communities.

- 
- Building Ecological Solutions to Coastal Community Hazards: Develop, design and deliver green infrastructure techniques that add ecological value and enhance community resiliency for coastal communities.
  - Enhancing Liberty State Park's Marshes and Upland Habitats: Create and improve Liberty State Park's 40 acres of salt marsh and 100 acres of upland habitat in Jersey City. Project will improve ecosystem resiliency and create a new publicly accessible area within the park.

The Casino Reinvestment Development Authority uses casino reinvestments to fund projects statewide, including housing and neighborhood development (CRDA 2014).

Cumulative impacts resulting from these projects and the proposed project would consist of typical construction-related impacts, including:

- Minor, temporary beneficial impacts on the local economy due to the potential need for local construction workers and non-local construction workers frequenting area businesses.
- Minor, temporary adverse impacts to traffic flow during demolition and construction.
- Minor, temporary adverse impacts to air quality due to increases in criteria pollutants during demolition and construction activities.
- Minor, temporary increases in noise levels from operation of heavy construction equipment.
- Minor, temporary adverse impacts on water quality during construction due to increased turbidity. Appropriate best management practices will be used to minimize sedimentation and maintain water quality.
- Minor, temporary impacts on aquatic species, including ESA-listed Atlantic, including increased turbidity, loss of prey, and acoustic impacts from pile driving, dredging, and other in-water work that may occur.
- Temporary disturbance and possible displacement of birds and small animals from construction activities on land.

These cumulative impacts are not anticipated to be significant, primarily because the projects would occur at a variety of times and locations along the New Jersey coast. There is no indication to date that NPS planning projects are scheduled to happen during the USCG Station Sandy Hook construction period, or in the near term. No other cumulative effects are anticipated.

## **7. AGENCIES AND PERSONS CONTACTED**

During the preparation of this EA, the following agencies and organizations were contacted by letter requesting project review. Responses received to date are included in Appendix C.

- National Park Service
  - Gateway National Recreation Area
  - Northeast Region, National Historic Landmark Program
- Advisory Council on Historic Preservation

- 
- U.S. Fish and Wildlife Service, New Jersey Field Office
  - U.S. Army Corps of Engineers, New York District
  - National Marine Fisheries Service
    - Habitat Conservation Division
    - Protected Resources Division
  - New Jersey Department of Environmental Protection
    - Historic Preservation Office
    - Division of Land Use Regulation, Coastal Management Program
    - Commissioner's Office
    - Division of Fish and Wildlife Endangered & Non-game Species Program
    - Bureau of Marine Fisheries
    - Natural Heritage Program
    - Office of Permit Coordination and Environmental Review
  - Absentee Shawnee Tribe of Oklahoma
  - Delaware Tribal Preservation Officer
  - Delaware Tribe of Indians
  - Nanticoke Lenni-Lenape Indians of New Jersey
  - Powhatan Renape Nation
  - Ramapough Lenape Indian Nation
  - Sand Hill Band of Indians
  - Sand Hill Indian Association
  - Shawnee Tribe of Oklahoma
  - Stockbridge-Munsee Band of the Mohicans
  - The Cherokee Nation of New Jersey
  - The Cherokee Tribe of New Jersey
  - The Delaware Nation
  - Preservation New Jersey
  - Nike Historical Society
  - The Sandy Hook Foundation
  - Monmouth County Historical Association
  - Fort Hancock 21<sup>st</sup> Century Advisory Committee
  - New Jersey Lighthouse Society

## **8. PUBLIC INVOLVEMENT**

The Coast Guard is the lead Federal agency for conducting the NEPA compliance process for the Proposed Action. The Coast Guard's goal is to expedite the preparation and review of NEPA documents and to be responsive to the needs of the community and the purpose and need of the Proposed Action while meeting the intent of NEPA and complying with all NEPA provisions.

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The Coast Guard requested input from the public on the environmental issues to be addressed in the EA by publishing a public notice on October 6, 2013, in the *Asbury Park Press* (Appendix F). The notice described the Proposed Action and invited the public to submit comments to the Coast Guard by October 20, 2013. No comments were received.

The Coast Guard notified the public of the availability of the draft EA through publication of a notice on August 17, 2014, in the *Asbury Park Press* (Appendix F). The draft EA was available for public review online at <http://www.uscg.mil/d5/PublicNotices.asp> or in hard copy at the Middletown Township Public Library located at 55 New Monmouth Road, Middletown, NJ 07748, during normal business hours ((Monday through Thursday 9:00 a.m. to 9:00 p.m., and Saturday 9:00 a.m. to 5:00 p.m.). The 15-day comment period concluded on August 30, 2014.

Comments received on the draft EA are included in Appendix G, along with Coast Guard responses to those comments. Where appropriate, revisions have been made to the EA to address comments received.

The Coast Guard notified the public of the availability of the Final EA and FONSI through publication of a notice on September 14, 2014 in the *Asbury Park Press* (Appendix E). The final EA, including public and agency comments, and the FONSI are available online at <http://www.uscg.mil/d5/PublicNotices.asp>, or copies may be requested from Lynn Keller, U.S. Coast Guard, SILC EMD, 1301 Clay St., Suite 700N, Oakland, CA 94612-5203, or by email at [Lynn.M.Keller@uscg.mil](mailto:Lynn.M.Keller@uscg.mil).

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### Personal Communication

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Popolizio, C. 2014. Discussion with URS biologist Bradley Burford. September 9.

