ATTACHMENT M8

PROJECT MITIGATION PLAN

Project Mitigation Plan

USACE & CT DEEP Joint Permit Application
CT State Pier Infrastructure Improvements New London, Connecticut

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State Pier Infrastructure Improvements

Compensatory Aquatic Resources Mitigation Plan

Contents

Figures

Appendices

General Information (Mitigation Plan Element A)

The enclosed plan describes the compensatory mitigation that is currently envisioned for impacts to aquatic resources from the proposed State Pier Infrastructure Improvements (the Project or the SPII Project). **The mitigation components described herein have been advanced in level of detail from the original conceptual application, however it is anticipated that they will continue to be modified based on agency input during the final stages of the environmental permitting process.** The environmental permitting process is ongoing. The following permit authorizations are currently anticipated for the Project or are already in hand:

- Clean Water Act (CWA) Section 404 Individual Permit (IP) and Connecticut General Permit (CT GP) authorization from the U.S. Army Corps of Engineers (USACE), inclusive of the Rivers and Harbors Act Section 10 authorizations.
- CWA Section 401 Water Quality Certification (WQC) Permit from the CT Department of Energy and Environmental Protection (CT DEEP).
- U.S. Section 408 Civil Works Alteration Authorization from USACE and Federal Navigation Project (FNP) Deauthorization action via federal law (potentially through Water Resources Development Act language).
- CT DEEP Tidal Wetlands - Structures, Dredge and Filling Permit.
- Coastal Zone Consistency Review (through the CT DEEP Structures Dredge and Filling Permit).
- Certificate(s) of Permission (COP) authorizations from CT DEEP.
- General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities from CT DEEP (Permit No. GSN003536).

In accordance with the Council on Environmental Quality (CEQ) and National Environmental Policy Act guidance, qualifying mitigation under the 40 CFR 1508.20 regulations include: avoiding impacts, minimizing impacts, rectifying impacts, reducing impacts over time, and compensating for impacts. Clean Water Act Section 404 permit authorizations must demonstrate compliance with the 404(b) (1) Guidelines (40 CFR 230), which establish relevant environmental criteria including sequencing to reduce a project's impacts on the aquatic environment. As demonstrated within this application, the Project includes a sequencing hierarchy of: avoiding impacts to aquatic resources to the greatest extent practicable; minimizing unavoidable impacts; and finally, compensating for any remaining unavoidable impacts to aquatic resources.

Mitigation Plan Details (Mitigation Plan Element A.1)

The enclosed mitigation document has been prepared in accordance with the USACE 2016 New England District Compensatory Mitigation Guidance[1] (NAE Mitigation Guidance) to the extent practicable (additional agency input is required for select mitigation components). The 2016 NAE Mitigation Guidance indicates that "*It is important to note that there is flexibility in this guidance*". As such, the enclosed compensatory mitigation plans follows the district guidance to the extent practicable; however, not all NAE Mitigation Guidance elements are applicable to the work described herein. To avoid confusion, and as required, all mitigation proposal materials are enclosed herein as a single package.

[1] https://www.nae.usace.army.mil/portals/74/docs/regulatory/Mitigation/2016_New_England_Compensatory_Mitigation_Guidance.pdf Accessed March 27, 2019.

Project Mitigation Breakdown (Mitigation Plan Element A.2)

The following components (plan elements and objectives) are anticipated under the Project's mitigation plan:

Please note that the mitigation options summarized in Table 1 remain flexible in nature. It is anticipated that the overall mitigation strategy will be finalized in consultation with the appropriate regulatory agencies through the permitting process.

Table 1: Project Mitigation Breakdown

Component Number	Plan Element Description	Objective
Mitigation Element 1	Living Shoreline Creation and Habitat Enhancement	Enhancement of shoreline resource areas to provide coastal storm surge softening and improved fisheries, mollusk, tidal wetland and buffer habitat. The Living Shoreline creation is treated as the "permittee-responsible" element and described in greater detail herein.
Mitigation Element 2	In-Lieu Fee* / Mitigation Bank Payment	Provision of funds to USACE ILF program to compensate for unavoidable Project impacts. SPII anticipates the ILF / Mitigation Bank payments will be incurred at the rate of $10.80/square foot[2] in this area and that the impact mitigation will be based on a 1:1 open water basis[3]. The ILF/ mitigation bank project(s) may be funded by the Project through a USACE funding mechanism and any projects would be implemented by others.
Mitigation Element 3	Off-Site Stream Continuity / Diadromous Fisheries Restoration Projects	Provision of funds to CT DEEP Inland Fisheries Program to compensate for unavoidable Project impacts. Fishway / stream continuity project(s) may be funded by the Project through a CT DEEP funding mechanism and would be implemented by others. CPA understands that Off-Site Stream Continuity / Diadromous Fisheries Restoration Projects payments were recently incurred for similar projects in this locale at the rate of $3.13/square foot[4]. CT DEEP has provided a tentative list of candidate fishery mitigation projects to be considered for implementation with Project funds[5]. A DRAFT model escrow agreement has been provided for mitigation funding by DEEP and is included as Appendix A to this document.
Mitigation Element 4 (Conceptual)	Winter Flounder Habitat Shelf Provision	Potential addition of suitable winter flounder spawning and nursery habitat (depths of approximately 5m [16.4 ft.] or shallower)[6] Spawning in sandy or muddy bottom[7]. Design depths would require alteration to achieve suitable spawning / nursery habitat or other off-site areas could be altered.

* CT DEEP fisheries staff (S.Gephard; 04/04/2019 and 07/01/2019 SPII agency teleconferences) has indicated the importance of mitigation funds to be directed to appropriate aquatic resource/fisheries -related impacts.

[2] Based on agency conversations during the Essential Fish Habitat (EFH) and Project mitigation conference call of 04/04/2019. Approximate payment rate detail provided by D. Ray (USACE) based on similar local projects.

[3] Based on agency conversations during the EFH and Project mitigation conference call of 04/04/2019. Mitigation calculation detail provided by. A.Verkade, (NMFS) based on similar local projects. Table C-7 of the 2016 NAE Compensatory Mitigation Guidance document also indicates a 1:1 restoration/creation ratio for Open Water Habitats.

[4] Based on agency conversations during the EFH and Project mitigation conference call of 04/04/2019. Approximate payment rate detail provided by M. Grzywinski (CT DEEP) based on similar local projects.

[5] Based on agency conversations during the EFH and Project mitigation conference calls of 04/04/2019 and 07/01/2019. Candidate fishery mitigation project detail was provided to CPA by S. Gephard (CT DEEP). M. Grzywinski (CT DEEP) has provided a model escrow agreement. These materials are included in Appendix A.

[6] Based on agency conversations during the EFH and Project mitigation conference call of 04/04/2019. This conceptual mitigation component was requested by A.Verkade, (NMFS).

[7] https://www.fws.gov/r5gomp/gom/habitatstudy/metadata/winter_flounder_model.htm. Accessed 7 April, 2019.

Permittee-Responsible Mitigation Site Location (Mitigation Plan Element A.3)

Locus maps meeting the 2016 NAE Mitigation Guidance requirements are included in the accompanying figures. Figures 1 and 2 (USGS- and orthoimagery-based, respectively) depict the location of the SPII impact area and the location of the anticipated permittee-responsible mitigation (i.e. Mitigation Element 1 – Living shoreline) sites. Select photographs of the Project Site are included as Appendix B. Detail pertaining to the mitigation projects and their accompanying locations is presented in Table 2, below.

Please note that the mitigation options summarized in Tables 1 and 2 remain flexible in nature. AECOM anticipates that the overall mitigation strategy will be finalized in consultation with the appropriate regulatory agencies through the permitting process.

Table 2: Mitigation Site Location

Component Number	Plan Element Description	Approximate Latitude	Approximate Longitude	Watershed
Mitigation Element 1	Living Shoreline Creation and Habitat Enhancement	41.363300 North	72.090600 West	HUC 0110003
Mitigation Element 2	In-Lieu Fee / Mitigation Bank Payment	TBD –Component #2 / ILF funds would be administered by others if required		TBD – Anticipate located within HUC 0110003
Mitigation Element 3	Off-Site Stream Continuity / Diadromous Fisheries Restoration Projects	TBD –Component #3 final locations to be determined based on multiple factors (including CT DEEP Fisheries input) and implemented by others.		TBD –The attached Figure 3 depicts the location of select higher-priority fishway / stream continuity projects that may be funded by CPA, through CT DEEP and implemented by others.
Mitigation Element 4 (Conceptual)	Winter Flounder Spawning Habitat Enhancements	TBD – Conceptual Component #4 final locations to be determined based on multiple factors (including NMFS input relative to shallow spawning habitat creation).		TBD – Anticipate located within HUC 0110003

Impact Areas (Mitigation Plan Element B)

A discussion of impact areas in the SPII wetlands and waters is presented below.

Waters of the U.S. / Wetland Acreage (Mitigation Plan Element B.1)

The total acreage of wetlands and watercourses, including federally jurisdictional *waters of the U.S.,* noted at the SPII site are reported in Table 3, below. Additional detail regarding these resource areas is presented in Attachment M1 of the Project's Joint Permit Application.

Table 3: Jurisdictional Wetlands/ Watercourses Total Onsite and Impact Areas

Wetland / Watercourse Description	Jurisdictional Description	Total Wetland / Watercourse Acreage (Square footage and volume)	Impact Type
Thames River	Federal Watercourse / Waters of the U.S.; Connecticut Nearshore Waters (shallower than 10m) and Connecticut Offshore Waters (deeper than 10m)	Total Onsite = >27 Acres at or near the Project Site; Additional Impact Breakouts Below	N/A – Total Onsite
		~8.16 Acres (~355,600 SF; 323,600 CY)	Wharf Creation: Structural Fill placement***
		~7.14 Acres (~311,000 SF; 153,000 CY)	Navigational Dredging+
		~8.72 Acres (380,000 SF; 246,000 CY++)	Vessel Berth Dredging and Stone Pad Installation+**
Developed Shoreline[a]	Note – No local, state or federal jurisdictional wetlands were noted at the SPII site[b]	4,546 Linear Feet to be impacted	Placement of fill atop previously altered shorelines (riprap / sheetpile bulkhead areas)
Rocky Shorefront	CT Coastal/Aquatic Resource Type	500 SF to be impacted	Installation of stormwater outfall structure

+ Approximate areas and volumes presented for dredging and stone pad placement have been updated to include sideslope construction and deeper berth pocket design depths.

++ Dredge material volume presented in table above; backfill volumes are slightly less. Up to 107,000 CY of crushed stone would be installed at the East Berth and 107,000 CY of crushed stone at the Northeast Berth for seabed preparation / jack-up pad creation work. It is anticipated that the East Berth seabed preparation work would be completed first and the Northeast Bulkhead seabed preparation work would be constructed at a later stage.

** Crushed stone will be placed to protect seafloor from vessel spud cans and to create a stable lifting platform. NE Berth rock pad to be installed at later stage.

*** Approximate fill volumes represent material placed below MHHW line (Elevation +1.21' NAVD88). Total Fill at Central Wharf to +9' NAVD88 ~400,000 CY. Fill relative to CT DEEP Coastal Jurisdiction Line (CJL: +2.1' NAVD88 in New London) is 315,900 CY at the Central Wharf Area and 15,600 CY at the East Face Heavy Lift Area (See note below). Engineering design is progressing. The East Berth Heavy Lift Area may be constructible using a toe wall and associated pile supports, thus eliminating a need for structural solid-fill placement atop the existing embankment. Conservatively, and for permitting purposes, placement of 0.7 acres of East Face Heavy Lift Area fill has been assumed.

[a] Onsite resource investigations completed in 2019 identified that these areas are comprised predominantly of granite block retaining/seawall, steel sheet pile bulkhead, pile-supported deck, and rip-rap armoring.

[b] Note that the boat launch and Winthrop Point potential mitigation areas are not included within the current Project impact area limits. These areas are considered for potential restoration, enhancement, and/or mitigation, as described herein. The northeastern corner of the Project area contains several small sandy pocket beaches interspersed within the eastern rocky shorefront habitat which are considered "beaches and dunes" as defined in CGS Chapter 444. Both rocky shorefront and beaches are generally unvegetated and are almost exclusively located beyond the footprint of SPII pier construction impacts. Approximately 500 SF of temporary impacts to rocky shorefront may occur in association with stormwater outfall 3 (OF-3) construction. No impact to beach areas are anticipated under the SPII construction. Mitigation efforts may occur within these resource areas, as outlined below.

Although no jurisdictional wetlands are located within the currently-defined Project impact area, a small CT Tidal Wetland was identified immediately south of the Thames River Boat Launch. This wetland is dominated by common reed (*Phragmites australis*) and includes several marsh elder (*Iva frutescens*), and groundsel (*Baccharis halmifolia*) shrubs. This wetland has not yet been formally delineated, as it is located outside of the SPII construction footprint impacts.

In the event that the mitigation elements identified near the boat launch and Winthrop Point (as described herein), are accepted for mitigation purposes, these resource areas will be revisited and formally delineated. Initial investigations indicate that the Living Shoreline work would include work in the following CT resource areas: Beach, Rocky Shorefront, Nearshore Waters, Tidal Wetland. Impact tables would be adjusted accordingly prior to Living Shoreline construction to account for the mitigation work following detailed surveys, as warranted.

Resource Area Classifications (Mitigation Plan Elements B.2 and B.3)

Table 4 presents a breakdown of resource areas and associated acreages at the Project site, by Cowardin, et al.[8] 1979 and Tiner[9] 2014. Wetlands at each site should also be described using the hydrogeomorphic[10] classification system and total acreage should be calculated for each HGM class.

Table 4: Resource Area Classification

Resource Class	Onsite Resource Area Description	Approximate Resource Area
Cowardin et. al. Classification		
E1UBL/E1UBL3 (estuarine, subtidal, unconsolidated bottom, mud)	CT Nearshore and Offshore waters (areas north of Winthrop point mapped as mixohaline [brackish])	Approximately 1.1 Ac (~48,000 SF) in Living Shoreline Restoration Area. Based on total area of estimated habitat creation between living breakwater (i.e., reef balls) and MHW elevation. Ongoing design may result in modifications of the total restoration footprint.
E2US1/2: Estuarine, intertidal, unconsolidated shore, cobble-gravel/sand	CT Beach/dune coastal resource (pocket beaches)	Approximately 0.3 Ac (~13,000 SF) onsite (eastern and western portions of Site).
E2RS2: Estuarine, intertidal, rocky shore, rubble	CT Rocky Shorefront	Approximately 0.13 Ac (~5,600 SF) onsite (eastern and western portions of Site).
Tiner Classification		
EY1cMISW Estuarine, Drowned River Valley, river channel, Microtidal, Salt Wedge /	CT Nearshore and Offshore Waters (Waterbody)	>27 acres

[8] Cowardin, et. al. (1979) "Classification of wetlands and deepwater habitats of the United States," Office of Biological Services, FWS/OBS-79/31, December 1979

[9] Tiner, R.W. 2014. *Dichotomous Keys and Mapping Codes for Wetland Landscape Position, Landform, Water Flow Path, and Waterbody Type Descriptors: Version 3.0*. U.S. Fish and Wildlife Service, National Wetlands Inventory Program, Northeast Region, Hadley, MA. 65 pp plus appendices.

[10] Brinson, M. M. (1993). "A hydrogeomorphic classification for wetlands," Technical Report WRP-DE-4, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS. NTIS No. AD A270 053.

