

**STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION**



*OFFICE OF ADJUDICATIONS*

*IN THE MATTER OF* : *APPLICATION NO.*  
*200600415*

*CONNECTICUT DOT*  
*I-95 MOSES WHEELER BRIDGE* : *JULY 21, 2008*

*PROPOSED FINAL DECISION*

*I*

*SUMMARY*

The Connecticut Department of Transportation (applicant) has applied to the Department of Environmental Protection, Office of Long Island Sound Programs (OLISP) for a permit to conduct regulated activities in tidal wetlands and in the Housatonic River, waterward of the high-tide line. General Statutes §§ 22a-32, 22a-361. The permit would allow the applicant: (1) to replace the existing Moses Wheeler Bridge with a new structure within the footprint of and directly north of the existing structure; (2) to reconstruct an existing state boat launch; and (3) to conduct tidal wetlands restoration activities as mitigation for the proposed transportation project. The Moses Wheeler Bridge conveys Interstate 95 (I-95) across the Housatonic River between the Town of Stratford and the City of Milford.

The applicant and the DEP are the only parties in this matter. DEP staff supports issuance of this permit and has submitted into the record a revised draft permit that would authorize the applicant's proposed regulated activities (Attachment B).

The purpose of this project (DOT Project No. 138-221) is to replace the existing multi-span structure with a new structure consisting of substantially longer, and therefore fewer spans. The new structure will meet current design standards. It will be approximately forty feet wider than the existing structure to accommodate full width shoulders (inside and outside) for each direction of travel.

The current bridge is classified as deficient and at the end of its service life. The proposed project will ensure that the bridge meets current design standards and will improve safety through the addition of full-width shoulders. The project has been planned to minimize impacts to tidal wetlands and coastal resources while meeting current highway design, safety, and drainage standards and results in a net gain of resource area. These proposed regulated activities, if conducted in accordance with the terms and conditions of the revised draft permit, would be consistent with the applicable legal standards for issuance of the permit. I therefore recommend that the permit be issued.

## *II*

### *DECISION*

#### *A*

### *FINDINGS OF FACT*

I adopt the parties' Stipulated Statement of Facts (Attachment A). These facts include a description of the project and its purpose, descriptions of the impact sites, consideration of alternatives to the project, the permanent and temporary impacts of the project on the environment and the applicant's mitigation plans. These proposed findings and the additional findings that follow provide the basis for my conclusions.

1. The draft permit specifically authorizes the applicant to perform regulated activities in conformance with the applicant's permit application and attached plans (application). Any deviation from the application requires review and approval by the Commissioner. The permit sets forth the terms and conditions for the project's construction as well as the construction and implementation of the compensatory mitigation plan, including the post-construction monitoring requirements. (Ex. DEP-21; Test. 12/06/07<sup>1</sup>, K. Zawoy.)

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<sup>1</sup> All references to testimony are from the hearing held on December 5, 2007 at Flood Middle School in Stratford or the continued hearing held on December 6, 2007 at DEP Headquarters. The audio recording of this hearing is on file with the Office of Adjudications and is the official record of this proceeding.

2. A hydraulic analysis was conducted to determine the effects of construction on flow velocities, water levels, and the flood plain. Any impact would be minimal during and after construction. (Ex. App-15B; test. 12/6/07, Kennedy, W.)

3. Except for the periods listed in the Stipulated Statement of Facts when public safety warrants the closure of the channel, the navigation channel will remain open during construction to a minimum of forty feet and allow crafts currently using the channel to continue to use it. (Ex. App-15B; test. 12/6/07, Kennedy, W.)

***B***

***CONCLUSIONS OF LAW***

***I***

***SUMMARY OF STATUTORY BACKGROUND***

The purposes and policies for the preservation of tidal wetlands and limitations on activities conducted waterward of the high tide line are met through the process and criteria outlined in §§ 22a-33, 22a-359, and 22a-361 of the General Statutes. Section 22a-33 provides that where a permit application has been the subject of a hearing, the Commissioner or designated hearing officer shall consider the effects of the proposed work on public health and welfare, marine fisheries, shellfisheries, wildlife, the protection of life and property from flood, hurricane, and other natural disasters, and the public policy regarding the preservation of tidal wetlands set forth in sections 22a-28 to 22a-35 inclusive.