Appendix A  
Figures



<b>PROJECT</b> USCG Hurricane Sandy Recapitalization Projects	<b>Station Sandy Hook</b>	
<b>SCALE</b> As shown	U.S. Department of Homeland Security <b>United States Coast Guard</b> 	Contract No. HSCG83-07-D-3WF170 Order No. HSCG47-13-J-A17010 Project No. 01-5250932 Station Sandy Hook
<b>SOURCE</b> USGS 7.5' Series, Sandy Hook, NJ, 1995		<b>Figure 1</b>



<b>PROJECT</b>	USCG Hurricane Sandy Recapitalization Projects
<b>SCALE</b>	As shown
<b>SOURCE</b>	Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

<b>Station Sandy Hook Proposed Action</b>	
 	Contract No. HSCG83-07-D-3WF170 Order No. HSCG47-13-J-A17010 Project No. 01-5250932 Station Sandy Hook
<b>Figure 2</b>	



<b>PROJECT</b> USCG Hurricane Sandy Recapitalization Projects	<b>Structure 541 Concrete Mining Casemate</b>	
<b>SCALE</b> Not to scale	U.S. Department of Homeland Security <b>United States          Coast Guard</b> 	Contract No. HSCG83-07-D-3WF170 Order No. HSCG47-13-J-A17010 Project No. 01-5250932 Station Sandy Hook
<b>SOURCE</b> USCG SILC-EMD		<b>Figure 3</b>

RMOSER:\CORP\OFFICES\NOR\2013\6060-STATION SANDY HOOK\CAD-NORFOLK\SHEETS\A201 MMB ELEVATIONS SHPO 22814.DWG LAYOUT: MMB ELEVATIONS 3/13/2014 11:21AM DIMSCALE: 1/8"=1'-0"



**B1** MULTI-MISSION BUILDING - SOUTH ELEVATION  
SCALE: 1/8"=1'-0"



**A1** MULTI-MISSION BUILDING - EAST ELEVATION  
SCALE: 1/8"=1'-0"

**GENERAL NOTES**

1. SEE CIVIL DRAWINGS FOR GRADE ELEVATIONS.
2. SEE AE201 ELEVATION NOTES.

**NOTES #**

1. BRICK VENEER (TYPE A)
2. BRICK VENEER (TYPE B)
3. STANDING SEAM METAL ROOF SYSTEM
4. ALUMINUM STOREFRONT SYSTEM.
5. ALUMINUM WINDOWS
6. ARCHITECTURAL PRECAST CONCRETE
7. ACM METAL PANEL FASCIA & SOFFIT @ CANOPY
8. ALUMINUM GUARDRAIL
9. PREFINISHED METAL DOWNSPOUT; COLOR TO MATCH ADJACENT FINISH. PROVIDE PRECAST SPLASHBLOCK AT GRADE.
10. GRADE, SEE CIVIL DRAWINGS.
11. CONCRETE PIER.
12. SCUPPER.
13. OVERHEAD COILING DOOR
14. TRANSLUCENT CLERESTORY WALL PANEL
15. FLOOD VENTS AS REQ'D BY ASCE 24
16. BOLLARD
17. BREAK-AWAY METAL MESH FOUNDATION SCREEN WALL WITH ACCESS GATES AS INDICATED.

**CLARK NEXSEN**  
NORFOLK, VIRGINIA  
757-455-5800

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CONSULTANTS

SHPO SUBMITTAL  
3/14/2014

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915 SECOND AVENUE, ROOM 2664  
SEATTLE, WASHINGTON 98174-1011

ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 5050
CAD FILE NAME: A201 MMB ELEVATIONS SHPO 22814.C
DESIGNED BY: MB
DRAWN BY: SC
EDITED BY: RAM
CHECKED BY: RAM

SCALE AS NOTED PLOT SCALE: 1 : 1

**SHEET TITLE**

**REBUILD STATION SANDY HOOK**  
STATION SANDY HOOK  
SANDY HOOK NEW JERSEY

**ARCHITECTURAL**  
**MMB ELEVATIONS**

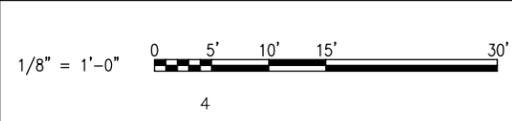
REVIEWED BY:	REVIEWED BY:	REVIEWED BY:
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR

APPROVING OFFICER	DATE
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PROJECT NUMBER	DRAWING NUMBER
<b>5250932</b>	-

DISCIPLINE/SH# NO	SHEET 18 OF 23
<b>A201</b>	

**GRAPHIC SCALES**



R:\CORP\OFFICES\NOR\2013\5050-STATION SANDY HOOK\CAD-NORFOLK\SHEETS\A202 MMB ELEVATIONS SHPO 22814.DWG LAYOUT: A202 MMB ELEVATIONS SHPO 22814.DWG DIMSCALE: 1/8"=1'-0" 3/13/2014 11:26AM

**GENERAL NOTES**

- SEE CIVIL DRAWINGS FOR GRADE ELEVATIONS.
- SEE AE201 FOR ELEVATION NOTES.