River Dominated		
ES1cFRdmMI: Estuarine, Fringe Wetland, Microtidal, River (Tidal/Perennial)	*Phragmites* dominated CT Tidal Wetland near Boat Launch (Living Shoreline / Habitat Enhancement work area only)	Approximately 0.07 Ac (~3,030 SF) onsite.
HGM Classification		
Tidal Fringe Wetland	*Phragmites* dominated CT Tidal Wetland near Boat Launch (Living Shoreline / Habitat Enhancement work area only)	Approximately 0.07 Ac (~3,030 SF) onsite.

Other aquatic resources present (Mitigation Plan Element B.4)

Other aquatic resource areas described in the 2016 NAE Mitigation Guidance, such as wadeable streams and vernal pools, are not present at the Project site. Additional surveys, including for video-transects to survey for SAV (specifically eel grass [*zostera marina*] beds) and megafauna, as well as sediment grab samples to evaluate shellfish and meiofauna/infauna, were completed in Summer 2019. The results of those surveys are included in Attachment M1B.

In summary, a variety of common shellfish (mollusks and crustaceans), worms, and other macroinvertebrates common to coastal waters of the northeastern united states were identified during the benthic surveys. These organisms contribute to the Thames River estuary food web; though no rare, uncommon or otherwise especially noteworthy species were identified. A small patch of eelgrass was identified proximate to the Project area (adjacent to the Northeast Bulkhead); though it is located outside of any proposed SPII impacts. The Project construction and dredging activities have been designed to avoid and protect this patch of eelgrass. The narrow band of submerged aquatic vegetation (SAV) will be protected through the use of turbidity curtains during in-water work and via installation of a toewall designed so that the dredging activity and side slope creation will avoid SAV disturbance.

Due to the nature of the Project area (predominantly previously altered / filled working waterfront with steep drop-off to adjacent dredged channel areas), mud flat presence has not been noted at the site. The presence of mudflat resource areas has been noted adjacent to the boat-launch area where the living shoreline creation / enhancement work is proposed.

Functional assessment (Mitigation Plan Element B.5)

Site-specific and landscape level wetland and stream functions and services are summarized in the accompanying ecological baseline report (JPA Attachment M1) and corresponding Essential Fish Habitat Assessment (JPA Attachment M5).

Work proposed (Mitigation Plan Element B.6)

Through this Project, it is the goal of CPA to create infrastructure in Connecticut that will serve as a long-term wind turbine generator (WTG) port facility serving the northeast coast of the United States while at the same time continuing to support other existing long-term breakbulk operations for cargoes such as steel, lumber and copper billets.

Once built, this facility will be able to receive very large wind energy components such as turbines, blades and towers. The onshore portion of the facility would be large enough to facilitate the off-loading and preassembly of these components, which would then be loaded onto installation vessels that would transport the components to the offshore site for final installation. To accommodate the shipping and preassembly of the components, site improvements are needed both onshore and within the Thames River.

The proposed work is anticipated to occur in two phases, with some overlap in activities anticipated between Phase 1 and Phase 2 and generally moving from upland areas to in-water work. Work activities will only progress once applicable permits are in hand. Anticipated SPII components are detailed below.

Phase 1 work generally consists of the on-shore improvements and activities at the site, as well as select in-water activities. Work will include demolition of buildings, excavation, grading and installation of a stormwater management system and utilities. The site will be leveled and graded to accommodate future uses. Specifically, the entire upland portion of the site will be provided with a level, compacted gravel surface for use by any cargo handling and storage activities. Select in-water activities, such as derelict structure removal and bulkhead oversheeting, which have been authorized through the COP process will be conducted under Phase 1.

Phase 2 work generally consists of the in-water and over-water improvements such as dredging, fill placement and marine structure construction for creation of the new Central Wharf area and heavy-lift pad.

Phase 1 Work (Uplands and NE Bulkhead)

Onshore Demolition Activities

- Demolition of various existing buildings (including the Administration Building and Warehouse 1) and site utilities in upland area.
- Demolition of a segment of State Pier Road, including the bridge and bridge abutment.
- Offsite relocation of NOAA station.
- Removal of existing onsite rail tracks.

In-Water and Over-Water Demolition Activities

- Demolition of existing unused berthing dolphins (permitted under CT DEEP Certificate of Permission (201910828-COP) and USACE CT General Permit process (NAE-2018-02161).
- Demolition of Northeast Annex timber pile supported concrete deck on east side of Admiral Shear State Pier along shoreline under same CT DEEP COP / USACE GP process.

Onshore Improvements

- Cutting and grading of the onsite hill. Soils to be used as Phase 2 fill between the piers.
- Overall grading and compaction of the site and installation of a gravel surface.
- Installation of retaining wall or earth embankment to maintain existing State Pier Road.
- Installation of new drainage and stormwater treatment system.
- Onshore installation of an anchored heavy-lift relieving platform on the existing Northeast Bulkhead (bulkhead work permitted separately under above CT DEEP COP / USACE GP).
- Installation of fendering and bollards at Northeast Bulkhead.
- Installation of new electrical utilities. High mast light poles will be installed. Electrical equipment may include electrical substations, transformers and powered racks for nacelles.
- Installation of new fire protection mains, hydrants and potable water supply lines.
- Installation or upgrade of sanitary sewers.
- Installation of perimeter security fencing and gate.
- New roadway entrance to the site.

Phase 2 Work (Waterfront Works: State Pier / CVRR Pier / Central Wharf)

In-Water, Over-Water and On-Shore Improvements

- Demolition of approximately 420 linear feet (~84,000 SF) of State Pier to facilitate construction of the heavy lift pile supported area and bulkhead at the State Pier East Berth.
- Demolition of additional segments (~34,000 SF) of the west face of State Pier concrete deck to facilitate fill placement between the piers.

- Demolition of two areas at the east face and southeast corner of State Pier (each approximately 1,500 SF) to facilitate mooring bollard installation.
- Dredging of Turning Basin including approaches to both berths. Dredging to -39.8' NAVD88 (-36' MLLW + 2' overdredge), matching the existing New London Federal Channel depths. This includes removal of approximately 55,000 CY of material, including overdredge, generated from approximately 241,000 SF . The majority of this material will be generated in the northern portion of the turning basin.
- Dredging of vessel berthing areas to -41.8' NAVD88 (-38' MLLW + 2' overdredge) for berthing layout and up to -66.8' NAVD88 (-63' MLLW + 2' overdredge) to accommodate the seabed preparation work described below. Dredging to be completed at the proposed Northeast Berth (Up to ~240,000 SF; ±222,000 CY) and East Berth (Up to ~210,000 SF; ±122,000 CY) proximate to the new heavy lift areas.
- Seabed preparations would be completed after the above dredging to allow for berthing of vessels equipped with jack up legs (or similar) at the Northeast Bulkhead and East Berth heavy lift areas. Jack-up pockets will be constructed by filling the dredged pockets with crushed stone or gravel, to provide a stable jacking platform and to protect the seafloor from damage during install vessel jacking operations. Dredging and rock pad design utilizes a tiered approach, with stone pad thickness of 13' to 27' (maximum; in the eastern portions). Up to 107,000 CY of crushed stone would be placed in each pocket. The East Berth seabed preparation would be completed first and the Northeast Bulkhead seabed preparation work would be constructed at a later stage. This stone bed will be maintained throughout the duration of WTG operations.
- Installation of longitudinal steel sheeting or protected slope at CVRR pier.
- Installation of king pile bulkhead between the State Pier and the CVRR Pier, extending into the CVRR pier, tying into the new longitudinal sheet pile wall/slope along the CVRR pier.
- Filling approximately 7.4 acres (~322,000 SF; ±400,000 CY) between the CVRR Pier and State Pier to create the new Central Wharf operational area and East Berth Heavy Lift area. Approximately 308,600 CY will be placed below MHHW (+1.21 ft. NAVD88) and the balance will be placed above this elevation to raise the Central Wharf to finish grades. Relative to the DEEP New London Coastal Jurisdiction Line (CJL; elevation of +2.1 ft. NAVD88), approximately 315,900 CY of fill would be placed between the piers for Central Wharf creation.
- Installation of a series of ~3' wide stone columns, or comparable technology, in the filled area of the new Central Wharf created between the piers and at the East Berth Heavy Lift area.
- Installation of steel sheet pile to enclose the State Pier heavy lift platform and filling approximately 33,600 SF between the existing State Pier riprap slope and the proposed sheet pile wall along its East Face[11]. Approximately 15,000 CY will be placed below MHHW (+1.21 ft. NAVD88) for the East Face Heavy lift area creation. Relative to the CJL (+2.1 ft. NAVD88), approximately 15,600 CY of fill would be installed for East Face Heavy Lift area creation.
- Installation of steel toewall system at the base of the State Pier heavy lift platform. ~1,115 LF of toewall is proposed at and adjacent to the heavy lift platform.
- Installation of upgraded fendering and mooring bollards at the State Pier East Face Berth.
- Installation of a toewall to protect an existing eelgrass bed from dredging activities. Toewall will consist of up to ~170 linear feet of combination sheet pile (to extend ~1 foot above mudline).
- Installation of high mast lights at the State Pier Facility.
- Installation of cold ironing infrastructure.
- Installation of piles and associated gangway to support ConnDOT Chester-Hadlyme ferry overwintering at the Northwest Bulkhead area.

Watershed or regional plans (Mitigation Plan Element B.7)

The proposed Project is a water dependent use and no other feasible, less environmentally damaging alternatives exist (see Attachment M7). As noted herein, adverse impacts to coastal resources will be

[11] Engineering design is progressing. The East Berth Heavy Lift area may be constructible using a toe wall and associated pile supports, thus eliminating a need for structural solid-fill placement atop the riprap slope. Conservatively, and for permitting purposes, placement of this fill has been assumed.

minimized and compensated to mitigate any remaining adverse impacts. In addition, the proposed Project is consistent with the City of New London municipal plans and has the general support of city officials[13].

Further, the Project is proposed in a manner consistent with the current Connecticut State Plan of Conservation and Development. As noted on the State of Connecticut Office of Policy and Management website[14],

> *"The Office of Policy and Management, Intergovernmental Policy and Planning Division, Office of Responsible Growth, prepares a state plan of conservation and development (State C&D Plan, also known as the state POCD), every five years in accordance with Section 16a-27 of the Connecticut General Statutes. House Joint Resolution No. 74 (2019 session) would adopt the most recent revision of the State C&D Plan, titled Conservation and Development Policies: The Plan for Connecticut, 2018-2023. Until such time the 2018-2023 State C&D Plan is adopted, the 2013-2018 State C&D Plan and Priority Funding Areas remain in effect."*

As the draft 2018-2023 State C&D Plan is still awaiting adoption, the Project has been reviewed against the policies outlined in the 2013-2018 State C&D Plan. The 2013-2018 State C&D Plan establishes six growth management principals to which state-funded development shall adhere. Demonstration of the Project's compliance with the applicable principals is presented in Attachment M9.

Potential adverse environmental impacts associated with the Project will be appropriately avoided, minimized and mitigated as detailed herein.

8-digit Hydrologic Unit Code (Mitigation Plan Element B.8)

The project impact site is proposed within the USGS 8-digit Hydrologic Unit Code (HUC) 0110003. The project's compensatory mitigation is also anticipated within this HUC.

Mitigation area(s) (Mitigation Plan Element C)

A program of on-site mitigation is envisioned in order to compensate for temporary and permanent impacts to *waters of the U.S.* which are anticipated from the CPA's proposed State Pier Infrastructure Improvements Project. While the Project's compensatory mitigation program may include multiple components (potentially including: in-lieu fee mitigation payments; mitigation credits applied for the use of an in-situ CDF disposal facilities [which would facilitate avoidance of offshore dredge material disposal]; and/or other projects to suitably compensate for spatial and temporal impacts), one element that may be undertaken as part of the compensatory mitigation suite is the installation of a Living Shoreline in the Project vicinity.

The following **Mitigation Plan components (Sections C through M) have been prepared relative to Mitigation Element 1 (Living Shoreline Creation and Habitat Enhancement) only.** An overview of the permittee-responsible mitigation and additional detail pertaining to Mitigation Element 1 is presented below. In

[13] https://portal.ct.gov/Office-of-the-Governor/News/Press-Releases/2019/01-2019/Gov-Lamont-Announces-Partnership-With-the-City-of-New-London-Regarding-the-Future-of-the-State-Pier. Accessed 03/28/2019; 10/29/2020.

[14] https://portal.ct.gov/OPM/IGPP-MAIN/Responsible-Growth/Conservation-and-Development-Policies-Plan/Conservation-and-Development-Policies-Plan. Accessed 03/26/2019, 04/22/2019, 09/24/2019, 05/06/2020; 10/29/2020.

accordance with the 2016 NAE Mitigation Guidance[15], Mitigation Elements 2 through 4 are not described in Sections C through M of the enclosed document (as they could potentially be funded by the Project, but would likely be implemented by others).

Mitigation Alternatives (Mitigation Plan Element C.1)

A variety of sites and methodologies have been considered for mitigation activities, in consultation with the regulatory agencies as part of the pre-application process. As described herein, the Project has considered implementing a mixture of a potential mitigation measures.

On-site and off-site mitigation has been assessed for appropriateness and in-kind versus out-of-kind mitigation has been reviewed. To the extent practical, and in an effort to replace the impacted functions (including temporal impacts), in-kind mitigation within the subject HUC8 watershed may be pursued, as described herein. Further, the off-site mitigation being considered by the project includes fish passage restoration and stream continuity improvements, as well as potential provision of lost finfish nursery/spawning habitat.

As noted in Table C7 of the 2016 NAE Compensatory Mitigation Guidance document, a 1:1 restoration or creation ratio is generally considered appropriate for Open Water Habitat losses (which would be incurred by the SPII work).

The overall mitigation strategy will be finalized in consultation with the appropriate regulatory agencies through the ongoing permitting process.

Mitigation Background (Mitigation Plan Element C.2)

Mitigation Element 1 (Living Shoreline Creation and Habitat Enhancement) is proposed immediately adjacent to the SPII site within existing intertidal and subtidal habitat. A full description of the surrounding land use and associated resource areas is presented in Attachment M1 of the Project's Joint Permit Application. These elements are summarized below.

Existing wildlife use
Wildlife common to New England utilize terrestrial uplands, intertidal areas, and open-water portions of the SPII site throughout the year. The avian species assemblages present with the seasons. Limited terrestrial mammal, reptile, and amphibian species are likely present year-round. Estuarine species also utilize the Thames River Estuary.

Due to the developed nature of the SPII site and limited availability of natural habitat, relatively few terrestrial wildlife species likely utilize the area as breeding grounds. Species present or likely to utilize the site include those which have adapted to live in developed areas and are not easily disrupted by human activities. In addition to resident terrestrial wildlife, patches of scrub-shrub habitat immediately adjacent to the mitigation area may be utilized for short periods of time by a variety of bird species during spring and fall migratory periods for foraging or resting. Table 5 provides a list of terrestrial wildlife that may utilize the SPII site.

Table 1. Potential Terrestrial Wildlife Utilizing the Upland Portion of the SPII Site.