The preservation of tidal wetlands is announced in 22a-28 as the policy of the state because the loss or despoliation of tidal wetlands would adversely impact the value of tidal wetlands as sources of nutrients to finfish, crustacean, and shellfish; would destroy habitat for plants and animals of significant economic value and would eliminate or substantially reduce marine commerce, recreation, and aesthetic enjoyment; would disturb the natural ability of tidal wetlands to reduce flood damage and adversely affect the public health and welfare; and would substantially reduce the capacity of such wetlands to absorb silt and result in the increased silting of channels and harbor areas to the detriment of free navigation.

Section 22a-359 requires any decisions regarding work waterward of the high tide line to be made with due regard for indigenous aquatic life, fish, and wildlife, the prevention or alleviation of shore erosion and coastal flooding, the use and development of adjoining uplands, the improvement of coastal and inland navigation for all vessels, including small craft for recreational purposes, the use and development of adjacent lands and properties, and the interests of the state, including pollution control, water quality, recreational use of public water and management of coastal resources.

Finally, any activity conducted within the coastal boundary must be consistent with the applicable policies articulated in the Coastal Management Act at § 22a-92.

## 2

### ***TIDAL WETLANDS***

The criteria for review of permit applications for work in tidal wetlands are established at Regs., Conn. State Agencies §22a-30-1 et seq. These criteria were established giving due regard to the policies announced in § 22a-28.

(A) *Preservation of wetlands*

In order to make a determination that a proposed activity will preserve the wetlands of the state and not lead to their despoliation and destruction the commissioner shall, as applicable, find that:

- (1) There is no alternative for accomplishing the applicant's objectives which is technically feasible and would further minimize adverse impacts;
  - (2) Any structure or fill will be no greater in length, width and height than necessary to accomplish its intended function;
  - (3) Pile supported construction will be used to the fullest extent practicable;
  - (4) All reasonable measures which would minimize the adverse impacts of the proposed activity on the wetlands of the state and adjoining coastal and tidal resources are incorporated as limitations on or conditions to the permit.
- Regs., Conn. State Agencies §22a-30-10 (b).

The proposed activity will preserve the wetlands of the state and not lead to their despoliation and destruction. The no-build alternative is not an option because the current bridge has been deemed deficient. Due to its status as a critical link in the state's transportation infrastructure, reducing its scope or size is not feasible. The proposed activity is necessary to meet the goal of constructing a bridge that meets current design standards, including the added

safety of full width shoulders inside and outside in both travel directions. The new design minimizes the number of piers in the vegetated wetlands area and reduces the encroachment into public trust resources. Therefore the complete replacement of the bridge reduces the amount of resource impact when compared to the alternative of widening the existing structure and rehabilitating the existing support structure. Finally, the proposed design will eliminate the possibility of age-related deterioration of the existing support piers, ensure a 75-year service life of the structure, and is more financially viable because the cost of the current bridge's rehabilitation would exceed 80% of its replacement cost.

The proposed design uses substantially less piers to support the structure and the chosen construction methods will minimize the temporary intrusion into resource areas. As a result, the structure and fill associated with the project is no greater than necessary and will encroach into resource areas less than the current structure. The use of a temporary trestle system supported by piles will minimize the temporary impacts associated with the construction as it carries associated equipment over the resource areas rather than through them. Additionally, the use of sheet piling around pier demolition areas and foundation seals around pier construction is intended to prevent debris associated with these activities from impacting resource areas. With the removal of the older, larger piers and the wetlands creation area, there is a net increase in resource areas, including open water, tidal wetlands, and intertidal flats, as a result of this project.

The permit requires the applicant to take reasonable measures to minimize and limit the impacts of the proposed activities both generally and on specific resources. In addition to specific construction methods identified above, the permit requires: erosion and sedimentation controls in the vegetated wetland areas; a debris containment plan for the existing bridge; turbidity monitoring; time and seasonal limitations on blasting, pile-driving, impact hammering, and hoe-ramming; the installation of stormwater separators; and the construction of wet ponds. All of these conditions ensure that the proposed activity will be conducted in a manner that will minimize the temporary impact from bridge demolition, existing pier removal, new pier construction, and all associated construction activities.