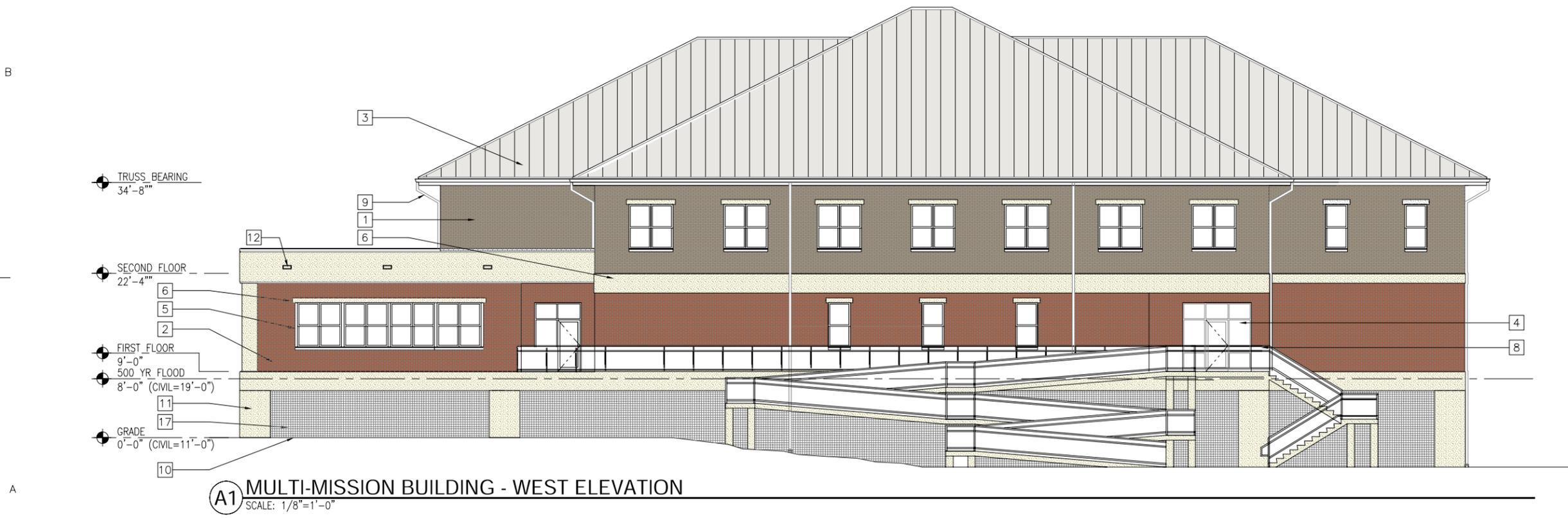
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3/14/2014



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ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO:5050  
 CAD FILE NAME: A202 MMB ELEVATIONS SHPO 22814.C  
 DESIGNED BY: MB  
 DRAWN BY: SC  
 EDITED BY: RAM  
 CHECKED BY: RAM

SCALE AS NOTED PLOT SCALE: 1 : 1

**SHEET TITLE**

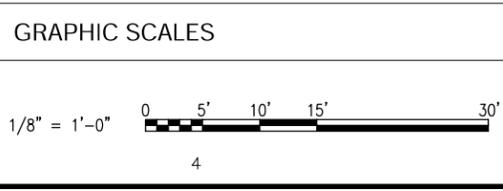
**REBUILD STATION SANDY HOOK**  
 STATION SANDY HOOK  
 SANDY HOOK NEW JERSEY

**ARCHITECTURAL**  
**MMB ELEVATIONS**

REVIEWED BY:	REVIEWED BY:	REVIEWED BY:
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR

APPROVING OFFICER	DATE
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PROJECT NUMBER	DRAWING NUMBER
5250932	-
DISCIPLINE/SHT NO	SHEET 19 OF 23
A202	



RMOSER:\CORP\DFS\OFFICES\NOR\2013\5050-STATION SANDY HOOK\CAD-NORFOLK\SHEETS\A203 BMF ELEVATIONS SHPO 22814.DWG LAYOUT: BMF ELEVATIONS 3/13/2014 11:28AM DIMSCALE: 1/8"=1'-0"



**B1** BOAT MAINTENANCE FACILITY - NORTH ELEVATION  
SCALE: 1/8"=1'-0"



**A1** BOAT MAINTENANCE FACILITY - SOUTH ELEVATION  
SCALE: 1/8"=1'-0"

**GENERAL NOTES**

- SEE CIVIL DRAWINGS FOR GRADE ELEVATIONS.
- SEE AE201 FOR ELEVATION NOTES.

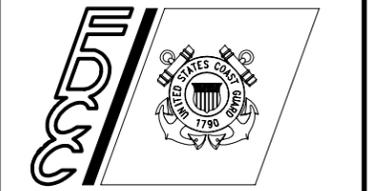
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3/14/2014



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ISSUE	
MARK	DESCRIPTION

A/E PROJECT NO: 5050
CAD FILE NAME: A203 BMF ELEVATIONS SHPO 22814.DWG
DESIGNED BY: MB
DRAWN BY: SC
EDITED BY: RAM
CHECKED BY: RAM

SCALE AS NOTED PLOT SCALE: 1 : 1

**SHEET TITLE**

**REBUILD STATION SANDY HOOK**  
STATION SANDY HOOK  
SANDY HOOK NEW JERSEY

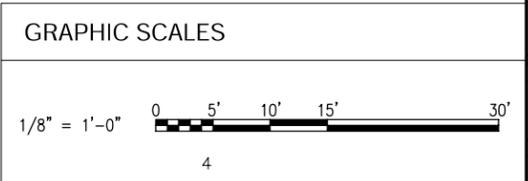
**ARCHITECTURAL**  
**BMF ELEVATIONS**

REVIEWED BY:	REVIEWED BY:	REVIEWED BY:
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR

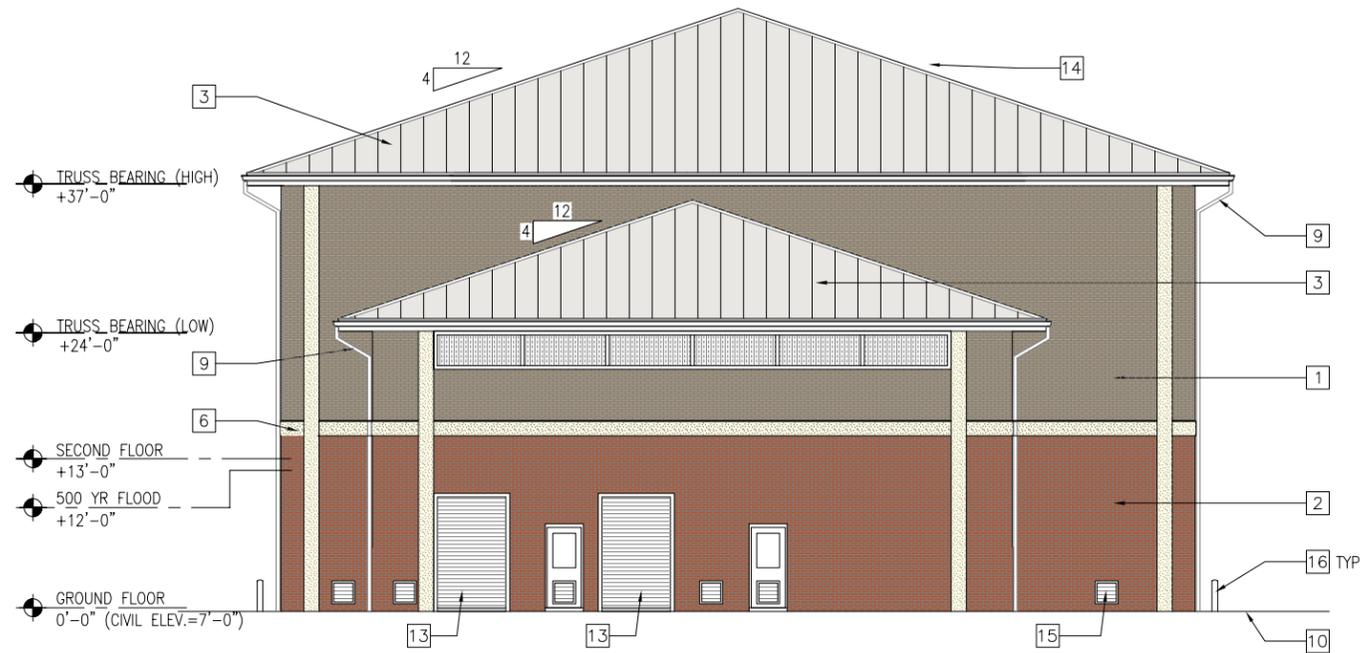
APPROVING OFFICER	DATE
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PROJECT NUMBER	DRAWING NUMBER
5250932	-

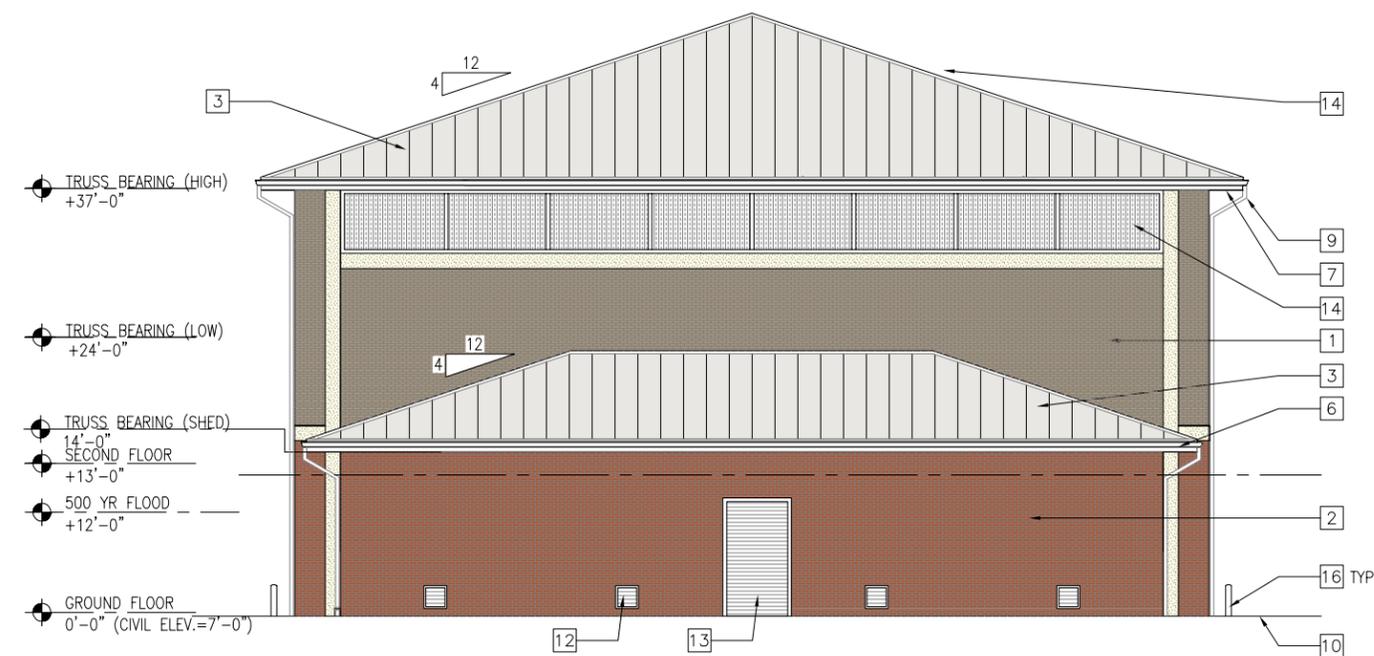
DISCIPLINE/SHT NO	SHEET 20 OF 23
A203	



RMOSER:\CORP\DFS\OFFICES\NOR\2013\5050-STATION SANDY HOOK\CAD-NORFOLK\SHEETS\A204 BMF ELEVATIONS SHPO 22814.DWG LAYOUT: BMF ELEVATIONS SHPO 22814.DWG DIMSCALE: 1/8"=1'-0"