Common Name	Scientific Name
Reptiles/Amphibians	
Garter Snake	*Thamnophis sirtalis sirtalis*

[15] Per the 2016 NAE Mitigation Guidance "*If all impacts are proposed to be covered by an ILF Program and/or Mitigation Bank, move on to section B, do not complete section A.3. or sections C-M. For any permittee-responsible mitigation complete all sections of the checklist.*"

American Toad	*Anaxyrus americanus*
Mammals	
Norway Rat	*Rattus norvegicus*
White-footed Mouse	*Peromyscus leucopus*
House Mouse	*Mus musculus*
Virginia Opossum	*Didelphis virginiana*
Gray Squirrel	*Sciurus carolinensis*
Raccoon	*Procyon lotor*
Birds	
Rock Pigeon	*Columba livia*
American Robin	*Turdus migratorius*
Northern Mockingbird	*Mimus polyglottos*
Song Sparrow	*Melospiza melodia*
European Starling	*Sturnus vulgaris*
House Sparrow	*Passer domesticus*

Avifauna

The assemblage of aviafauna likely to utilize uplands, shoreline, and open water habitats of the SPII site includes a variety of passerines, wading birds, ducks, geese, and gulls. Shorebirds and wading birds could use the rocky shoreline, beach areas, and shallow nearshore waters for foraging during low tide. Examples of these species include spotted sandpiper (*Actitis macularius*) and greater yellowlegs (*Tringa melanoleuca),* great blue heron (*Ardea herodias*), and green heron (*Butorides virescens*).

According to the US Fish and Wildlife Service (USFWS), the Thames River is a regionally significant habitat for migrating and wintering waterfowl (USFWS 1991). Species that use the river include relatively large numbers of canvasback (*Aythya valisineria*), American wigeon (*Anas americana*), American black duck (*Anas rubripes*), gadwall (*Anas strepera*), mallard (*Anas platyrhynchos*), redhead (*Aythya americana*), common goldeneye (*Bucephala clangula*), and hooded merganser (*Lophodytes cucullatus*). Also found in the river are common and red-breasted merganser (*Mergus merganser* and *M. serrator*, respectively), and greater and lesser scaup (*Aythya marila* and *A. affinis*, respectively). Mute swans (*Cygnus olor*) also nest and winter within the Thames River habitats.

Several species of gull and tern are highly likely to utilize open water areas for feeding and rafting. Representative species include laughing (*Leucophaeus atricilla*), ring-billed (*Larus delawarensis*), herring (*Larus smithsonianus*), and great black-backed (*Larus marinus*) gulls and common tern (*Sterna hirundo*). Gulls will also use nearshore and intertidal areas in search for food and roosting/resting areas.

Osprey (*Pandion haliaetus*) are known to nest along the Thames River and use open water areas for fishing. Currently, there are no known osprey nests located within or adjacent to the SPII site.

Peregrine falcons (*Falco peregrinus*) have previously nested on the Gold Star Bridge, located immediately north of the SPII site. This species may hunt for passerine birds, gulls, ducks, and pigeons within the SPII site. Additional information regarding this species is presented below.

Sea Turtles

Four species of marine sea turtles are known to occur in LIS off the coast of Connecticut (CT DEEP, 2011). These species include the leatherback (*Dermochelys coriacea*), Kemp's ridley (*Lepidochelys kempii*), green (*Chelonia mydas*), and loggerhead (*Caretta caretta*) sea turtles. All sea turtles are protected under federal and state statues.

Sea turtles visit Connecticut's estuarine and marine waters in early summer as water temperatures rise and generally migrate south by mid-November in search of warmer waters (CT DEEP, 2015). Sea turtles may occasionally utilize the Thames River estuary but are more likely to be found offshore in Long Island Sound.

Marine Mammals

Marine mammal sightings in Connecticut are a rare event (CT DEEP, 2015). However, several cetacean (whales, dolphins) and pinnipeds (seals) are known to occur and/or visit in the state. Suitable habitat for these animals is not present within or adjacent to the SPII site and any occurrence of marine mammals is highly unlikely.

Connecticut-listed Species of Concern

A request for Natural Diversity Data Base (NDDB) State Listed Species Review was initiated with CT DEEP in January 2019. NDDB determination No. 201901490, issued March 19, 2019, indicated CT DEEP has extant records for State Threatened peregrine falcon and State Special Concern blueback herring that occur in close proximity to the SPII site (McKay, 2019). Subsequent to the March 19, 2019 letter additional consultation with NDDB resulted in an updated letter response date July 22, 2019. While the same two state-listed species were identified as potentially utilizing the site, the July 22 letter reduced the buffer for any nests site of the peregrine falcon from 600 feet to 300 feet, as further described below.

Peregrine Falcon

The peregrine falcon has adapted to life in urban settings and is often associated with bridges, buildings and other structures for nesting and brood rearing purposes. The peregrine is Connecticut's largest falcon and can measure up to 20 inches in length. Adult peregrines are slate gray above and pale underneath with fine bars and spots of black; the bird has long pointed wings and a narrow tail. Young falcons have the same composite, but are browner overall with a darker belly. The peregrine falcon nesting season occurs between the months of April and June. Adult peregrines will actively and aggressively defend the nest site up to and sometimes past, 75 yards. As noted above, peregrine falcons have previously nested on the Gold Star Bridge, located immediately north of the SPII site.

To protect nesting peregrine falcons, the CT DEEP recommends construction be completed during non-nesting season months (July-March). CT DEEP also recommended that if work needs to be conducted during the nesting period, a project ornithologist should evaluate and prepare a protection plan for the birds. In their July 22, 2019 letter, CT DEEP has approved a Peregrine Falcon Protection Plan submitted on behalf of CPA. In the protection plan, it states all work must maintain a minimum buffer of 300 ft from an active falcon nest site. Therefore, in the event an active falcon nest is confirmed proximal to active construction, under the full-time supervision of a qualified wildlife biologist/ornithologist, CPA proposes to allow construction activities to proceed to within 300 feet of any active peregrine falcon nest site. If it is determined by the biologist, through observation of falcon behavior, that construction activity may be negatively impacting the birds in any way, the full 600 feet of buffer will automatically go into effect, with the previously noted exception of "pass through" construction vehicle traffic.

Blueback Herring

The blueback herring is an anadromous fish species with a native range along the Atlantic coast of Canada and the United States from Nova Scotia to Florida. Blueback herring have an overall silvery appearance with a characteristic deep bluish-green back and deeply forked tail. Blueback herring primarily feed on zooplankton and small fish, may reach a maximum length of approximately 16 inches, and live up to 8 years. Blueback herring live in marine systems and migrate to deep, swift moving freshwater rivers to spawn in the spring. During spawning, eggs are deposited over hard bottom substrate, where they stick to gravel, stones, rocks, and other objects. Depending on water temperature, eggs hatch within a few days and larvae quickly develop into juvenile fish which may migrate out to sea when about a month old.

Due to significant declines in anadromous populations of blueback herring and alewife, the Connecticut Department of Environmental Protection (CT DEP) issued an emergency fishery closure in April 2002, which remains in effect[16]. Potential causes of the declines to the fishery include several factors such as loss of spawning habitat, impediments to migration, fishing, and predation due to the recovering striped bass (*Morone saxatilis*) population.

Federally-listed Species of Concern

The U.S. Fish and Wildlife Service (USFWS) was consulted to identify any threatened, endangered, proposed and candidate species as well as proposed and final designated critical habitat that may occur within the Project area pursuant to Section 7(c) of the Endangered Species Act (ESA) of 1973 (16 U.S.C. 1531 *et seq*). The Information for Planning and Consultation (IPaC) report generated from the query resulted in the identification of three federally-listed species that may occur within the SPII site which are discussed below. No proposed or final critical habitats were identified within the SPII site. The IPaC results are included in JPA Attachment M3.

The attached Essential Fish Habitat Assessment (Attachment M5) includes additional information pertaining to the management of Atlantic sturgeon (*Acipenser oxyrhynchus*) in the Thames River. The Gulf of Maine distinct population segment (DPS) is considered threatened, while the New York Bight DPS is considered to be endangered under the Endangered Species Act (ESA)[17].

Northern Long-eared Bat

The Northern long-eared bat (*Myotis septentrionalis*) is listed as a threatened species under the federal ESA and an endangered species under the Connecticut ESA. The State of Connecticut has not indicated this species is a concern at the site. It is a medium-sized insectivorous bat about 3-3.7 inches from head to tail with a wingspan of 9-10 inches and brown fur. As its name suggests, its distinguishing characteristic is long ears. As with most insectivorous North American bats, the Northern long-eared bat forages on flying insects using echolocation.

Northern long-eared bats spend winter hibernating in caves, mines, and tunnels, typically those with large passages, relatively constant and cool temperatures, high humidity, and no air currents (USFWS, 2013). Individuals often attach to hibernaculum ceilings in small crevices, drill holes, or other sites.

During the summer, Northern long-eared bats roost singly or in colonies underneath bark in cavities or crevices of live and dead trees. Maternity colonies generally consist of 30 to 60 females and young utilizing trees or snags with cavities or loose bark in upland forests. Females give birth to a single pup in early summer; the young are ready to fly within three weeks. Males and non-reproductive females may roost and forage within areas adjacent to maternity colonies, but may also be solitary. Northern long-eared bats may utilize man-made structures such as barns and sheds as daytime roosts.

According to the CT DEEP, the City of New London is not an area which supports any known Northern long-eared bat hibernacula (CT DEEP, 2016). In addition, no suitable summer roost trees or maternity trees exist within or adjacent to the SPII site. Accordingly, Northern long-eared bats are unlikely to utilize the SPII site for roosting or maternity purposes.

Roseate Tern

The roseate tern (*Sterna dougallii dougallii*) is listed as an endangered species under both the federal ESA and Connecticut ESA. The State of Connecticut has not indicated this species is a concern for this site. The roseate

[16] https://portal.ct.gov/DEEP/Fishing/Freshwater/Herring-Closure. Accessed March 30, 2020.

[17] NOAA Fisheries/Office of Protected Resources (OPR). 2019. Protected resources web pages available at: http://www.fisheries.noaa.gov/pr/species/fish/atlantic-sturgeon.html. Accessed February 2019.

tern is a medium-sized white and light gray-backed tern with a black bill (has a reddish base), black head cap, orange feet and legs, and deeply forked tail. During the breeding season, the amount of red/pink at the base of the bill increases and a pink hue may be visible on the bird's breast. The roseate tern inhabits saltwater coastlines and feeds almost exclusively on small fish.

The northern population of roseate terns nests in colonies on sand/gravel beaches or pebbly/rocky offshore islands along the Atlantic coast from Nova Scotia to Long Island. Roseate terns arrive from their tropical wintering grounds to breeding areas in Connecticut in late April and May. Eggs are laid in shallow scrapes and sometimes lined with dried grasses. Chicks hatch following an incubation period of 23-24 days and young birds subsequently fledge within 26-30 days of hatching. The third largest roseate tern colony in North America exists in Connecticut at Falkner Island, which is located in LIS approximately 30 miles southwest of New London. Several small islands in the New London area were occupied by roseate terns in the 1970s (CT DEEP, 1999). A review of the eBird database indicates several sightings of roseate terns in New London Harbor in August 2018.

No potential nesting habitat is located within the SPII site. Sightings of roseate terns near the SPII site can be expected periodically, as this species is highly mobile and individuals will follow and hunt schools of small fish in estuarine waters.

Small Whorled Pogonia

The small whorled pogonia (*Isotria medeoloides*) is listed as a threatened species under the federal ESA and an endangered species under the Connecticut ESA. The State of Connecticut has not indicated this species is a concern for this site. The small whorled pogonia is a grayish-green orchid that grows about 10 inches tall when in flower and about 14 inches tall when in fruit. It has a whorl of five or six leaves near the top of the stem below its flower.

The small whorled pogonia grows in older hardwood stands with an open understory on acidic soils with a thick layer of dead leaves. It is often found on slopes near small streams.

No suitable habitat for the small whorled pogonia exists within the SPII site. Accordingly, this plant is highly unlikely to be present on the SPII site.

Existing soil

The majority of the site is underlain by the Udorthents-Urban land complex. This soil unit consists of moderately well drained to excessively drained soils that have been disturbed by cutting or filling, and areas that are covered by buildings and pavement. The areas are mostly larger than 5 acres. The complex is about 70 percent Udorthents, 20 percent urban land, and 10 percent other soils. Most areas of these components are so intermingled that it was not practical to map them separately. Udorthents are in areas that have been cut to a depth of two (2) ft or more or are on areas with more than two (2) ft of fill. Udorthents consist primarily of moderately coarse textured soil material and a few small areas of medium textured material.

Land occupied by the State Pier Facility and onsite warehouse buildings located immediately to the north are mapped as Urban Land. This soil unit consists of nearly level to moderately steep areas where the soils have been altered or obscured by urban works and structures. Buildings and pavement cover more than 85 percent of the surface.

The Hinckley series consists of very deep, excessively drained soils formed in glaciofluvial materials. They are nearly level through very steep soils on outwash terraces, outwash plains, outwash deltas, kames, kame terraces, and eskers. The saturated hydraulic conductivity is high or very high. Within the SPII site, these soils occupy an elevated area of the northeastern portion of the site which is currently used for a road salt stockpile and distribution area.

Existing vegetation

Several small patches of deciduous scrub-shrub upland habitat are interspersed throughout the SPII site. This habitat generally occupies narrow strips of rocky/sandy upland areas adjacent to the waterfront, along fence lines, and other underutilized areas of the site such as behind buildings. The largest nearby contiguous scrub-shrub habitat patch is located adjacent to the northeastern corner of the site at Winthrop Point.

Vegetation within this habitat type consists of sparsely- to moderately-dense shrub-dominated uplands with few scattered trees and a varied herbaceous layer. Vegetation composition is typical of moderately dry, disturbed sites and may include numerous noxious/invasive species such as: tree-of-heaven (*Alianthus altissima*), multiflora rose (*Rosa multiflora*), Asiatic bittersweet (*Celastrus orbiculatus*), poison ivy (*Toxicodendron radicans*), and honeysuckle (*Lonicera spp.*).

A small tidal wetland was identified immediately south of the Thames River Boat Launch. This wetland is dominated by common reed (*Phragmites australis*) and includes several marsh elder (*Iva frutescens*), and sea myrtle (*Baccharis halmifolia*) shrubs. This wetland was not formally delineated because it is located outside of the SPII impact footprint.

Surrounding land uses

The existing State Pier Facility is an active maritime port that receives shipments of various bulk cargo commodities. Accordingly, space is at a premium and the vast majority of the complex consists of industrial developed land occupied by:

1. Roadways;
2. Warehouses and support buildings;
3. Transit structures;
4. Railroad tracks; and,
5. Upland storage areas.

In general, industrial developed land includes impervious land surfaces such as asphalt or concrete pavement, compacted gravel, and buildings. Upland storage areas are used for temporary storage of a variety of commodities awaiting shipment off site, construction and industrial materials, vehicles, and heavy machinery.

USFWS and/or NOAA Clearance Letter or Biological Opinion

As the lead federal agency, the U.S. Army Corps of Engineers (USACE) is currently consulting with applicable regulatory agencies including USFWS and NOAA Fisheries. Additional information regarding rare species in the mitigation area may be provided as the permitting process progresses. The compensatory mitigation project is not anticipated to adversely impact the rare species noted above. Appropriate measures will be employed to avoid a species take.

SHPO/THPO Cultural Resource Clearance Letter

The Project is consulting with the Connecticut State Historic Preservation Officer, as well as appropriate Tribal Historic Preservation officers as part of the federal permitting process (under CWA Section 404, RHA Section 10 and US Section 408 coordination). Historic and cultural resources are not known at the proposed onsite compensatory mitigation location, an area deemed to be of low archaeological sensitivity; however, the project will continue to coordinate with these entities as appropriate during the permitting process.