Those impacts that cannot be avoided or minimized are addressed by the wetlands mitigation plan and the boat launch reconstruction.

(B) *Recreational and navigational uses.*

In order to make a determination that a proposed activity will not destroy existing or potential recreational or navigational uses, the commissioner shall, as applicable, find that:

- (1) The proposed activity will not unreasonably interfere with established public rights of access to and use of wetlands, or with access to the portion of the shoreline below the mean high tide elevation that is held in public trust by the state, or with access to and use of public recreational facilities, both in operation and planned;
- (2) The proposed activity will not be located in a way which unreasonably interferes with a navigable channel or small craft navigation;
- (3) The proposed activity will not cause or contribute to sedimentation problems in adjacent or nearby navigable waters, navigation channels, anchorages or turning basins. Regs., Conn State Agencies § 22a-30-10(c).

The proposed activity will temporarily interfere with the use of the public boat launch on the Milford side of the Housatonic River. The area of the boat launch will be used for staging equipment and will be closed throughout construction to ensure public safety. However, this impact is not unreasonable. The boat launch will be reconstructed and significantly improved by the applicant at the conclusion of construction. The launch will be widened to accommodate two vessels, the parking area will be expanded and striped, and floating docks will be added to both sides of the launch.

There was public comment and testimony that expressed concern about the length of the closure and the limited options for launching a boat to gain access to Long Island Sound in this part of the state. After further consideration of this comment and testimony, the DEP and the applicant added a condition to the permit requiring the applicant to submit for review and approval a Temporary Boating Access Plan within one year of the permit authorization. This condition adequately addresses the deficiency in boating access during the construction period.

The construction will also have a temporary impact on a private marina. A limited number of slips at The Dock Marina will be closed to access due to the construction of the temporary trestle system. The Dock Marina will be compensated monetarily for the closure. The applicant will fully restore navigation to the impacted area once construction is complete and the trestle system can be removed. This impact is minimal and compensated for monetarily and through the full restoration of access.

The trestle system will allow the continued use of the navigation channel throughout construction with limited closures. Although the channel will be narrower during construction, it will not prevent any craft that currently navigates that channel from continuing to navigate it during construction. The permit requires it to remain open to a width of at least forty feet. Any closure of the navigation channel will be limited to times in the construction process where public safety warrants such a closure. The limited interference with navigation is reasonable given the scale of the project.

The sedimentation control system required in the permit's special terms and conditions will adequately prevent erosion and sedimentation from construction activities from entering the Housatonic River and affecting navigation.

After construction, the applicant will replace the current fender system at the Moses Wheeler and Metro North Railroad Bridges to reestablish the current navigation channel. There will be fewer bridge piers, which will improve sight lines under the bridge. Vertical clearance will also increase slightly by nearly six feet. It is reasonable to conclude that the temporary impacts to navigation will be minimal and the post construction conditions will represent an improvement over existing ones.

(C) *Erosion and sedimentation.*

In order to make a determination that a proposed activity will not cause or produce unreasonable erosion or sedimentation the commissioner shall, as applicable, find that:

- (1) The proposed activity will not cause significant changes in current patterns, water velocity or exposure to storm or wave conditions which result in adverse effects on erosion or sedimentation patterns;
- (2) Temporary erosion control measures will be utilized on the project site both during and after construction;
- (3) When permanent erosion control measures are proposed, non-structural alternatives are utilized unless structural alternatives are demonstrated to be unavoidable and necessary to protect infrastructural facilities, water-dependent uses and existing inhabited structures;
- (4) Any structure or fill shall:
  - (A) Not cause a significant adverse impact on the movement of sediments on or along the shoreline;
  - (B) Not cause erosion of adjacent or downdrift areas;
  - (C) If necessary, include provision for the transfer of sediment to downdrift areas to prevent those areas from being deprived of sediments;

- (5) The perimeter of all areas proposed to be filled, dredged or excavated are suitably stabilized to prevent spillover or erosion of material into adjoining wetland or watercourse areas;
  - (6) When areas are proposed to be dredged:
    - (A) They are laid out so as to make the best practical use of existing water depths;
    - (B) They are designed to avoid siltation of any existing natural or established navigation channel;
    - (C) The best available methods are used to reduce sedimentation.
- Regs., Conn State Agencies § 22a-30-10(d).