**B1** BOAT MAINTENANCE FACILITY - EAST ELEVATION  
SCALE: 1/8"=1'-0"



**A1** BOAT MAINTENANCE FACILITY - WEST ELEVATION  
SCALE: 1/8"=1'-0"

**GENERAL NOTES**

1. SEE CIVIL DRAWINGS FOR GRADE ELEVATIONS.

**NOTES #**

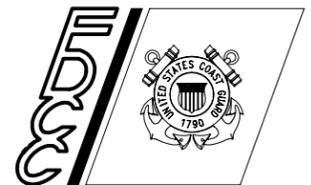
1. BRICK VENEER (TYPE A)
2. BRICK VENEER (TYPE B)
3. STANDING SEAM METAL ROOF SYSTEM
4. TRANSLUCENT CLERESTORY
5. ALUMINUM WINDOWS
6. ARCHITECTURAL PRECAST CONCRETE
7. ACM METAL PANEL FASCIA & SOFFIT @ CANOPY
8. BOLLARD
9. PREFINISHED METAL DOWNSPOUT; COLOR TO MATCH ADJACENT FINISH. PROVIDE PRECAST SPLASHBLOCK AT GRADE.
10. GRADE, SEE CIVIL DRAWINGS.
11. OVERHEAD COILING DOOR.
12. FLOOD VENT, AS REQUIRED PER ASCE 24.

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ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 5050  
 CAD FILE NAME: A204 BMF ELEVATIONS SHPO 22814.D  
 DESIGNED BY: MB  
 DRAWN BY: SC  
 EDITED BY: RAM  
 CHECKED BY: RAM

SCALE AS NOTED PLOT SCALE: 1 : 1

**SHEET TITLE**  
**REBUILD STATION SANDY HOOK**  
 STATION SANDY HOOK  
 SANDY HOOK NEW JERSEY

**ARCHITECTURAL**  
**BMF ELEVATIONS**

REVIEWED BY:	REVIEWED BY:	REVIEWED BY:
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR

APPROVING OFFICER \_\_\_\_\_ DATE \_\_\_\_\_

PROJECT NUMBER 5250932 DRAWING NUMBER -

DISCIPLINE/SHT NO A204 SHEET 21 OF 23

**GRAPHIC SCALES**



1 2 3

GENERAL NOTES

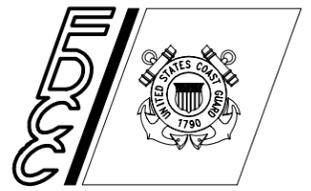
1. SEE CIVIL DRAWINGS FOR GRADE ELEVATIONS.
2. SEE AE201 FOR ELEVATION NOTES.

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MARK	DATE	DESCRIPTION

A/E PROJECT NO:5050  
CAD FILE NAME: A205 SAFR ELEVATIONS SHPO  
DESIGNED BY: MB  
DRAWN BY: SC  
EDITED BY: RAM  
CHECKED BY: RAM

SCALE AS NOTED PLOT SCALE: 1 : 1

SHEET TITLE  
**REBUILD STATION SANDY HOOK  
STATION SANDY HOOK  
SANDY HOOK NEW JERSEY**

ARCHITECTURAL  
SAFR ELEVATIONS

REVIEWED BY:	REVIEWED BY:	REVIEWED BY:
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR

APPROVING OFFICER	DATE
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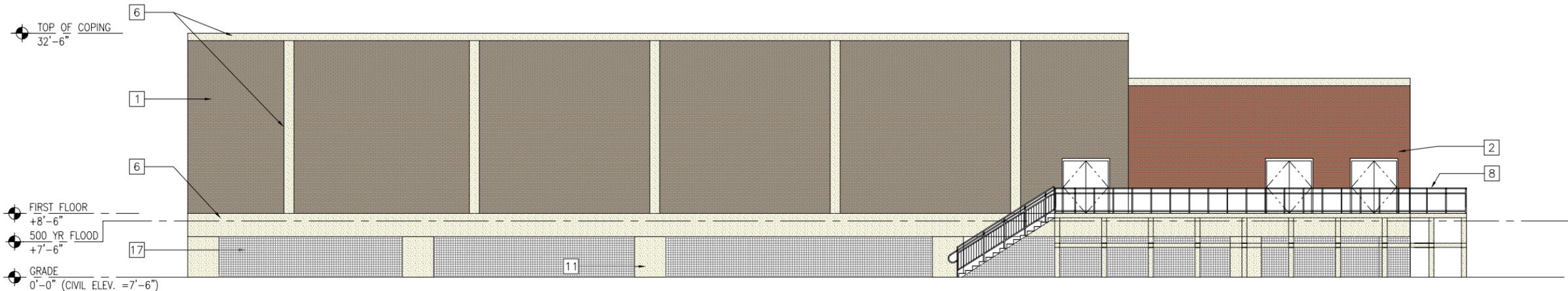
PROJECT NUMBER	DRAWING NUMBER
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5250932 -

DISCIPLINE/SHT NO	SHEET 22 OF 23
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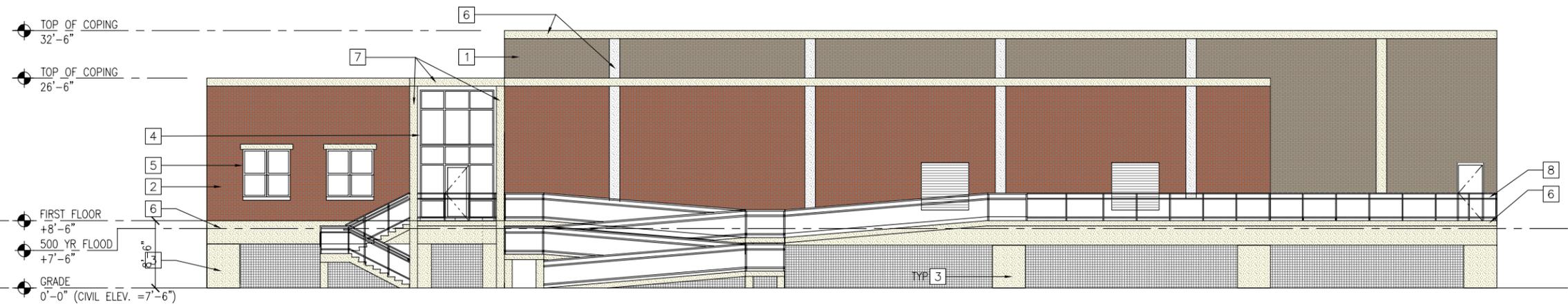
C