Mitigation Proposed (Mitigation Plan Element C.3)

Living Shoreline features have been used successfully at other nearby sites in the recent past, such as at Stratford Point,[18] and would likely provide multiple benefits to ecosystems immediately adjacent to the Project site. As defined by NOAA:

> *"A living shoreline is made up mostly of native material. It incorporates natural vegetation or other living, natural soft elements alone or in combination with some type of harder shoreline structure, like oyster reefs, rock sills, or anchored large wood for added stability. Living shorelines connect the land and water to stabilize the shoreline, reduce erosion, and provide ecosystem services, like valuable habitat, that enhances coastal resilience."*[19]

The Project's Living Shoreline creation and design has been advanced from a conceptual stage as described in the May 2019 JPA, to a working draft design; however, additional site-specific topography and bathymetry along portions of the shoreline enhancement areas, from approximately the +4-foot elevation down to -6-foot elevation (NAVD88), will be obtained in the process of finalizing the design. Available land-based topographic datasets and water-based bathymetric datasets are not completely available through this area, so aerial photographic interpretation and interpolation between the two datasets were completed to advance the mitigation design. Elevation data collected by AECOM in Summer 2020 has been added to the accompanying Living Shoreline Enhancement Area figures.

Living Shoreline installation in the vicinity of the State Pier Facility involves work in and around Winthrop Point (New London, CT). The work would be completed on previously developed parcels and submerged/intertidal lands in the Thames River, near Long Island Sound. Specifically, the shoreline habitat enhancements will be implemented along two discrete areas of the Thames River; with Area-1 (Figure 2, Sheet 1 of 2) beginning just north of the State Pier Northeast Bulkhead and extending for approximately 500 linear feet northward along the shoreline, around Winthrop Point to an existing beach, and Area-2 (Figure 2, Sheet 2 of 2) beginning just north of the Amtrak Railroad Bridge and extending approximately 300 linear feet along the shoreline to an existing public boat ramp just south of the I-95 transportation corridor.

A large proportion of these areas have been historically altered and armored in order to support adjacent port facilities and infrastructure, including the Amtrak Railroad Bridge. The proposed Living Shoreline would add "softer" elements to the landscape, enhance coastal resilience, and improve fisheries, mollusk, tidal wetland and buffer habitats along this section of shoreline.

In their comprehensive 2017 *Living Shorelines in New England: State of the Practice* Report[20] prepared for the Nature Conservancy, the Woods Hole Group includes an interactive Applicability Index[21] to assess the suitability of installing various Living Shoreline varieties at a particular site. In accordance with this Applicability Index, the design and suitability of a particular type of Living Shoreline type are influenced by the following parameters of a particular site:

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[18] https://circa.uconn.edu/projects/stratford-point-living-shoreline/# Accessed 26 February 2019.

[19] https://www.habitatblueprint.noaa.gov/living-shorelines/ Accessed 26 February 2019.

[20] https://www.conservationgateway.org/ConservationPractices/Marine/crr/Documents/Final_StateofthePractice_7.2017.pdf Accessed 26 February 2019.

[21] https://www.conservationgateway.org/ConservationPractices/Marine/Pages/new-england-living-shorelines.aspx Accessed 26 February 2019.

- Energy State
- Existing Resources
- Nearby Sensitive Resources
- Tidal Range
- Elevation (relative to MLW/MHW)
- Intertidal Slope
- Bathymetric Slope
- Erosion

Based on an examination of these parameters and evaluation of site-specific conditions, the installation of a Living Breakwater with Low Marsh Creation and Toe Protection are appropriate enhancements for this location. In addition, expansion of an existing eelgrass bed located just north of the Northeast Bulkhead is included in this design as they are vital habitats for a wide range of fish and wildlife, including flounder, bay scallops, and crabs. Other types of enhancements and erosion control methods outlined in the 2017 Living Shoreline document that may be applied to coastal banks, dunes, and beaches are not applicable at this location.

Low Marsh Creation with Toe Protection

AECOM anticipates that the creation of a fringe of low salt marsh habitat will be appropriate within the vicinity of Winthrop Point (Area-1) and along the shoreline and "cove" areas located immediately north of the Amtrak corridor and south of the existing boat launch (Area-2) (see Figure 2 for additional location detail).

Based on the current design, up to approximately 13,000 sq. ft. of low marsh habitats may be achievable between the MLW and MHW tidelines. Low marsh creation would be completed through the installation of clean fill materials of appropriate grain size, being applied atop the existing substrate, where necessary. Efforts will be made to approximate the existing sediment conditions while preparing the surface sediment/soil to be suitable for low marsh plantings. Plantings will include the installation of low-marsh species vegetation (i.e. salt-water cordgrass [*Spartina alterniflora*]) in the intertidal zone.

Because these low marsh areas are within a low to moderate tidal range (amplitude of approximately 3 feet) and may be subjected to both natural fetch and wave action from boats that could potentially result in a low to moderate energy state, toe protection along the lower boundary is warranted. Therefore, installation of a toe protection system – comprised of coir logs, shellfish bags, rocks or similar features to dissipate wave energy – are included in the design.

Enhancement plantings (of approximately 6,000 sq. ft.) of tidal/high marsh vegetation in a fringe ring surrounding the cove / shoreline (Area-2) is also proposed. High marsh vegetation will include a combination of woody shrub and herbaceous species including saltmeadow cordgrass (*S. patens*), black rush (*Juncus gerardii*) and spikegrass (*Distichlis spicata*) at lower elevation areas with marsh elder (*Iva fructescens*) and groundsel tree (*Baccharis halimifolia*), along the upper fringes of the marsh creation area, as onsite space constraints allow. In addition, existing patches of common reed (*Phragmites australis*) located at or above the cove's MHW line, as noted on Figure 2, will be removed and controlled to further improve available habitats.

Living Breakwater

In order to break waves and dissipate their energy, promote sediment retention as valuable substrate for marine organisms and create additional habitat for fish, crab and other mobile species, a Living Breakwater will be installed along portions of Area-1 and Area-2. Sediment retention and reduced wave action landward of the breakwater is also intended to promote eelgrass expansion from just below the MLLW line to approximately -4-foot elevation and provide additional protection for the created low marsh areas.

Three different sizes of pre-formed, hollow concrete balls, designed to mimic the structure and function of a natural shellfish reef/cultch, will be installed to create a Living Breakwater. These include Goliath Balls, Reef Balls, and Pallet Balls, which are deployed and anchored in the Thames River at or within a few feet below MLLW, depending on ball height. In most cases the tops of these breakwaters are at or just below MHW. Shell bags, concrete forms and/or stone may function as the physical breakwater, which reduces the wave energies landward of the features. Depending upon existing conditions and final design, the breakwaters could be used to encourage native blue mussel (*Mytilus edulis*) growth in the cove's existing mud flats landward of the proposed breakwater and/or to enhance oyster (*Crassostrea virginica*) populations at the site (comparable to the previously cited Stratford Point project).

The existing eelgrass bed located just north of the Northeast Bulkhead is situated roughly between the -2-foot and -5-foot elevation (NAVD88). Therefore, placing the medium sized Reef Balls at around the -4-foot elevation (NAVD88), will help to create a lower energy environment and promote accretion of finer sediments that will ultimately encourage development of additional eelgrass habitats landward of the reef balls. Under this approach approximately 25,000 sq. ft. of eelgrass beds may be achievable.

In addition to the creation of new eelgrass beds, larger sized Goliath Balls are proposed along the existing eelgrass bed to protect it from propeller wash and wave action generated by activities along the adjacent bulkhead/installation berth.

As currently designed, 97 reef balls (i.e., 28 Pallet Balls, 45 Reef Balls, and 24 Goliath Balls) are proposed to provide shoreline protection and promote development of eelgrass and low marsh habitats.

Permittee-Responsible Mitigation Summary

As previously mentioned, additional information on shoreline bathymetry was recently collected (i.e., from approximately +4-foot down to -6-foot elevation NAVD88) and additional surveys may further an understanding of conditions and refine the final design at the Living Shoreline Restoration sites located in the vicinity of Winthrop Point (Figure 2; Sheet 1 of 2) and the boat ramp (Figure 2; Sheet 2 of 2). These initial investigations have been completed and detailed additional topographic surveys would be incorporated into final design plans and documents in compliance with anticipated permit approval conditions.

Creation of a low marsh habitat, eelgrass expansion areas coupled with toe-protection and a living breakwater (i.e., reef balls) are expected to be beneficial and appropriate for the site. The proposed design should provide the benefits of energy dissipation, erosion control and habitat for marine organisms, including shellfish, fish, crab and other mobile species through installation of a non-traditional "soft" engineering approach that would be compatible with onsite conditions.

A wetland/coastal habitat scientist will be on-site to monitor construction of the mitigation areas to ensure compliance with the mitigation plan and to make adjustments when appropriate to meet mitigation goals.

Compensatory mitigation construction would be initiated not later than 90 days after initiation of Project

construction and completed within two years of commencement of mitigation construction. The Project proponent would be responsible for the design, construction, implementation, and subsequent monitoring of the permittee-responsible compensatory mitigation (i.e. Mitigation Element #1) described herein.

Specific Aquatic Resource Checklist Information Appended (Mitigation Plan Element C.4)

No additional specific aquatic resource checklist information (i.e. wetlands, streams, vernal pools, SAV or other aquatic resources [e.g., mudflats]) has been included herein, as none are known at the Project site's impact areas or compensatory mitigation areas. As noted in Attachment M1B, a discrete patch of eelgrass (*Zostera marina*: SAV) was noted during the Summer 2019 onsite surveys; adjacent to the Northeast Bulkhead. Project dredging, fill and compensatory mitigation activities will completely avoid direct impacts to this SAV. Controls, including turbidity curtain use and toewall installation, as described above, will be implemented to ensure that proposed Project will avoid adversely impacting the extant band of eelgrass. Additional information will be provided if future investigations reveal the presence of additional noted resources onsite, and specifically within the proposed mitigation area.

Grading (Plan Mitigation Plan Element D)

The anticipated permittee-responsible compensatory mitigation (i.e. Mitigation Element #1) described herein remains flexible in nature. The living shoreline concept described herein will require additional agency input and completion of site characterization prior to implementation.

Additional detailed Grading Plan information meeting NAE Mitigation Plan Guidance (i.e. at appropriate scale and format) will be provided prior to construction of the living shoreline. A representative cross-section and accompanying details which depict the living shoreline (Mitigation Element #1) at the "cove" are included as Figures 4 and 5.

Erosion Controls (Plan Mitigation Plan Element E)

A soil erosion control plan has been developed and submitted to CT DEEP. A soil erosion control plan for the permittee-responsible compensatory mitigation work described herein would be provided prior to construction. A "*Stormwater and Dewatering Wastewaters from Construction Activities*" permit has been obtained for the SPII (Application No. 201914361 / Permit No. GSN003536) And additional authorizations would be required before any construction activities occur relative to the Living Shoreline component.

The intent of the erosion control plan is to minimize soil erosion and sedimentation throughout the extent and duration of the project. This will be performed by implementing erosion control best management practices (BMPs) that: 1) control soil detachment, 2) control water movement, and 3) control sediment deposition. The plan was developed using criteria from the "*2002 Connecticut Guidelines for Soil Erosion and Sediment Control*". Additional plan measures would be developed prior and authorizations sought prior to construction of the compensatory mitigation work.

The erosion control plan for Living Shoreline construction will include a variety of stormwater and erosion control measures for the upland portion of the site. Among other BMPs, these measures may include the installation of common elements such as silt fencing, straw bales, slope breakers, rip rap, geotextile filters, water bars, and stabilized construction entrances in terrestrial areas.

Turbidity control measures will be utilized and implemented during all in-water work and demolition proposed for the Project. Additional detail regarding the anticipated turbidity mitigation and monitoring program is presented in DEEP Application Section III.2. The CPA anticipates installation of turbidity curtains and turbidity

monitoring to be part of the demolition and dredging phases of the Project. Floating silt curtains or equivalent may be employed during in-water construction operations.

During living shoreline construction, especially as alterations are made to the benthos elevations, there may be potential for a short term increase in suspended sediments in the water column. During this work, there is potential for the resuspension (fluidization and dispersion) of sediments within the water column. For living shoreline construction activities, site controls and BMPs will be put in place to minimize impacts to the water column.

The potential to create turbidity and impact water column quality will be minimized by adherence to the BMPs provided below.

- Turbidity curtains may be in place during activities that could disturb the sediment surface.
- Efforts will be made to avoid grounding of barges and work vessels, and water levels will be allowed to rise before attempting to free grounded vessels.
- Use of equipment appropriate for the water depth of the work area.
- Re-handling or stockpiling material on the river bottom will not be permitted.
- Limiting tug propeller revolutions per minute.
- Work on slopes will proceed from top of slope to toe of slope, where practical.
- Utilization of precision bucket guidance systems (e.g., integrated with real-time kinematic differential global positioning systems [RTK – DGPS]), will allow the operator to deploy/ retrieve the environmental dredge/construction bucket with a high level of operational accuracy.
- Use of an experienced environmental dredging operator capable of implementing appropriate BMPs to limit re-suspension will be required.
- The operator will not fill the construction bucket beyond its stated capacity.
- The operator will optimize the rate of bucket descent and retrieval during operations in order to reduce sediment re-suspension.
- Oil absorbent booms will be available for deployment in an emergency situation.
- Salt-marsh plantings would occur immediately after benthos elevation changes (as required).
- If used, turbidity (silt) curtains will be long enough to cover the full length of the water column, with an allowance for tidal flux (approximately 2-4 feet [ft]). The curtains will be anchored to structures and / or the mudline, as detailed on Attachment I.
- Near-shore silt curtains will be anchored using a multi-point anchoring system and affixed to mechanical winch system to ensure that they are not moved out of position by tidal action, vessel wakes, etc.

In-water work will be conducted during the permitted timeframes as determined through final design and permitting of the Project. During in-water construction activities, real-time measurements of turbidity will be used to trigger mitigation/response actions, in accordance with the Project's turbidity monitoring plan (described under separate cover). The water quality monitoring program will also include ongoing visual inspections for evidence of solids transport that may not be monitored by the turbidity measurements.

Temporary devices and structures to control erosion and sedimentation in and around mitigation sites will be properly maintained at all times. The devices and structures will be disassembled and properly disposed of as soon as the site is stable but no later than November 1st of the third full growing period after planting. Sediment collected by these devices will be removed and placed at an upland location in a manner that prevents its erosion and transport to a waterway or wetland.

Invasive Species Control Plan (Plan Mitigation Plan Element F)

A project-specific Invasive Species Control Plan (ISCP) will be developed to address the risks, constraints and control strategies for invasive species at the living shoreline area. As noted above, Compensatory Mitigation Element #1 includes an opportunity for common reed removal and control at or above the cove's MHW line. The existing extent of Phragmites is noted on Figure 2. The ISCP - which includes near- and longer-term control measures for common reed and other species – will be included as Appendix C.

Off-Road Vehicle Use (Plan Mitigation Plan Element G)

The Living Shoreline (Mitigation Element #1) area is currently accessible by foot from the upland areas and by vessel from the water-side. As such, significant off-road vehicle usage is not anticipated. If required, temporary access measures such as corduroy roads or similar would be employed to facilitate access to the living shoreline restoration area.

Site Protection (Plan Mitigation Plan Element H)

Site Protection measures included in the 2016 NAE Mitigation Guidance document include implementation of buffer-areas, deed restrictions and conservation set-asides in perpetuity. Detail regarding Site Protection measures specific to the SPII Mitigation Element #1will be provided as part of the Project permitting process and prior to the Living Shoreline construction.