The proposed activity will not cause or produce unreasonable erosion or sedimentation. A hydraulics analysis was done to compare the anticipated flows during and after construction to current flows in this area of the river. This analysis shows a slight increase in velocities and a slight decrease in water levels when comparing proposed conditions to existing ones due to the removal of various obstructions, including the old, larger bridge piers. This analysis also determined that during the construction, there will be minimal impacts on velocities and water levels from the additional obstructions in the river.

The permit requires a sediment control plan to prevent any erosion of sediment into the river. The proposed construction methods include the use of foundation seals and sheet piling to enclose areas of pier construction and demolition and prevent debris from entering the river. No actual dredge work is proposed. The use of sheet piling for the excavation work and the temporary foundation seals during new pier construction will provide a stable environment to protect the resources from excavation and drilling spoils.

Also, the permit requirement that any excavation is properly backfilled with appropriate materials consistent with existing conditions will further stabilize the environment at the completion of construction.

(D) *Marine fisheries, shellfisheries, and wildlife.*

In order to make a determination that a proposed activity will not result in significant adverse impacts on marine fisheries, shellfisheries or wildlife the commissioner shall, as applicable, find that:

- (1) The existing biological productivity of any wetland will not be unreasonably affected;
- (2) Habitat areas, such as habitat of rare and endangered wildlife and fish species, will not be destroyed, filled, or otherwise unreasonably affected;
- (3) Wildlife and their nesting, breeding or feeding habitats will not be unreasonably reduced or altered;



- (4) Erosion from the proposed activity will not result in the formation of deposits harmful to any fish, shellfish or wildlife habitat;
  - (5) Shellfish beds will not be adversely affected by changes in:
    - (A) Water circulation and depth patterns around and over the shellfish beds;
    - (B) Natural relief of shellfish beds;
    - (C) Grain size and distribution of sediment in shellfish beds;
  - (6) The timing of construction activities takes into consideration the movements and life stages of fish, shellfish, and wildlife;
  - (7) The proposed activity will not unreasonably interfere with the harvesting or maintenance of leased, franchised or natural shellfish beds.
- Regs., Conn. State Agencies § 22a-30-10(e)

There will be no significant adverse impacts to marine fisheries, shellfisheries, and wildlife as a result of the proposed activity. Any impact to fisheries associated with the demolition and construction activities will be temporary and minimized through the use of enclosures around demolition and construction activities and a pile-supported trestle system for in-water construction and the overall sedimentation control plan to be submitted by the applicant for review and approval by DEP. The date and time limitations on blasting, pile driving, and hoe ramming activities will minimize the temporary noise impacts to anadromous fish migration.

The permit application was analyzed for impacts to endangered species. Although endangered peregrine falcons nest in the vicinity of the project, the project will have no impact on them. The threatened Atlantic sturgeon will be protected by the applicant's efforts cited above to minimize any temporary impacts to finfish, including the time and date limitations on demolition activities.

There are no shellfish beds in the immediate project footprint. The potential impacts to shellfish areas, namely spawning shellfish, in the vicinity of the project are addressed by permit requirements to monitor turbidity levels daily and stop work if those levels exceed ambient levels by more than five turbidity units. Oyster cultch (shell) will be used to backfill excavation areas to minimize any impact to and improve oyster and possibly fish habitat in the locations of the old piers. These permit requirements address concerns of the Department of Agriculture, Bureau of Aquaculture regarding impacts to shellfish.

(E) *Circulation and quality of coastal or tidal waters.*

In order to make a determination that a proposed activity will not result in a significant adverse impact on the circulation and quality of coastal or tidal waters the commissioner shall, as applicable, find that:

- (1) The proposed activity will not cause the significant adverse alteration of patterns of tidal exchange or flushing rates, freshwater input or existing basin characteristics and channel contours;
  - (2) Water stagnation will be neither caused nor contributed to, and the ability of wetlands and adjacent water bodies to flush themselves will not be adversely affected;
  - (3) Pile-supported construction will be utilized to the fullest extent practical;
  - (4) The proposed activity will not result in water pollution which unduly affects:
    - (A) The bottom fauna;
    - (B) The physical or chemical nature of the bottom;
    - (C) The propagation and habitats of shellfish, finfish and wildlife.
- Regs., Conn. State Agencies §22a-30-10(f).