B



**B1** SMALL ARMS FIRING RANGE - WEST ELEVATION  
SCALE: 1/8"=1'-0"

A



**A1** SMALL ARMS FIRING RANGE - EAST ELEVATION  
SCALE: 1/8"=1'-0"

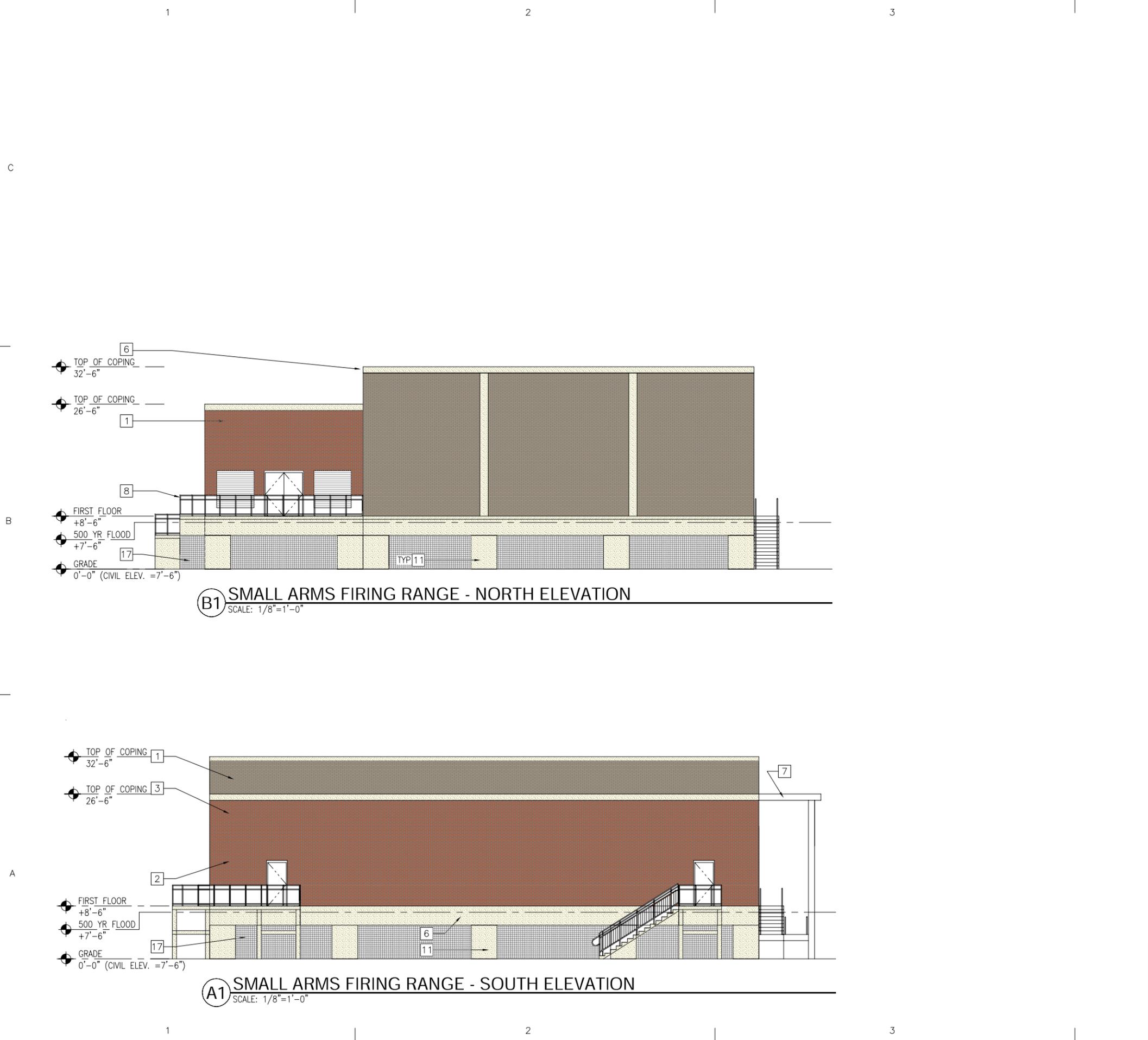
GRAPHIC SCALES



1 2 3

RAMSER:\CORP\DESIGN\OFFICES\NOR\2013\5050-STATION SANDY HOOK\CAD-NORFOLK\SHEETS\A205 SAFR ELEVATIONS SHPO 22814.DWG LAYOUT: SAFR ELEVATIONS SHPO 1 R19.1

RMOSER:\CORP\DESIGN\OFFICES\NOR\2013\5050-STATION SANDY HOOK\CAD-NORFOLK\SHEETS\A206 SAFR ELEVATIONS SHPO22814.DWG LAYOUT: A206 SAFR ELEVATIONS SHPO22814.DWG SCALE: 1/8"=1'-0"



**B1** SMALL ARMS FIRING RANGE - NORTH ELEVATION  
SCALE: 1/8"=1'-0"

**A1** SMALL ARMS FIRING RANGE - SOUTH ELEVATION  
SCALE: 1/8"=1'-0"

**GENERAL NOTES**  
 1. SEE CIVIL DRAWINGS FOR GRADE ELEVATIONS.  
 1. SEE AE201 FOR ELEVATION NOTES

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 NORFOLK, VIRGINIA  
 757-455-5800