Monitoring and Assessment (Plan Mitigation Plan Element I)

Success of the Living Shoreline (Mitigation Element #1) installation would be monitored annually for a minimum of five years. Monitoring and assessment reporting would occur in a format consistent with *Appendix D* of the 2016 NAE Mitigation Guidance document.

Notification of Construction Completion

Within 60 days of completing a mitigation project that includes restoration, creation, and/or rehabilitation, the applicant will submit a signed letter to the Corps, Policy and Technical Support Branch, specifying the date of completion of the mitigation work and the Corps permit number.

If mitigation construction is initiated in, or continues throughout the year, but is not completed by December 31 of any given year, the permittee will provide the Corps, Policy and Technical Support Branch, a letter providing the date mitigation work began and the work completed as of December 31. The letter will be sent no later than January 31 of the next year. The letter will include the Corps permit number.

Monitoring Report Guidance

For each of the first five full growing periods following construction of the mitigation site(s), the site(s) will be monitored and annual monitoring reports submitted. Observations will occur at least two times during the growing period – in late spring/early summer and again in late summer/early fall. Each annual monitoring report, in the format provided in the New England District Compensatory Mitigation Guidance, will be submitted to the Corps, Regulatory Division, Policy and Technical Support Branch, no later than December 15 of the year being monitored. Failure to perform the monitoring and submit monitoring reports constitutes permit non-compliance. A self-certification form will be completed and signed as the transmittal coversheet for each annual monitoring report and will indicate the permit number and the report number (Monitoring Report 1 of 5, for example). The reports will address the following performance standards in the summary data section and will address the additional items noted in the monitoring report requirements, in the appropriate section. The reports will also include the monitoring-report appendices. The first year of monitoring will be the first year that the site has been through a full growing period after completion of construction and planting. For these permit special conditions, a growing period starts no later than May 31. However, if there are problems that need to be addressed and if the measures to correct them require prior approval from the Corps, the permittee will contact the Corps by phone (800-343-4789) or letter as soon as the need for corrective action is discovered. Remedial measures will be implemented - at least two years prior to the completion of the monitoring period - to attain the performance standards described below within five growing periods after completion of

construction of the mitigation site(s). Should measures be required within two years of the end of the original monitoring period, the monitoring period will be extended as necessary to ensure two years of monitoring after the remedial work is completed. Measures requiring earth movement or changes in hydrology will not be implemented without written approval from the Corps.

Site-specific performance standards meeting NAE Mitigation Plan Guidance will be developed and submitted to USACE prior to construction of the living shoreline. In addition, a reference reach appropriate to the living shoreline work will be determined and associated plans developed as part of the planning process.

Project Overview Form will be prepared and included with each Annual Monitoring Report. The Transmittal and Self-Certification Form will be included with each Annual Monitoring Report

ASSESSMENT

A post-construction assessment of the condition of the mitigation site(s) shall be performed at the end of the monitoring period. The assessment report shall be submitted to the Corps by December 15 of the year the assessment is conducted; this will coincide with the year of the final monitoring report, so it is acceptable to include both the final monitoring report and assessment in the same document.

Contingency (Plan Mitigation Plan Element J)

The 2016 NAE Mitigation Guidance document includes examples of situations that could require contingency planning such as unearthing an unexpected archaeological site, and/or encountering hazardous waste. Though considered unlikely, if either of these scenarios were encountered during the mitigation construction, the Project would consult with the applicable regulatory agencies to implement corrective measures. Project planning has been completed to minimize the chance of these scenarios occurring. Additional detail regarding Contingency Plan measures specific to the SPII Mitigation Element #1 may be provided as part of the Project permitting process and prior to the Living Shoreline construction.

Long-term Stewardship (Plan Mitigation Plan Element K)

The anticipated permittee-responsible compensatory mitigation (i.e. Mitigation Element #1) described herein remains flexible in nature. The Living Shoreline concept described herein will require additional agency input and completion of site characterization prior to implementation.

Additional detailed long-term stewardship plan and associated legal documentation meeting NAE Mitigation Plan Guidance may be provided prior to construction of the Living Shoreline.

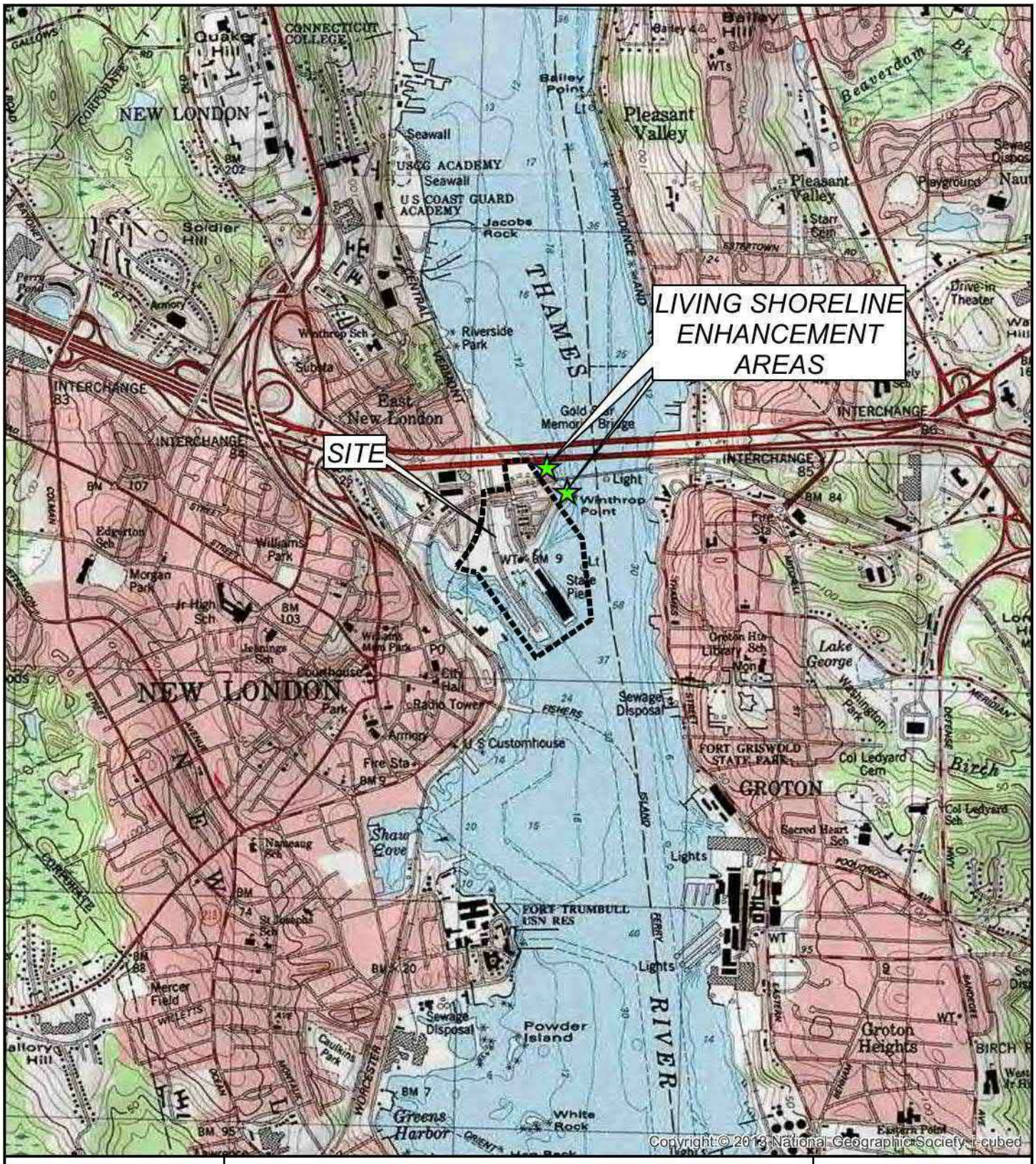
Financial Assurances (Plan Mitigation Plan Element L)

The anticipated permittee-responsible compensatory mitigation (i.e. Mitigation Element #1) described herein remains flexible in nature. The Living Shoreline concept described herein will require additional agency input and completion of site characterization prior to implementation.

Additional detailed financial assurances documentation meeting NAE Mitigation Plan Guidance, including potential construction bond amount and associated securities information, may be provided prior to construction of the Living Shoreline.

Other Comments (Mitigation Plan Element M)

If requested, the CPA would be pleased to provide additional information regarding the Project's compensatory mitigation plans to the Corps.



Map Location

N

Site Locus Map and Living Shoreline Enhancement Areas

State Pier Infrastructure Improvements
New London, Connecticut

0 1,000 2,000 4,000 6,000 Feet

0 0.125 0.25 0.5 0.75 Miles

Map Projection: State Plane, NAD 83, feet.
Image Source: USGS Topographic Quadrangle New London and Uncasville, CT.

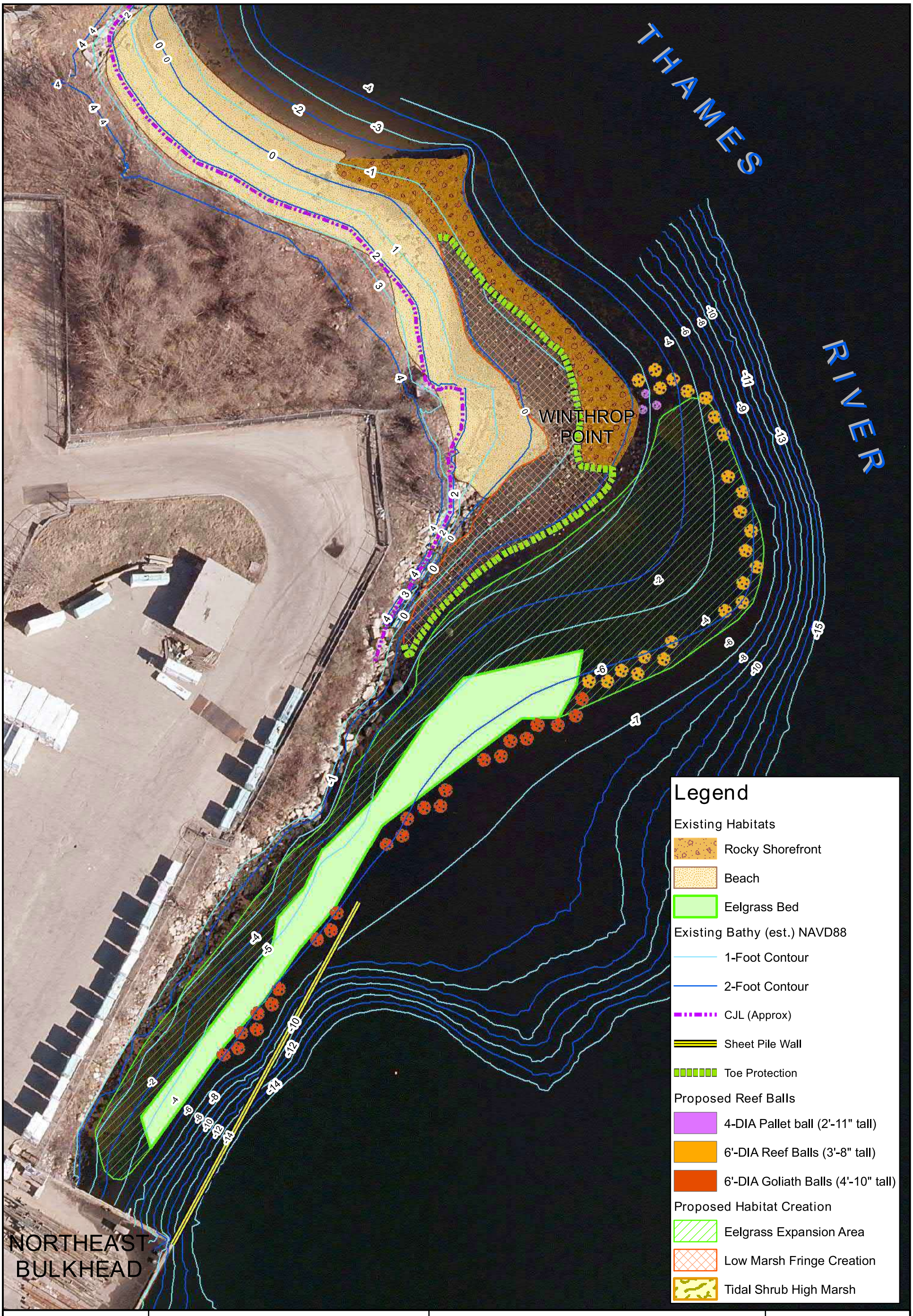
AECOM

Figure 1

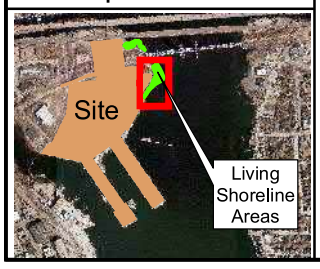
4/8/2019

Proj. #: 60579714

)



Map Location



Living Shoreline Enhancement Area - 1

Mitigation Plan
State Pier Infrastructure Improvements
New London, Connecticut
1 inch = 40 feet

0 20 40 80 120 Feet

AECOM

Figure 2

Sheet 1 of 2

9/30/2020

THAMES

RIVER

INVASIVE SPECIES MANAGEMENT AND NATIVE SPECIES ENHANCEMENT PLANTINGS

Map Location

Existing Habitats
- Rocky Shorefront
- Beach
- Eelgrass Bed

Existing Bathy NAVD88
- 1-Foot Contour
- 2-Foot Contour
- CJL (Approx)

Proposed Reef Balls
- 4-DIA Pallet ball (2'-11" tall)
- 6'-DIA Reef Balls (3'-8" tall)
- 6'-DIA Goliath Balls (4'-10" tall)

Proposed Habitat Creation
- Eelgrass Expansion Area
- Low Marsh Fringe Creation
- Tidal Shrub High Marsh
- Toe Protection