The proposed activity will not have a significant adverse impact on the circulation and quality of tidal waters. Any impact to water quality will be temporary and minimized through the use of best management practices including sheet piling enclosures and foundations seals to prevent materials from pier demolition and construction activities from entering the resources. The temporary trestle system will be supported by piles to minimize the intrusion of heavy equipment and building materials in the wetlands areas and the river. The permit requires turbidity monitoring to avoid significant changes from ambient conditions that could impact shellfish. Contaminated sediment excavated from the river bottom will not be reused at the site. The excavation areas will be backfilled with materials having similar characteristics to existing materials and will include a top-layer of shell (cultch) to support shellfish. Significant drainage improvements, including hydrodynamic separators and wet ponds, will be utilized to improve the water quality of the stormwater discharge at the site.

(F) *Protection of life and property from hurricanes or natural disaster.*

In order to make a determination that a proposed activity is consistent with the need to protect life and property from hurricanes or other natural disasters, including flooding, the commissioner shall, as applicable, find that:

- (1) The proposed activity will not increase the potential for flood or hurricane damage on adjacent or adjoining properties;
- (2) The proposed activity will not increase the exposure of any property, land or structures to damage from storm waves and erosion produced thereby;

(3) The proposed activity will not result in significant increase in the velocity or volume of flood water flow both in streams and estuaries;

(4) The proposed activity will not significantly reduce the capacity of any stream, river, creek or other water course to transmit flood waters generated by hurricanes or other storm events and will not result in significantly increased flooding either up or downstream of its location.

Regs., Conn. State Agencies § 22a-30-10(g).

The proposed activity is consistent with the need to protect life and property from hurricane or flooding. The applicant conducted a hydraulic study to assess the impact of construction activities and post construction conditions on the floodplain. As discussed above, there will be a minimal increase in water levels during construction due to the presence of the temporary trestle system, the sheet piling and the foundation seals. However, after construction is complete, there will be a slight decrease in water levels due to the use of smaller and fewer bridge piers displacing less water. The impact from any changes to flow velocities both during and after construction will be minimal.

*(G) Criteria for water dependent use of tidal wetlands.*

In order to make a determination that a proposed activity within the coastal boundary, as defined and mapped in accordance with section 22a-94 of the General Statutes as amended by section 4 of Public Act 79-535, is consistent with the state policy that water-dependent uses of the shorefront be given highest priority and preference, the commissioner shall, as applicable, find that:

(1) When the proposed activity is not a water-dependent use:

(A) The wetland is unsuitable for or incapable of supporting a water-dependent use;

(B) There is little or no demonstrable demand for water-dependent uses suitable for or capable of being supported by the wetland;

(C) A non-water dependent use has substantially fewer adverse impacts than all water-dependent uses suitable for or capable of being supported by the wetland;

(2) All reasonable measures which would minimize adverse impacts on future water dependent uses are incorporated as limitations on or conditions to the permit;

(3) The proposed activity will not unreasonably interfere with the riparian rights of adjacent landowners or claimants of water or shellfish rights in or adjacent to the wetlands.

Regs., Conn State Agencies § 22a-30-10(h).

The proposed activity is consistent with policies favoring water-dependent uses in these resource areas. The Moses Wheeler Bridge is not a water-dependent use. However, the

alternatives analysis shows that the existing transportation right-of-way and the resource areas within it cannot support another use. This area supports a critical piece of transportation infrastructure. There was no other alternative but to design a replacement structure that minimizes encroachment into regulated areas and stays exclusively within the current transportation right-of-way. The proposed activity will not permanently reduce the potential for water-dependent use of adjacent properties. The temporary impacts to the public boat launch and the slips at The Dock Marina are necessary due to safety considerations. The applicant will submit a plan for boating access to the Commissioner for review and approval to mitigate for any loss of boating access during the construction. Both the public boat launch and the use of the slips at the private marina will be restored to their current uses.