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 3/14/2014



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ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 5050  
 CAD FILE NAME: A206 SAFR ELEVATIONS SHPO22814.DWG  
 DESIGNED BY: MB  
 DRAWN BY: SC  
 EDITED BY: RAM  
 CHECKED BY: RAM

SCALE AS NOTED PLOT SCALE: 1 : 1

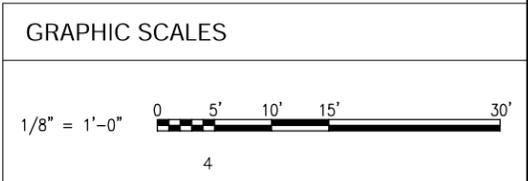
**SHEET TITLE**  
 REBUILD STATION SANDY HOOK  
 STATION SANDY HOOK  
 SANDY HOOK NEW JERSEY

**ARCHITECTURAL**  
**SAFR ELEVATIONS**

REVIEWED BY:	REVIEWED BY:	REVIEWED BY:
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR

APPROVING OFFICER \_\_\_\_\_ DATE \_\_\_\_\_

PROJECT NUMBER	DRAWING NUMBER
5250932	-
DISCIPLINE/SHT NO	SHEET 23 OF 23
A206	



Appendix B  
Eight-Step Planning Process for Floodplains and Wetlands

**Eight-Step Planning Process for Floodplains and Wetlands  
USCG Station Sandy Hook Recapitalization Project**

Step Number	Project Analysis
<p><b>1:</b> Determine whether the Proposed Action is located in a wetland and/or the 100-year floodplain (500-year floodplain for critical actions), and whether it has the potential to affect or be affected by a floodplain or wetland.</p>	<p>According to recent Federal Emergency Management Agency (FEMA) mapping completed in 2013 after Hurricane SANDY, the areas of U.S. Coast Guard (USCG) Station Sandy Hook that would be affected by the Proposed Action are within the 100-year, specifically zone AE with the waterfront areas within zone VE, and 500-year floodplain (FEMA Region II Coastal Analysis and Mapping “<i>What is My Base Flood Elevation (BFE)? Address Lookup Tool,</i>” <a href="http://www.region2coastal.com/sandy/table">http://www.region2coastal.com/sandy/table</a>). Waters surrounding the Station are considered Waters of the United States (WOUS) and are classified as estuarine and marine wetlands (U.S. Fish and Wildlife Service National Wetlands Inventory Mapper, <a href="http://www.fws.gov/wetlands/Data/mapper.html">http://www.fws.gov/wetlands/Data/mapper.html</a>).</p>
<p><b>2:</b> Notify public at earliest possible time of the intent to carry out an action in a floodplain or wetland, and involve the affected and interested public in the decision-making process.</p>	<p>The USCG published a public notice in the local newspaper <i>The Asbury Park Press</i> on October 6, 2013, informing the public about the Proposed Action. The public was invited to submit comments to the USCG by October 20, 2013. No comments were received.</p> <p>The USCG is preparing, in accordance with the National Environmental Policy Act (NEPA) of 1969, the President's Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] parts 1500-1508), and the USCG NEPA implementing procedures (COMDTINST M16475.1D), an Environmental Assessment (EA) to evaluate the environmental impacts of the Proposed Action and the No Action Alternative. The USCG notified the public of the availability of the draft EA through publication of a notice on August 17, 2014 in <i>The Asbury Park Press</i>. The draft EA is available for public review online or in hard copy at the Middletown Township Public Library. The 15-day comment period concludes on August 30, 2014.</p>
<p><b>3:</b> Identify and evaluate practicable alternatives to locating the Proposed Action in a floodplain or wetland.</p>	<p>Because the project area is in the 100-year and 500-year floodplain, there are no practicable alternatives to locating the Proposed Action outside of the floodplain. The USCG considered constructing the Boat Maintenance Facility (BMF) and Multi-Mission Building (MMB) at other sites; however, the USCG does not own another facility nearby with waterfront access and geographically separating operations at the Station would result in inefficiency. There are no other acceptable locations within the National Historic Landmark-designated Fort Hancock and Sandy Hook Proving Ground Historic District that meet time</p>

**Eight-Step Planning Process for Floodplains and Wetlands  
USCG Station Sandy Hook Recapitalization Project**

Step Number	Project Analysis
	<p>critical deployment distances for responses to distress calls. The USCG considered leasing space in a nearby facility; however, there are no adequate local facilities available for lease.</p> <p>The USCG also considered building the proposed new MMB on the same site as the existing Station Building, but it is too costly and disruptive to critical USCG missions, as temporary facilities to relocate the functions would be necessary for the duration of the work. If the MMB was reconstructed in the location of the existing Station Building, the new BMF and MMB would be in extremely close proximity to each other and would present a huge building mass on the waterfront.</p> <p>The proposed Small Arms Firing Range (SAFR) needs to be relocated because the existing SAFR site was retrofitted to a historic Casemate structure from the site's past use as an Army battery. The existing SAFR site is designated as a historical site and as such is not available for construction of the new SAFR building. Other possible sites were generally not acceptable due to their locations, issues with utilities, loss of existing habitat, proximity to historic structures, proximity to sensitive archaeological areas, and appropriate proximity to parking.</p> <p>USCG also considered repairing Building #123, which was used as a Recreational Center by the Station. However, the structural integrity of Building 123 was lacking even prior to Hurricane SANDY.</p> <p>The 22 Borough Housing Units constructed in the mid-1990s were significantly damaged by Hurricane SANDY, and repair costs to bring the structures back to full use would be excessive. USCG considered rebuilding housing structures in this same location, but the low demand for housing at the remote site, combined with the cost to rebuild housing, did not favorably compare with other competing needs for mission critical repair and new construction at Station Sandy Hook.</p> <p>Therefore, these above alternatives are not feasible and were dismissed from further consideration. The USCG is considering two alternatives: No Action and the Proposed Action. Under the Proposed Action, the USCG would:</p> <ul style="list-style-type: none"> <li>● Demolish the existing historic Building #123 (Former Recreation Building).</li> </ul>