Living Shoreline Enhancement Area - 2

Mitigation Plan
State Pier Infrastructure Improvements
New London, Connecticut

1 inch = 30 feet

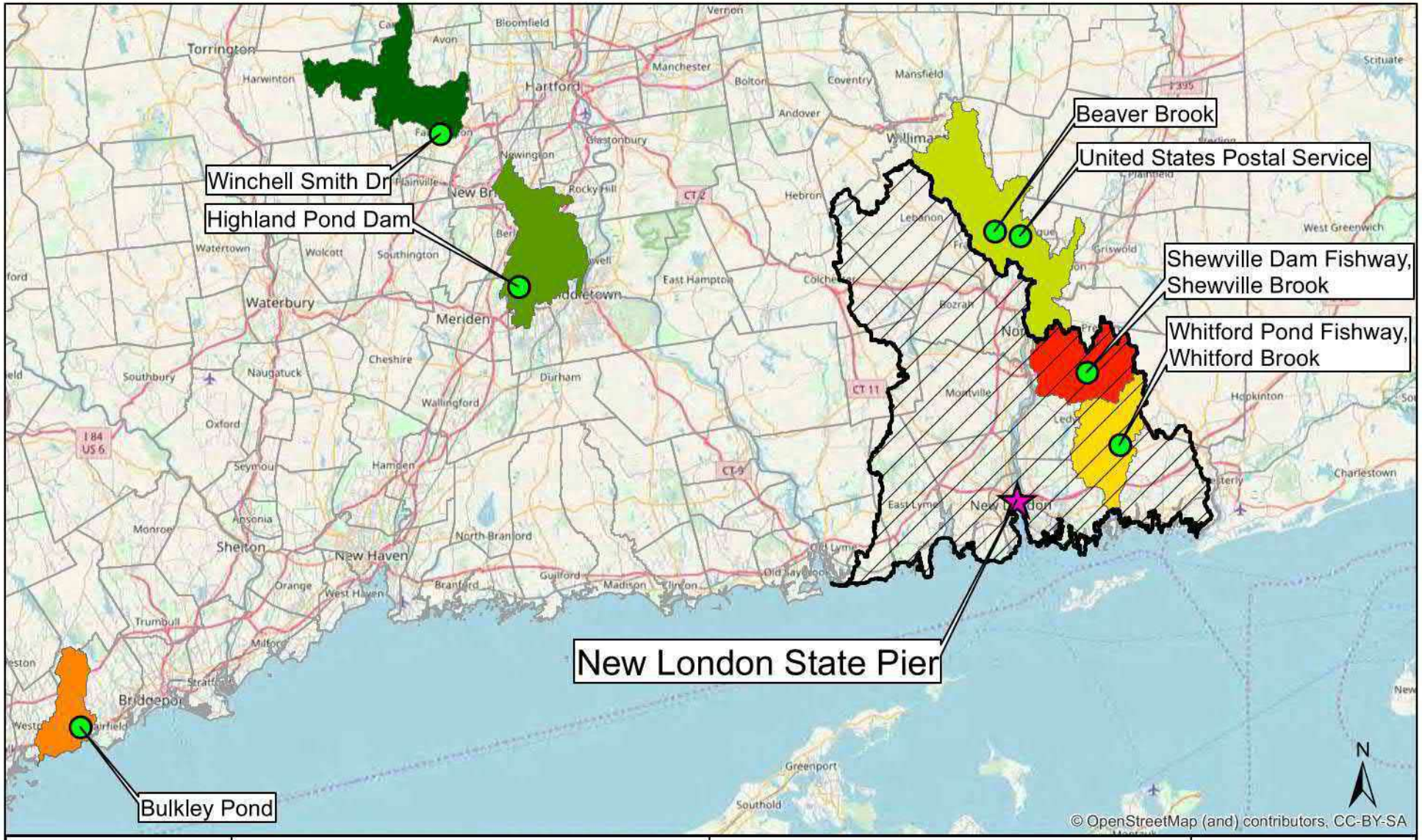
0 15 30 60 90 Feet

AECOM

Figure 2

Sheet 2 of 2

9/30/2020



Map Location

HUC 8 Watershed (#0110003)

HU 10 NAME

- Farmington River-headwaters to Thompson Brook
- Mattabesset River
- Shetucket River
- Southeast Coastal-Pawcatuck River to Eastern Point
- Southwest Coast-Stratford Point to Cedar Point
- Thames River-Yantic River to mouth

Potential CT DEEP Stream Connectivity Projects

State Pier Infrastructure Improvements
New London, Connecticut

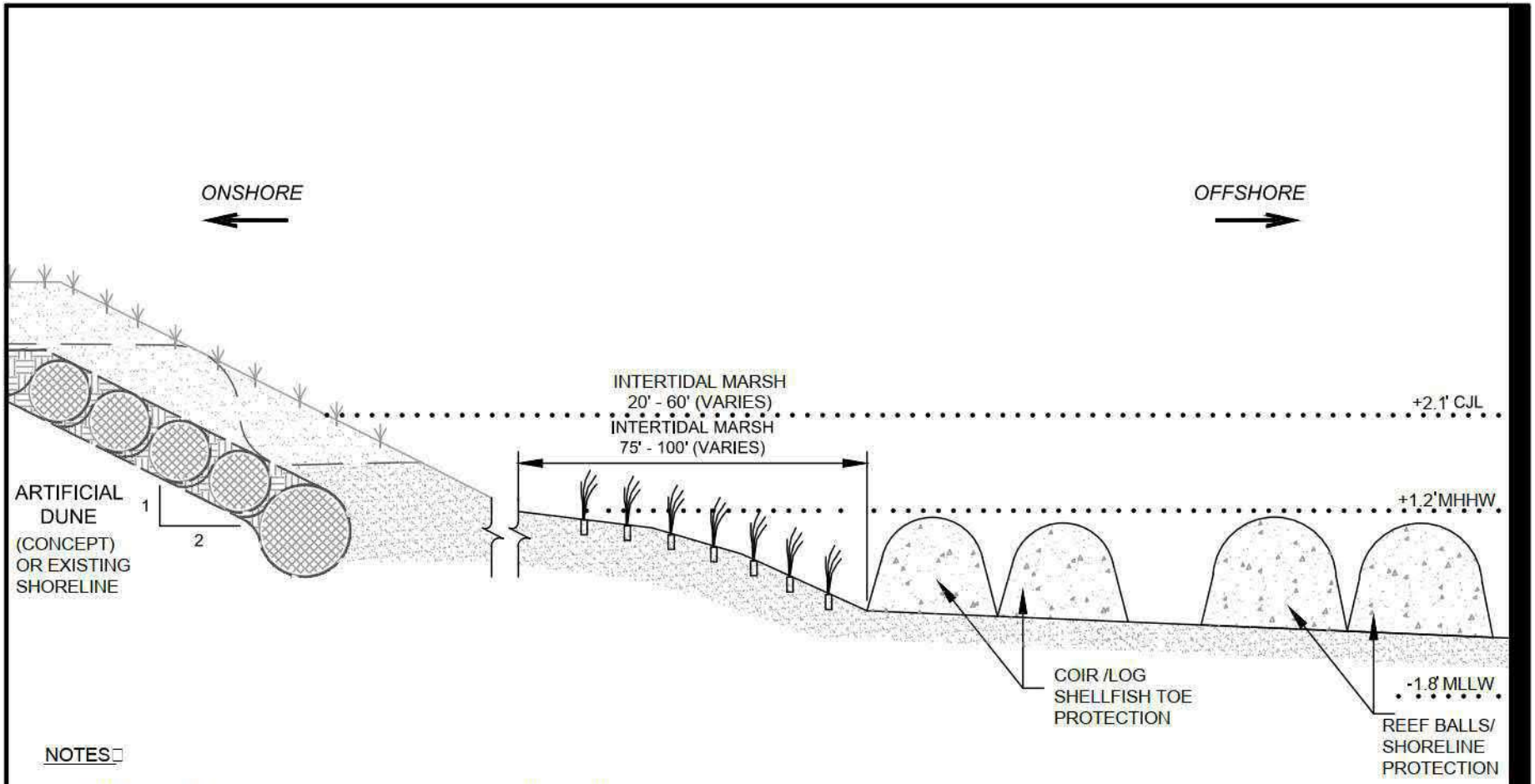
0 4.25 8.5 17 Miles

AECOM

Figure 3

9/29/2019

Proj. #: 60579714



NOTES

1. LIVING SHORELINE/MITIGATION REMAINS CONCEPTUAL IN NATURE
2. 1. ELEVATIONS SHOWN HEREIN REFER TO THE NATIONAL AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) IN FEET.
3. 2. DEFINITION OF TERMS
   A. A. CJL - COASTAL JURISDICTIONAL LIMIT (ANNUAL HIGH TIDE)
   B. B. MHW - MEAN HIGH WATER
4. C. MHHW - MEAN HIGHER HIGH WATER
5. D. MLW - MEAN LOW WATER
   E. MLLW - MEAN LOWER LOW WATER
6. 3. REEF BALL SIZE AND BOTTOM ELEVATION WILL VARY BASED UPON ITS LOCATION.
7. 4. REEF BALL ALIGNMENTS SHOWN ARE APPROXIMATE. THE ACTUAL ALIGNMENTS WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION.
8. 5. THIS FIGURE IS FOR PERMITTING PURPOSES ONLY; IT IS NOT TO BE USED FOR BIDDING OR CONSTRUCTION PURPOSES.

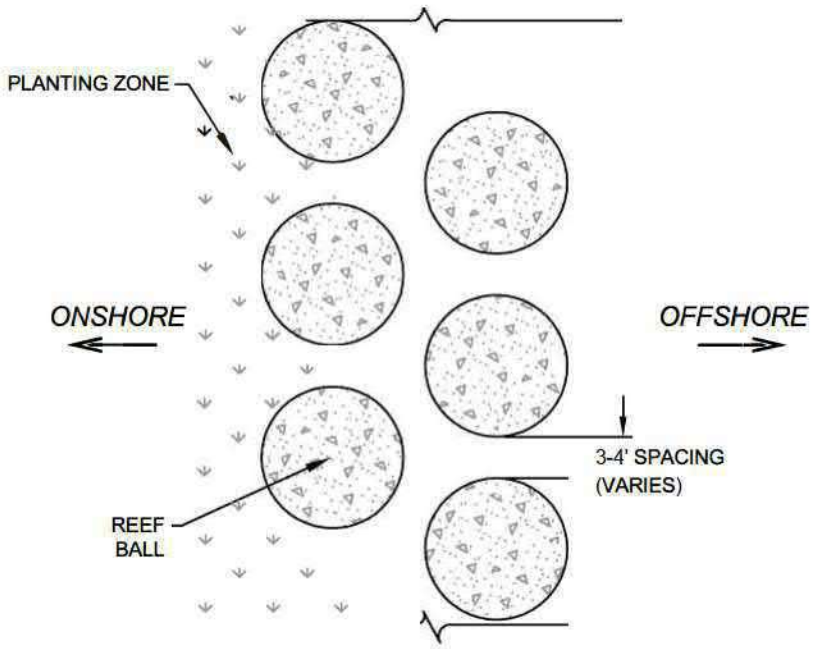
AECOM

Figure 4

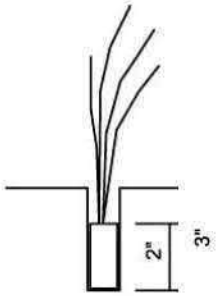
TYPICAL SECTION
SUBJECT TO CHANGE BASED ON
REGULATORY INPUT

SPII "LIVING SHORELINE" CONCEPT
STATE PIER
NEW LONDON CONNECTICUT Project
No. 60558060 Date: 05/07/2020

ANSI A 8.



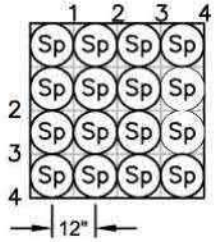
DETAIL - PLAN VIEW
NOT TO SCALE



NOTES:

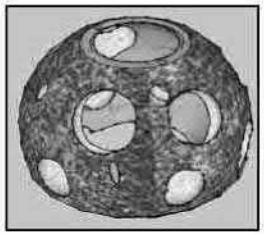
1. PLANTING ZONE SHALL CONSIST OF SPARTINA ALTERNIFLORA.
2. FILL AROUND BOTTOM & SIDES WITH SOIL REMOVED FROM PLANTING HOLE.

TYPICAL PLANTING DETAIL
NOT TO SCALE



NOTES:
PLUGS TO BE PLANTED 12" ON CENTER.

TYPICAL PLANTING LAYOUT
NOT TO SCALE



REEF BALL SCHEMATIC
NOT TO SCALE

NOTES:
1. IF CONDITIONS ALLOW, REEF BALLS SHALL BE PLACED IN A STAGGERED ALIGNMENT AS SHOWN WITH 1-FOOT SPACING.
2. THIS FIGURE IS FOR PERMITTING PURPOSES ONLY; IT IS NOT TO BE USED FOR BIDDING OR CONSTRUCTION PURPOSES.

TYPICAL DETAILS
SUBJECT TO CHANGE BASED ON REGULATORY INPUT

ANSI A 8.5" x 11"

SPII "LIVING SHORELINE" CONCEPT
STATE PIER
NEW LONDON CONNECTICUT Project
No. 60558060 Date: 05/07/2020

Figure 5

Appendix A: Fisheries Management/Mitigation Plan: In-Stream Restoration Overview

Part 1. CT DEEP Fisheries Mitigation Plan Approach and List of Candidate Fisheries Restoration Projects; and,

Part 2. Model Escrow Funding Agreement

Certain economically important, water-dependent projects, including this project, affect fish habitat by their very nature. Recent coastal projects involving waterfront development have, or propose to, irreversibly damage nursery habitat and staging grounds for alewife (*Alosa pseudoharengus*) and blueback herring (*Alosa aestivalis*). These species are in decline and under consideration for listing under the federal Endangered Species Act. The American shad (*Alosa sapidissima*), is also the target of many restoration programs in affected watersheds throughout Connecticut and New England. Such habitat loss is very difficult to replace with newly created habitat elsewhere. Other nearby estuarine areas are already providing this kind of habitat, and there is a lack of technical knowledge and practical opportunities to excavate terrestrial waterfront and convert it to suitable sub-tidal fish habitat.

The Connecticut Department of Energy and Environmental Protection (CT DEEP) Fisheries Division always seeks to mitigate the loss of fish habitat with the gain of fish habitat instead of with the gain or preservation of habitat for some other taxa. There is precedent set by previous CT DEEP-issued permits where a project resulted in an estimated loss of fisheries habitat. In response to this estimated loss, CT DEEP has previously issued permits to include a condition whereby anadromous fish passage project(s) are required by way of dedicated funding. For those previous CT DEEP-issued permits, specific projects at various stages of design and construction were funded by way of an escrow account according to a Memorandum of Agreement. Monies from the escrow account were then distributed to the predetermined project(s). Consequently, anadromous fish passage projects (e.g., fishway, dam removal) expanded the migration of alewife and herring (and other species) and provided access to more habitat than what was lost, resulting in a net gain over existing conditions.

CT DEEP has determined that the proposed SPII will result in direct, permanent impacts to coastal resources and associated anadromous fisheries habitat. To mitigate for the permanent impacts, CPA has worked with CT DEEP Fisheries Division to identify compensatory restoration projects.

CPA understands that the following habitat enhancement projects may be viable in-stream restoration projects, based on prior correspondence with CT DEEP. If undertaken, CPA-funded habitat enhancement project(s) would be finalized during the ongoing permitting process with CT DEEP and others.

The CPA understands that CT DEEP has previously identified seven (7) Tier I habitat enhancement projects that would reconnect miles of fish habitat that are currently inaccessible and, therefore, not productive. As CPA understands, these restoration projects were or are active and would be ready for implementation within approximately the next 12 months. They include fishways and possible dam removals, as summarized below.

CT DEEP Tier I Projects

Project Name	Stream	Town	Project Sponsor[25]	Maximum Contribution to Project[26]
Post Office	Beaver Brook	Sprague	Town of Sprague	$300,000
Harrington Apt	Beaver Brook	Sprague	Town of Sprague	
Highland Pond Dam	Sawmill Brook	Middletown	Middlesex Land Trust	$200,000
Shewville Dam Fishway	Indiantown Brook	Ledyard	ECCD	$200,000
Bulkley Pond	Sasco Brook	Westport/Fairfield	TBD	$135,000
Winchell-Smith	Farmington River	Farmington	Connecticut River Salmon Assoc.	$500,000
Whitford Pond Dam	Whitford Brook	Ledyard	STS	$300,000
Total				**$1,635,000**

In addition to the seven Tier I projects listed above, CT DEEP has identified 26 Tier II habitat enhancement projects. These Tier II projects have been identified in the event that one or more of the priority projects cannot be implemented due to unresolvable issues associated with, but not limited to, land ownership, design obstructions, time of year restrictions, and/or permitting. The Tier II-designated projects are summarized below.