### 3

#### ***STRUCTURES AND DREDGING ACT***

The inquiry to issue a permit for work waterward of the high tide line required by § 22a-359(a) encompasses the similar criteria to that evaluated above for work in tidal wetlands articulated in Regs. Conn. State Agencies § 22a-30-10. The commissioner shall give due regard for: indigenous aquatic life, fish, and wildlife, the prevention or alleviation of shore erosion and coastal flooding, the use and development of adjoining uplands, the improvement of coastal and inland navigation for all vessels, including small craft for recreational purposes, the use and development of adjacent lands and properties and the interests of the state, including pollution control, water quality, recreational use of public water and management of coastal resources. General Statutes § 22a-359(a).

As indicated above, the applicant will take the necessary steps to minimize impacts as required by the permit. The applicant has adequately analyzed potential impacts in the resource areas as well as impacts on navigation, public access, and recreation. Those temporary impacts will be addressed by the chosen construction methods and best management practices, the wetlands creation and mitigation plan, and the public access plan to address the closure of the public boat launch.

Indigenous fish and wildlife will be protected by the sediment control measures to be implemented during demolition and construction activities, including the sheet piling and foundation seals to enclose work areas. Turbidity monitoring will protect spawning shellfish and

time and date limitations on pile driving, hoe ramming, and blasting activities will protect finfish during periods of migration. The project will not contribute to shore erosion or coastal flooding both during and after construction. The slight variations in flow velocities and water levels will have minimal impact.

The potential for development of adjoining uplands within the transportation right of way is limited. Coastal access and navigation will be impacted by a decrease in the width of the navigation channel and temporary closures during construction. The closure of the public boat launch will restrict access to this part of the river throughout construction. However, the permit requirement for the applicant to submit a boating access plan to address the closure of the boat launch and the substantial improvement to the boat launch to be made post construction will both minimize and mitigate for these impacts adequately. The bridge will remain within the existing right of way and will not impact any use of adjacent properties, including the railroad bridge and nearby power plant. The applicant is acquiring maintenance access to the bridge from The Dock owners. This will not have an impact on the facility's current operations.

The interest of the state in preventing water pollution and maintaining water quality will be addressed by the sedimentation control plan and the use of sheet piling and foundation seals during pier demolition and construction. The applicant will also construct three wet ponds to control the flow and improve the water quality of stormwater discharging into the resource areas. The applicant will take sufficient steps during the construction and after construction to monitor the planned wetlands creation and mitigation areas to protect the interests of the state in those resources. The boat launch improvements will foster the public's recreational use of the water.

#### 4

### ***COASTAL MANAGEMENT ACT***

The proposed activity is also consistent with the relevant policies articulated in the Coastal Management Act, General Statutes §§ 22a-90 through 113. The proposed project and permit requirements adequately address the following policies of the coastal management act applicable to this permit:

*(A) To require that structures in tidal wetlands and coastal waters be designed, constructed, and maintained to minimize adverse impacts on coastal resources and sedimentation patterns, water*

*quality, and flooding and erosion, to reduce to the maximum extent practicable the use of fill and to reduce conflicts with the riparian rights of adjacent landowners. § 22a-92(b)(1)(D)*

The bridge design, construction methods and the permit requirement for sedimentation and debris controls will all combine to minimize any adverse impacts to resource areas. Those impacts that are unavoidable will be mitigated for by the wetlands creation sites and the reconstruction and enhancement of the boat launch.

*(B) To encourage recreational boating. § 22a-92(b)(1)(G)*

Although the proposed activity will prevent the use of the public boat launch at the site, the applicant will completely reconstruct the boat launch in a manner that will enhance the location and encourage increased use of the site by improving and expanding the parking area, widening the launch, and installing new docks. The permit also requires the applicant to submit a boating access plan to address the temporary closure of the boat launch. These measures will encourage recreational boating.

*(C) To encourage the enhancement of degraded intertidal flats. §22a-92(b)(2)(D)*

The project will result in a net increase in resource area due to the removal of existing piers in the intertidal flats.