**Eight-Step Planning Process for Floodplains and Wetlands  
USCG Station Sandy Hook Recapitalization Project**

Step Number	Project Analysis
	<ul style="list-style-type: none"> <li>● Demolish the existing non-historic Building #103 (Former Exchange/ESD Building) and an adjacent small concrete pad that formerly housed a picnic pavilion. Demolish the existing non-historic Station Building and replace it with a new MMB located in the area of the existing Building #103 and Building #123 structures.</li> <li>● Demolish 22 non-historic Borough housing units that were abandoned after Hurricane SANDY.</li> <li>● Demolish the existing non-historic Boathouse and replace with a new BMF in the same location as the existing Boathouse.</li> <li>● Demolish the existing non-historic SAFR and Construct a new SAFR in the area of the former Sycamore Circle housing units and playground, which were demolished immediately following Hurricane SANDY.</li> <li>● Repair and rebuild structures at the waterfront including repairs to or replacement of the wharf, piers, breakwaters, floating docks, groin, utilities, and boat ramp to return them to pre-Hurricane SANDY conditions. Remove a small concrete floating dock that has washed up onto the beach just northwest of the boat basin.</li> <li>● Dredge the boat basin to maintenance depths to remove recent and accumulated sands and sediments.</li> </ul>
<p><b>4:</b> Identify the full range of potential direct or indirect impacts associated with the occupancy or modification of floodplains and wetlands, and the potential direct and indirect support of floodplain and wetland development that could result from the Proposed Action.</p>	<p>Because the Proposed Action would occur in areas that are already developed and would be replacing existing facilities, the functionality of the floodplain at the Station would not be changed or reduced by the Proposed Action. The new MMB, BMF, and SAFR would be constructed to withstand the 500-year flood and built to hurricane-resilient standards to reduce flooding during future storms. The functionality of the floodplain would not be changed or reduced by the Proposed Action. No impacts on the floodplain are expected. Under the Proposed Action, minor impacts to WOUS would result from reconstruction of waterfront facilities and boat basin dredging, and would also result in increased, localized turbidity and minor, temporary adverse impacts on water quality in Sandy Hook Bay.</p>
<p><b>5:</b> Minimize the potential adverse impacts from work within floodplains and wetlands (identified under Step 4), restore and preserve the natural and</p>	<p>The USCG would implement erosion and sediment control measures to minimize sediment transported into marine waters; implement spill prevention and</p>

**Eight-Step Planning Process for Floodplains and Wetlands  
USCG Station Sandy Hook Recapitalization Project**

Step Number	Project Analysis
beneficial values served by wetlands.	<p>control measures to minimize potential for and impacts of a spill of pollutants such as fuel into marine waters; and minimize the time working in the water to the maximum extent practicable.</p> <p>The USCG would obtain all necessary permits for work in WOUS. The Coast Guard would obtain Clean Water Act (CWA) Section 404 permits prior to construction (NWP#3 for repair of existing structures and NWP#35 for maintenance dredging of the existing boat basin are anticipated to apply). A New Jersey Pollutant Discharge Elimination System (NJPDES) general permit for construction activity would also be obtained from New Jersey Department of Environmental Protection (NJDEP) Division of Water Quality, Bureau of Nonpoint Pollution Control. NJDEP has issued a conditional CWA Section 401 Water Quality Certificate (WQC) for the project which covers all but the dredging; the WQC will be modified to include the dredging once NJDEP has reviewed the detailed dredge plan.</p>
<p><b>6:</b> Reevaluate the Proposed Action to determine: 1) if it is still practicable in light of its exposure to flood hazards; 2) the extent to which it will aggravate the hazards to others; 3) its potential to disrupt floodplain and wetland values.</p>	<p>No practicable alternatives to work in the floodplain exist. Because of the alternative items specified in step number 3, only the Proposed Action meets mission needs and cost and site restrictions. The functionality of the floodplain would not be changed or reduced by the Proposed Action and, therefore, would not aggravate flood hazards. No impacts on the floodplain are expected. Minor, temporary adverse impacts on water quality during construction. Spill prevention and safety response plans would be implemented to minimize impacts. Appropriate best management practices will be used to minimize sedimentation and maintain water quality. The appropriate permits, as specified in step number 5, would also be obtained. NJDEP has already issued a conditional CWA Section 401 WQC for the project which covers all but the dredging and a conditional WQC was already authorized as part of the Coastal Zone Consistency Determination issued by NJDEP DLUR in a letter dated March 4, 2014.</p>
<p><b>7:</b> If the agency decides to take an action in a floodplain or wetland, prepare and provide the public with a finding and explanation of any final decision that the floodplain or wetland is the only practicable alternative. The explanation should include any relevant factors considered in the decision-making process.</p>	<p>The USCG notified the public of the availability of the draft EA through publication of a notice August 17, 2014 in <i>The Asbury Park Press</i>. The draft EA is available for public review online or in hard copy during a 15-day comment period that concludes on August 30, 2014.</p>

**Eight-Step Planning Process for Floodplains and Wetlands  
USCG Station Sandy Hook Recapitalization Project**

<b>Step Number</b>	<b>Project Analysis</b>
<b>8:</b> Review the implementation and post-implementation phases of the Proposed Action to ensure that the requirements of the EOs are fully implemented. Oversight responsibility shall be integrated into existing processes.	This step is integrated into the National Environmental Policy Act process and USCG project management.