CT DEEP Tier II Projects

Project Name	Stream	Town	Project Sponsor[19]	Maximum Contribution to Project[20]
Roaring Brook	Roaring Brook	Lyme	Connecticut River Salmon Assoc.	TBD
Wards Mill	Branford River	Branford	TBD	TBD
Parke Pond	Shunnock River	Stonington	TBD	TBD
Merwin Meadows	Norwalk River	Wilton	Save the Sound	TBD
Long Pond	Whitford Brook	Ledyard	Save the Sound	TBD
Bristol Brass	Pequabuck River	Bristol	Connecticut River Salmon Assoc.	TBD
Roses Mill Pond	Indian River	Milford	Save the Sound	TBD

[25] Hereinafter, referred to individually as a "Project Sponsor," and collectively as "Project Sponsors," which includes sponsors of both Tier I and Tier II Projects. Project Sponsors may also be more specifically referred to as "Tier I Project Sponsors" or "Tier II Project Sponsors," or in the singular as a "Tier I Project Sponsor" or "Tier II Project Sponsor."

[26] Hereinafter, the amount identified in this column, or (if this column does not provide an amount) the amount later determined by DEEP as part of its review of a Project proposal to be the Maximum Contribution to Project, is referred to as the "Maximum Contribution to Project."

CT DEEP Tier II Projects (Continued)

Project Name	Stream	Town	Project Sponsor[19]	Maximum Contribution to Project[20]
Indian Lake	Indian River	Milford	Save the Sound	TBD
Schwartz Pond	Stony Brook	Suffield	Connecticut River Salmon Assoc.	TBD
Starr Mill Dam	Coginchaug River	Middletown	Connecticut River Salmon Assoc.	TBD
Johnsonville	Moodus River	East Haddam	Connecticut River Salmon Assoc.	TBD
Witch Hazel	West River	Guilford	TBD	TBD
Deer Lake	Chatfield Hollow Br	Madison	TBD	TBD
Grannis Pond	Eightmile River	Southington	Save the Sound	TBD
Dam of the Damned	Noroton River	Stamford	Save the Sound	TBD
Nickson	Quinnipiac River	Plainville	Save the Sound	TBD
Chasmar	Fivemile River	Darien/Norwalk	Save the Sound	TBD
Haleys Brook dams	Haley's Brook	Groton	Save the Sound	TBD
Stillman Pond	Yellow Mill Channel	Bridgeport	Save the Sound	TBD
Mill River Tide Gates	Mill River	New Haven	Save the Sound	TBD
Millers Pond	Hunts Brook	Waterford	TBD	TBD
Cannondale	Norwalk River	Weston	TBD	TBD
Tingue Dam Fishway	Naugatuck River	Seymour	Town of Seymour	TBD
Upper Millpond	Indian River	Clinton	TBD	TBD
Last Pond	Pine Brook	North Haven	TBD	TBD
Bladen Brook	Bladen Brook	Seymour	TBD	TBD

CPA is prepared to fund one or more of the identified habitat restoration projects to proportionally compensate for proposed permanent impacts to fisheries habitat. However, each of the restoration projects is at a different stage of scoping, design, permitting and/or construction. Therefore, as a condition of the Structures, Dredging and Fill permit for the proposed regulated activities associated with the SPII development, CPA is prepared to enter into an agreement whereby an escrow account is established as a funding instrument to execute one or more of the CT DEEP identified mitigation projects (Tier I and/or Tier II).

Based on coordination with CT DEEP, an escrow value will be determined to adequately support the cost of the one or more of the Tier I and Tier II projects, including management and administration, necessary to compensate for the proposed permanent impacts resulting from the proposed Project. The following considerations for an escrowed mitigation fund may be negotiated in the final Memorandum of Agreement:

- CPA will not be required to administer, participate, or hold any kind of responsibility for the implementation of or held liable for the results of the mitigation activity.
- The Memorandum of Agreement will establish the intent and agreement – specific funding for specific projects.
- The Memorandum of Agreement will prevent any party within the State of Connecticut from diverting the funds and using them for purposes other than the specified projects.
- The mitigation account may be administered by the DEEP or a third party. The CPA will not be required to administer the account.
- The CPA will be required to fund the account within a specified time period as agreed upon in the Memorandum of Agreement and as conditioned in the permit to be issued.
- The CT DEEP will be responsible for developing a framework for the account establishing how funds will be managed and disbursed.
- Project will be managed by non-government organizations (NGO) or municipalities. At this time, the CPA understands that all identified Tier I habitat enhancement projects are active and have NGO or municipal project managers working on them.
- Managing organizations will be free to augment these funds with other funds to complete the project (e.g., matching funds).
- The money will be committed first to projects specified herein. If the original managing organization is unable to complete the project, the CT DEEP will attempt to recruit another organization to manage the same project using the funds. If a designated project is terminated due to unresolvable issues, the CT DEEP will first see if the managing organization has another suitable project listed herein to which the funds may be transferred. If not, the CT DEEP will allocate funds to another suitable project and organization as listed herein.
- If one identified project does not spend all of the funds in its account and another identified project needs additional funding to complete its project, then funds may transfer from one project to another.
- The CT DEEP will provide the CPA or its agent an annual report on the status of the escrow account until such funds are spent and the account is closed. Such a report will include the amount withdrawn, the purpose, the status of the project and anticipated future timeline as well as notification of any changes made to the intent of an account.

DRAFT Fisheries Management/Mitigation Plan Escrow Agreement

DRAFT

Fisheries Management/Mitigation Plan Escrow Agreement

This Fisheries Management/Mitigation Plan Escrow Agreement ("Agreement") is made and entered into as of the _____ day of _____, 20__, by and among the Connecticut Port Authority ("CPA") and Selected Financial Institution (TBD) ("AGENT"). CPA and the AGENT are sometimes referred to herein individually as a "Party" and collectively as the "Parties."

RECITALS

WHEREAS, CPA received a Structures, Dredge and Fill Permit and a Section 401 Water Quality Certification from the State of Connecticut Department of Energy and Environmental Protection ("DEEP") to construct certain improvements at the State Pier Facility (at or about 200 State Pier Road) in New London, Connecticut (License # _____SDFWQC dated _____ ["License"]), and as a condition of such License and as mitigation for resource impacts, agreed to fund fish habitat restoration projects acceptable to DEEP in accordance with the terms of the License. The enclosed Agreement relates to, and is required by, the above-noted License issued by the DEEP;

WHEREAS, CPA has received authorization to create a new "Central Wharf Area" at the State Pier Facility, in accordance with the License. Creation of the Central Wharf Area will result in the placement of approximately 7.4 acres of fill in the Thames River. The new Central Wharf Area will be located between the existing Admiral Shear State Pier and the existing Central Vermont Railroad Pier. The southern limit of the new Central Wharf Area is a sheetpile wall proposed between the southern terminus of each pier.

WHEREAS, DEEP has advised CPA that the projects described in this Agreement to restore the passage of alewife, blueback herring, and other fish species to habitat currently unavailable to said species due to the presence of dams or other obstructions is acceptable to DEEP and will satisfy all conditions in the License relating to mitigation of resource impacts through fish habitat restoration;

WHEREAS, DEEP has entered into agreements with sponsors of fish habitat restoration projects (such agreements referred to individually as a "Project Sponsor Commitment") to sponsor the fish habitat restoration projects described below; and,

WHEREAS, the AGENT agrees to act as AGENT and hold the funds deposited by CPA and distribute them in accordance with the terms of this Agreement. As outlined in this Agreement, CPA shall provide escrow funding to be held by the AGENT for implementation of "Projects" (as defined below). DEEP shall distribute funds from the escrow account, as described in this Agreement, to applicable Projects which will be implemented by others;

NOW THEREFORE, in consideration of the mutual promises, undertaking, and covenants hereinafter contained, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereto intending to be legally bound agree as follows:

I. Identification of Fish Habitat Restoration Projects

A. DEEP has identified fish habitat restoration projects (each referred to individually as the "Project", and collectively as the "Projects") that would provide adequate mitigation for resource impacts by reconnecting areas of fish habitat that are currently inaccessible and, therefore, not productive. DEEP has also established the maximum amount of funding each Project would receive from the CPA funding. The Projects have been categorized as Tier I, which are currently in active development and would be ready for implementation with approximately twelve (12) months from the date of this Agreement, and Tier II, which have been identified in the event that a Tier I Project cannot be implemented due to unresolvable issues, including, but not limited to, land ownership, design obstructions, time of year restrictions, and/or the failure to obtain all necessary regulatory permits.

B. Tier I Projects.

Project Name	Stream	Town	Project Sponsor[1]	Maximum Contribution to Project[2]
Post Office	Beaver Brook	Sprague	Town of Sprague	$300,000
Harrington Apt	Beaver Brook	Sprague	Town of Sprague	
Highland Pond Dam	Sawmill Brook	Middletown	Middlesex Land Trust	$200,000
Shewville Dam Fishway	Indiantown Brook	Ledyard	ECCD	$200,000
Bulkley Pond	Sasco Brook	Westport/Fairfield	TBD	$135,000
Winchell-Smith	Farmington River	Farmington	Connecticut River Salmon Assoc.	$500,000
Whitford Pond Dam	Whitford Brook	Ledyard	STS	$300,000

C. Tier II Projects.

Project Name	Stream	Town	Project Sponsor[1]	Maximum Contribution to Project[2]
Roaring Brook	Roaring Brook	Lyme	Connecticut River Salmon Assoc.	TBD
Wards Mill	Branford River	Branford	TBD	TBD
Parke Pond	Shunnock River	Stonington	TBD	TBD
Merwin Meadows	Norwalk River	Wilton	Save the Sound	TBD
Long Pond	Whitford Brook	Ledyard	Save the Sound	TBD
Bristol Brass	Pequabuck River	Bristol	Connecticut River Salmon Assoc.	TBD
Roses Mill Pond	Indian River	Milford	Save the Sound	TBD
Indian Lake	Indian River	Milford	Save the Sound	TBD
Schwartz Pond	Stony Brook	Suffield	Connecticut River Salmon Assoc.	TBD
Starr Mill Dam	Coginchaug River	Middletown	Connecticut River Salmon Assoc.	TBD
Johnsonville	Moodus River	East Haddam	Connecticut River Salmon Assoc.	TBD
Witch Hazel	West River	Guilford	TBD	TBD
Deer Lake	Chatfield Hollow Br	Madison	TBD	TBD
Grannis Pond	Eightmile River	Southington	Save the Sound	TBD
Dam of the Damned	Noroton River	Stamford	Save the Sound	TBD
Nickson	Quinnipiac River	Plainville	Save the Sound	TBD
Chasmar	Fivemile River	Darien/Norwalk	Save the Sound	TBD
Haleys Brook dams	Haley's Brook	Groton	Save the Sound	TBD
Stillman Pond	Yellow Mill Channel	Bridgeport	Save the Sound	TBD
Mill River Tide Gates	Mill River	New Haven	Save the Sound	TBD
Millers Pond	Hunts Brook	Waterford	TBD	TBD
Cannondale	Norwalk River	Weston	TBD	TBD
Tingue Dam Fishway	Naugatuck River	Seymour	Town of Seymour	TBD
Tier II Projects (Continued)				
Upper Millpond	Indian River	Clinton	TBD	TBD

[1] Hereinafter, referred to individually as a "Project Sponsor," and collectively as "Project Sponsors," which includes sponsors of both Tier I and Tier II Projects. Project Sponsors may also be more specifically referred to as "Tier I Project Sponsors" or "Tier II Project Sponsors," or in the singular as a "Tier I Project Sponsor" or "Tier II Project Sponsor."

[2] Hereinafter, the amount identified in this column, or (if this column does not provide an amount) the amount later determined by DEEP as part of its review of a Project proposal to be the Maximum Contribution to Project, is referred to as the "Maximum Contribution to Project."

Project Name	Stream	Town	Project Sponsor[1]	Maximum Contribution to Project[2]
Last Pond	Pine Brook	North Haven	TBD	TBD
Bladen Brook	Bladen Brook	Seymour	TBD	TBD

II. Effective Date

This Agreement shall be effective as of the date CPA deposits the sum of XXX,XXX Thousand Dollars ($XXX,000.00) (the "Funds") with the AGENT by delivering a certified check in that amount to: [insert instructions from Selected Financial Institution: TBD]

III. Obligations of CPA

A. CPA agrees to pay for the services of AGENT in accordance with Schedule A hereto.

B. As allowed pursuant to applicable law, CPA shall indemnify and hold harmless AGENT and each director, officer, employee and affiliate of AGENT (each, an "Indemnified Party") upon demand against any and all claims, actions and proceedings (whether asserted or commenced by CPA or any other person or entity and whether or not valid), losses, damages, liabilities, penalties, costs and expenses of any kind or nature (including without limitation reasonable attorneys' fees, costs and expenses (collectively, "Losses") arising from this Agreement or AGENT's performance of duties or enforcement of rights hereunder, except to the extent such Losses are finally determined by a court of competent jurisdiction, which determination is not subject to appeal, to have been directly caused solely by the gross negligence or willful misconduct of such Indemnified Party in connection with AGENT's material breach of this Agreement. CPA's obligations under this Section III.B shall survive any termination of this Agreement and the resignation or removal of AGENT.

IV. Obligations of AGENT

A. Hold Funds. The AGENT shall hold the Funds deposited by CPA pursuant to Section II, above, un-invested and separately from other monies held by AGENT. Funds shall be invested by the AGENT in the investment identified in Schedule B.

B. Disburse Funds. The AGENT shall only disburse the Funds to a Project Sponsor that has signed and submitted a Project Sponsor Commitment as confirmed by DEEP to the AGENT in writing. Promptly after receipt of such DEEP confirmation, the AGENT shall disburse to each of the Tier I Project Sponsors the applicable Maximum Contribution to Project amount identified in Section I.B, above.

C. Accounting of Funds. The AGENT will provide DEEP and CPA an annual report on the status of the Funds until such Funds are fully expended or transferred pursuant to Section VI.C, below, the escrow account is closed, and this Agreement is terminated pursuant to Section XI, below. Such annual report will list each payment from the Funds, and disclose the recipient of the Funds, the Project to which the Funds were disbursed, the amount disbursed, and the date disbursed. The AGENT will also provide to DEEP and CPA the report required by Section VI.B, below, when so requested by DEEP. DEEP and CPA may also request that the AGENT provide a status report regarding the Funds at any time, containing the same information as the annual report, and the AGENT will have thirty (30) days to provide such a report.

D. Final Report. After all Funds are fully expended or transferred pursuant to Section VI.C, below, the escrow account is closed, and this Agreement is terminated pursuant to Section XI, below, the AGENT will provide DEEP and CPA a final report on the disbursement of the Funds. Such report will list each payment from the Funds, and disclose the recipient of the Funds, the Project to which the Funds were disbursed, the amount disbursed, and the date disbursed.

V. Replacement of Sponsor

If the original Project Sponsor is unable to complete a Project to which Funds have been disbursed, DEEP may attempt to recruit another organization to manage the same Project using the disbursed Funds. If a replacement Project Sponsor is not selected and the AGENT does not receive a Project Sponsor Commitment as confirmed by DEEP in writing within six (6) months, the Project will be deemed terminated and Section VI, below, shall apply to any Funds returned by a Project Sponsor to the AGENT.