*(D) To preserve tidal wetlands and prevent the destruction and despoliation thereof to maintain their vital natural functions and enhance degraded tidal wetlands and create tidal wetlands where possible for habitat creation. § 22a-92(b)(2)(E)*

The proposed project will not cause the destruction and despoliation of tidal wetlands. During construction, the applicant will avoid and minimize impacts associated with the demolition and construction of the bridge. At the conclusion of the construction, there will be a net increase in resource area. Existing resources will also be enhanced. The wetlands creation and enhancement represents adequate mitigation for the unavoidable impacts

*(E) To require that coastal highway improvements, including bridges, be designed and constructed so as to minimize adverse impacts on coastal resources and where possible enhance and in no case decrease coastal access and recreational opportunities. § 22a-92(c)(1)(G).*

The design, construction methods, permit conditions, and mitigation efforts all ensure that the applicant will minimize impacts on coastal resources. The reconstructed boat launch and

wetlands creation areas represent an enhancement for coastal access and recreational opportunities.

5

***PUBLIC COMMENT***

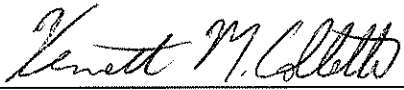
Several residents of Stratford, including public officials, provided comment on the application at the evening hearing session. While everyone understood the necessity of the project, the comments raised concerns about certain aspects of the project that affected neighboring residents. Most of these concerns were unrelated to the inquiry required for the permit application and concerned the use of a parcel of open space, including the removal of trees, within the applicant's right of way for equipment staging and the establishment of Wet Pond No. 1. The effect of equipment staging is only relevant to this permit to the extent it affects the resource areas. The sedimentation control plan will adequately address any potential impact from the use of this area for staging on resource areas that are the subject of this permit. The residents also voiced concerns about an increased mosquito population from Wet Pond No. 1. The applicant and DEP staff analyzed this issue in an attempt to address this concern. Although DEP and the applicant agreed that the potential for a mosquito problem at this location was limited, the parties agreed on a permit condition that requires the applicant to monitor mosquito populations at Wet Pond No. 1. This analysis and the resulting permit condition adequately address the public's concerns. The concern raised about the removal of trees is not reasonably related to this proceeding and would be best addressed by the applicant.

***III***

***CONCLUSION/RECOMMENDATION***

The permit application and the conditions of the revised draft permit meet the requirements of General Statutes §22a-33, § 22a-359 and are consistent with the applicable policies of § 22a-92. The record demonstrates that the temporary and permanent impacts from demolition and construction were adequately analyzed, minimized, and where unavoidable, mitigated for by the wetlands creation and boat launch reconstruction.

The reconstruction of the Moses Wheeler Bridge will result in a safer roadway and more efficient transportation system while reducing the encroachment into resource areas, improving navigation and public access for recreational boaters, and improving water quality through an improved stormwater system. The proposed plan strikes an appropriate balance between the obligation of the applicant to replace a key, but currently deficient piece of transportation infrastructure to avoid any risk to public safety and the mission of the DEP to protect the environment. I therefore recommend that the permit that is the subject of this application be issued.



Kenneth M. Collette  
Kenneth M. Collette, Hearing Officer



Attachment A

STIPULATED STATEMENT OF FACTS

COASTAL PERMIT APPLICATION SD/TW-200600415  
RECONSTRUCTION OF THE MOSES WHEELER BRIDGE  
TOWN OF STRATFORD AND CITY OF MILFORD

June 17, 2008

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1. Introduction: On March 1, 2006, The Department of Transportation (“Applicant”) submitted an application to undertake regulated activities in tidal, coastal and navigable waters of the State waterward of the high tide line and in an area of tidal wetlands, for the reconstruction of the Moses Wheeler Bridge over the Housatonic River between the Town of Stratford and City of Milford. This application seeks a permit to undertake said regulated activities under the provisions of the Structures, Dredging and Fill provisions of the Connecticut General Statutes ("General Statutes") sections 22a-359 through 363f, in accordance with the Connecticut Coastal Management Act, sections 22a-90 through 22a-112 of the General Statutes, and Tidal Wetlands Act and regulations, sections through 22a-28 through 22a-35 of the General Statutes and sections 22a-30-1 through 22a-30-17 of the Regulations of Connecticut State Agencies ("RCSA") and the Connecticut Water Quality Standards developed pursuant to General Statutes section 22a-426.
2. Parties: The parties to the proceeding are: the Applicant and staff from the Office of Long Island Sound Programs ("OLISP") of the Department of Environmental Protection ("DEP").