VI. Disposition of Unspent Funds

A. Transfer of Unspent Funds from a Tier I Project. If a Tier I Project Sponsor does not spend the Maximum Contribution to Project Amount, for any reason, including termination of the Project or completion of the Project for less than the Maximum Contribution to Project Amount, the Tier I Project Sponsor shall return the unspent portion of the Maximum Contribution to Project Amount to the AGENT and such Funds, to the extent so returned and notwithstanding the provision in Section IV.B, above, that Project Sponsor shall only receive the Maximum Contribution to Project Amount, shall be available to be transferred to another Tier I Project pursuant to direction in writing from DEEP to the AGENT.

B. Transfer of Unspent Funds to Tier II Project. Within thirty (30) days of being notified by DEEP that the Tier I projects have been completed or otherwise terminated, the AGENT shall submit an accounting of the Funds to DEEP. If all Funds have been disbursed, this accounting shall be the Final Report required by Section IV.D, above. If there are unspent Funds returned to AGENT pursuant to Section VI.A remaining in the account, DEEP shall thereafter identify Tier II Projects to which the Funds may be applied and alert the sponsors of such projects of the availability of the unspent Funds. Tier II Project Sponsors must submit a Project Sponsor Commitment as approved by DEEP in writing in order to receive any portion of the unspent Funds pursuant to direction in writing from DEEP to the AGENT. This process shall be repeated until all of the Funds are expended or transferred pursuant to Section VI.C, below.

C. Transfer of Unspent Funds from Escrow Account. If no new Project Sponsor commits to use the unspent Funds for a period of five (5) years after the last payment by the AGENT to a Project Sponsor, the unspent Funds shall be disbursed by AGENT, pursuant to DEEP's written direction, to a private tax-exempt entity selected by DEEP, in its sole discretion and judgment, whose purpose is environmental conservation and restoration.

VII. AGENT's Standard of Care

The AGENT may act in reliance upon any writing or instrument or signature which it in good faith believes to be genuine, may assume the validity and accuracy of any statement or assertion contained in such a writing or instrument, and may assume that any person purporting to give any writing, notice, advice or instructions in connection with the provisions hereof has been duly authorized to do so. The AGENT shall not be liable in any manner for the sufficiency or correctness as to form, manner and execution, or validity of any instrument deposited in this escrow account, nor as to the identity, authority, or right of any person executing the same. AGENT undertakes to perform only such duties as are expressly set forth herein and no duties will be implied. AGENT has no fiduciary or discretionary duties of any kind. AGENT's permissive rights will not be construed as duties. AGENT has no liability under and no duty to inquire as to the provisions of the License, any Project Sponsor Commitment, or any document other than this Agreement, including without limitation any other agreement between any or all of the parties hereto or any other persons even though reference thereto may be made herein and whether or not a copy of such document has been provided to AGENT. AGENT will not be liable for any action taken or omitted by it in good faith except to the extent that a court of competent jurisdiction determines, which determination is not subject to appeal, that AGENT's gross negligence of willful misconduct in connection with its material breach of this Agreement was the sole cause of any loss to CPA. In no event will AGENT be liable for (i) acting in accordance with or conclusively relying upon any instruction, notice, demand, certificate or document believed by AGENT to have been created by or on behalf of CPA or DEEP, (ii) incidental, indirect, special, consequential or punitive damages or penalties of any kind (including, but not limited to lost profits), even if AGENT has been advised of the likelihood of such damages or penalty and regardless of the form of action AGENT may consult, at CPA's cost, legal counsel selected by it in the event of any dispute or question as to the construction of any of the provisions hereof or of any other agreement or of its duties hereunder, or relating to any dispute involving this Agreement, and will incur no liability and must be fully indemnified by CPA, as allowed pursuant to applicable law, from any liability whatsoever in acting in accordance with the advice of such counsel. AGENT will not be obligated to take any legal action in connection with the Funds, this Agreement or any other agreement or to appear in, prosecute or defend any such legal action or to take any other action that in AGENT's sole judgment may expose it to potential expense or liability.

VIII. Resignation of AGENT

The AGENT may at any time resign upon thirty (30) days written notice to CPA and DEEP and CPA may remove AGENT as AGENT under this Agreement upon thirty (30) days notice to AGENT. CPA shall appoint a successor AGENT, with the advice and consent of DEEP, which consent shall not be unreasonably withheld, within this thirty (30) day period.

IX. Representations and Warranties

Each of the Parties represents and warrants to each other that such Party has full power and authority to enter into and perform its obligations under this Agreement, and all action necessary to authorize the execution and delivery of this Agreement and the performance by such Party of its obligations hereunder has been taken. This Agreement has been duly executed by such Party and constitutes the legal, valid, binding and enforceable obligation of such Party, enforceable against such Party in accordance with its terms subject to bankruptcy laws affecting creditors' rights generally.

X. Submission of Materials

All notices, reports, consents, approvals and requests or permitted hereunder shall be in writing, and shall be either hand delivered or sent, by (a) certified or registered U.S. Mail, Return Receipt Requested, first class postage prepaid, or (b) expedited prepaid delivery service, either commercial (e.g., Federal Express or comparable national courier) or U.S. Postal Service, with proof of attempted delivery. All notices shall be addressed to the following:

If to CPA:

Connecticut Port Authority
Attn: Joseph Salvatore
455 Boston Post Rd
Old Saybrook, CT 06475

If to DEEP:

Dept. of Energy and Environmental Protection
Land & Water Resources Division
Attn: Micheal Grzywinski
79 Elm Street
Hartford, CT 06105

and

Dept. of Energy and Environmental Protection
Steve Gephard
Director, Fisheries Division
79 Elm Street
Hartford, CT 06106

If to AGENT:

Selected Financial Institution (TBD)
Attn: _____
Street
City, State, Zip

The Parties and DEEP may change the recipient of its notices at any time by sending notice of the change pursuant to this Section.

XI. Termination of Agreement

A. This Agreement shall terminate upon the occurrence of any of the following events:

(1) The payment of all Funds by the AGENT to Project Sponsors.

(2) The transfer of any unspent Funds pursuant to Section VI.C, above.

(3) CPA does not construct the new "Central Wharf Area" at the State Pier Facility.

B. Upon termination of this Agreement, the AGENT will close the escrow account and submit the Final Report required by Section IV.D, above.

XII. General Provisions

A. Entire Agreement. This Agreement constitutes the entire agreement between the Parties pertaining to its subject matter, and it supersedes any and all written or oral agreements previously existing between the Parties with respect to such subject matter.

B. Amendment. No amendment of any provision of this Agreement shall be valid unless the same shall be in writing and signed by each of the Parties.

C. No Agency or Partnership. Nothing contained in this Agreement shall constitute CPA as a joint venture, partner or agent of the Project Sponsors or any recipient of the Funds, or render CPA liable for any interests, obligations, acts, omissions, representations or contracts of the Project Sponsors or any recipient of the Funds.

D. Waiver. Any Party's failure to insist on strict performance of this Agreement shall not be deemed a waiver of any of its rights or remedies, nor shall it relieve any other Party from performing any subsequent obligation strictly in accordance with the terms of this Agreement. No waiver shall be effective unless it is in writing and signed by the Party against whom enforcement is sought. Such waiver shall be limited to provisions of this Agreement specifically referred to therein and shall not be deemed a waiver of any other provision. No waiver shall constitute a continuing waiver unless the writing states otherwise.

E. Assignment; Successors and Assigns. This Agreement shall be binding upon and insure to the benefit of the Parties named herein and their respective successors and permitted assigns. No Party may assign either this Agreement or any of its rights, interests, or obligations hereunder without the prior written approval of the other Parties.

F. Miscellaneous. The Section headings of this Agreement are for convenience of reference only and do not form a part hereof and do not in any way modify, interpret, or construe the intentions of the Parties. This Agreement may be executed in two or more counterparts and all such counterparts shall constitute one and the same instrument. Delivery of an executed signature page to this Agreement by facsimile transmission shall be as effective as delivery of a manually signed counterpart of this Agreement. The term "including" is by way of example and not limitation.

G. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Connecticut, without giving effect to the conflict of laws principles thereof.

H. Severability. If any term or provision of this Agreement shall be held to be invalid or unenforceable for any reason by a court of competent jurisdiction, such term or provision shall be ineffective to the extent of such invalidity or unenforceability without invalidating the remaining

terms and provisions hereof, and this Agreement shall be construed as if such invalid or unenforceable term or provisions had not been contained herein.

I. Parties in Interest. Except as specifically contemplated hereby, nothing in this Agreement is intended to confer any rights or remedies on any persons other than the Parties. For the avoidance of doubt, this Agreement confers no rights or remedies to any Project Sponsor or DEEP. This Agreement shall not be construed to relieve or discharge any obligations or liabilities of third persons, nor shall it be construed to give third persons any right of subrogation or action over or against any Party.

J. Identifying Information. To help the government fight the funding of terrorism and money laundering activities, federal law requires all financial institutions to obtain, verify and record information that identifies each person who opens an account. For a non-individual person such as a business entity, a charity, a trust or other legal entity, AGENT requires documentation to verify its formation and existence as a legal entity. AGENT may require financial statements, licenses or identification and authorization documents from individuals claiming authority to represent the entity or other relevant documentation. CPA agrees to provide all information requested by AGENT in connection with any legislation or regulation to which AGENT is subject, in a timely manner.

Connecticut Port Authority

By: _____

_____

Its _____
Duly Authorized

Selected Financial Institution

By: _____

_____

Its _____
Duly Authorized

The State of Connecticut Department of Energy and Environmental Protection

By:_____

_____

Its

_____
Duly Authorized

SCHEDULE A

Selected Financial Institution

Schedule of Fees for Services

DRAFT

SCHEDULE B

Selected Financial Institution
Investment Authorization Form

Selected Financial Institution MONEY MARKET DEPOSIT ACCOUNT

Description and Terms

The Selected Financial Institution Money Market Deposit Account is a Selected Financial Institution ("XXXX") interest-bearing money market deposit account designed to meet the needs of Selected Financial Institution Corporate Trust Services Escrow Group and other corporate trust customers of Selected Financial Institution. Selection of this investment includes authorization to place funds on deposit and invest with Selected Financial Institution.

Selected Financial Institution uses the daily balance method to calculate interest on this account (actual/365 or 366). This method applies a daily periodic rate to the principal balance in the account each day. Interest is accrued daily and credited monthly to the account. Interest rates are determined at Selected Financial Institution discretion and may be tiered by customer deposit amount.

The owner of the account is Selected Financial Institution as agent for its corporate trust customers. Selected Financial Institution Corporate Trust Services Escrow Group performs all account deposits and withdrawals. Deposits accounts are FDIC insured per depositor, as determined under FDIC Regulations, up to applicable FDIC limits.

Selected Financial Institution **IS NOT REQUIRED TO REGISTER AS A MUNICIPAL ADVISOR WITH THE SECURITIES AND EXCHANGE COMMISSION FOR PURPOSES OF COMPLYING WITH THE DODD-FRANK WALL STREET REFORM & CONSUMER PROTECTION ACT. INVESTMENT ADVICE, IF NEEDED, SHOULD BE OBTAINED FROM YOUR FINANCIAL ADVISOR.**

Automatic Authorization

In the absence of specific written direction to the contrary to the extent and as authorized in the applicable escrow agreement, Selected Financial Institution is hereby directed to invest and reinvest proceeds and other available moneys in the Selected Financial Institution Money Market Deposit Account. The customer(s) confirm that the Selected Financial Institution Money Market Deposit Account is a permitted investment under the operative documents and this authorization is the permanent direction or investment of the moneys until notified in writing of permissible alternate instructions.

SCHEDULE C

CT DEEP Fisheries Documentation

Fisheries Project Approval Form

To Be Added As Required

Appendix B: Site Photographs

PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project No.**
CT Port Authority	Connecticut State Pier, New London, CT	60579714

Photo No.	**Date:**
1	6/12/2018

Direction Photo Taken:
North

Description:
NE Quay wall

Photo No.	**Date:**
2	6/12/2018

Direction Photo Taken:
North West

Description:
NE Quay stone bulkhead

PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project No.**
CT Port Authority	Connecticut State Pier, New London, CT	60579714

Photo No.	**Date:**
3	8/15/2018

Direction Photo Taken:
North

Description:
General view of NE Quay wall (Marine Solutions)

Photo No.	**Date:**
4	6/12/2018

Direction Photo Taken:
Northeast

Description:
NE Quay utility box at NOAA station

PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project No.**
CT Port Authority	Connecticut State Pier, New London, CT	60579714

Photo No.	**Date:**
5	8/14/2019

Direction Photo Taken:
Northeast

Description:
General view of Northeast Annex (Marine Solutions)

Photo No.	**Date:**
6	6/12/2018

Direction Photo Taken:
South

Description:
Northwest Quay upland area

PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project No.**
CT Port Authority	Connecticut State Pier, New London, CT	60579714

Photo No.	**Date:**
7	6/12/2018

Direction Photo Taken:
Southwest

Description:
NW Quay upland area showing poor drainage

Photo No.	**Date:**
8	8/13/2018

Direction Photo Taken:
Northwest

Description:
Description:
General view of Northwest Quay (Marine Solutions)

PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project No.**
CT Port Authority	Connecticut State Pier, New London, CT	60579714

Photo No.	**Date:**
9	8/15/2018

Direction Photo Taken:
Northeast

Description:
General view of Admiral Shear State Pier (Marine Solutions)

Photo No.	**Date:**
10	6/12/2018

Direction Photo Taken:
South

Description:
Admiral Shear State Pier

PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project No.**
CT Port Authority	Connecticut State Pier, New London, CT	60579714

Photo No.	**Date:**
11	8/13/2018

Direction Photo Taken:
Northeast

Description:
General view of CVRR Pier (Marine Solutions)

Photo No.	**Date:**
12	8/20/2018

Direction Photo Taken:
West

Description:
Collapsed granite block wall at southwest corner of CVRR Pier (Marine Solutions)

PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project No.**
CT Port Authority	Connecticut State Pier, New London, CT	60579714

Photo No.	**Date:**
13	6/12/2018

Direction Photo Taken:
Southwest

Description:
CVRR Pier

Photo No.	**Date:**
14	6/12/2018

Direction Photo Taken:
South

Description:
CVRR Pier west berth

PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project No.**
CT Port Authority	Connecticut State Pier, New London, CT	60579714

Photo No.	**Date:**
15	6/12/2018

Direction Photo Taken:
West

Description:
CVRR Pier showing distressed pavement

Photo No.	**Date:**
16	6/12/2018

Direction Photo Taken:
South

Description:
Administration building and upper parking lot

PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project No.**
CT Port Authority	Connecticut State Pier, New London, CT	60579714

Photo No.	**Date:**
17	8/13/2019

Direction Photo Taken:
Northwest

Description:
General view of Mooring Dolphins (Marine Solutions)

Photo No.	**Date:**
18	6/12/2018

Direction Photo Taken:
Southeast

Description:
General view of Mooring dolphins

PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project No.**
CT Port Authority	Connecticut State Pier, New London, CT	60579714

Photo No.	**Date:**
19	8/13/2019

Direction Photo Taken:
Northwest

Description:
Rocky Shorefront and Beaches and Dunes coastal resources at Winthrop Point.

Photo No.	**Date:**
20	6/12/2018

Direction Photo Taken:
Southeast

Description:
Developed Shorefront coastal resource located along northern shoreline of Winthrop Cove at western corner of site. The developed shorefront in this area consists of a granite block wall in various stages of repair.

Appendix C: Wetland Invasive Species Control Plan

(To be Developed and Provided Prior to Construction)