The parties have agreed to the admission of all the exhibits listed on the attached Post hearing Submissions and admitted during and after the Public Hearings comprising staff exhibits DEP-1 through DEP-13 and DEP-15 through DEP-19 and DEP-21 and Applicant's exhibits APP-1 through APP-25.

FINDINGS OF FACT

Background:

1. Site Location and Character: The site is located on and adjacent to Interstate 95, on the Housatonic River in Stratford and Milford, Connecticut. The Housatonic River is an estuarine embayment tributary to western Long Island that is subject to an average semidiurnal tidal range of 7.2 feet at the Moses Wheeler Bridge site. Tidal wetland vegetation is present along the western (Stratford) side and eastern (Milford) side of the Housatonic River within the project site. The project site is on State owned property supporting the freeway Interstate 95 that includes the existing Moses Wheeler Bridge. Immediately upstream (north) of the Moses Wheeler Bridge is the Metro-North Railroad New Haven Line that crosses the Housatonic River on a moveable bridge (the Devon

Bridge). To the south (downstream) is the Washington Bridge that carries U.S. Route 1 across the Housatonic River on a moveable bridge. There is a State boat launch ramp and parking area on the south side of the Moses Wheeler Bridge in Milford. Adjacent land use to the project site in Stratford includes The Dock Shopping Center and The Dock Marina.

2. Application History: The initial application was received on March 1, 2006 requesting authorization to replace the existing Moses Wheeler Bridge, reconstruct an existing State boat launch ramp, and conduct tidal wetland mitigation activities. (DEP-1). On June 22, 2006, the OLISP staff requested that the Applicant provide additional information and make modifications to the submitted plans and application materials in order to reduce impacts and maximize mitigation efforts. The DEP requested that an evaluation be conducted which would measure the potential for additional shading to the tidal wetlands which currently exist as well as to those that would be present within the newly created mitigation area. DEP requested that the endangered species coordination with the Environmental & Geographic Information center also be updated. The DEP also requested that additional parking be provided at the public boat launching ramp and further, that a suitable alternative to access be provided during construction. The Applicant responded to the comments regarding the boat launch ramp on September 27, 2006, requested an update from the Environmental & Geographic Information Center on December 27, 2006 and responded to all other concerns and provided updated permit plates on January 22, 2007.

After their initial review of the application, OLISP staff determined that the proposed work appeared to be consistent with applicable State policies and standards and criteria. On December 27, 2006, OLISP staff recommended tentative approval (DEP- 9) of the application and published the Notice of Tentative Determination to Approve and Intent to Waive a Public Hearing for the Moses Wheeler Bridge reconstruction project on June 4, 2007 in the New Haven Register newspaper. Because the project spans an area of tidal wetland vegetation, section 22a-32 of the General Statutes required a 40-day comment period on the application and also required that a public hearing be held upon request by twenty-five (25) individuals in a petition. The public comment period closed on July 14, 2007. On July 12, 2007, staff received a petition with 39 signatures requesting that a public hearing be held on the application from Mr. Bill Rock. (DEP-12).

A prehearing conference was held on November 15, 2007 at the DEP offices, which was attended by several representatives of the Applicant, as well as OLISP staff and the hearing officer. None of the petitioners attended the prehearing conference. The prehearing conference established December 5, 2008 as the date for the site visit and the public hearing with a continued hearing date of December 6, 2008, if deemed necessary.

A site walk was conducted for the benefit of the hearing officer by the Applicant and OLISP staff on December 5, 2007 prior to the public hearing. The site visit consisted of a field walk of the proposed Project location, viewing the existing Moses Wheeler Bridge from the Milford and Stratford sides of the Housatonic River. Items of discussion at the field walk included the type of construction of the existing and proposed Moses Wheeler Bridges, the nature and limits of the tidal wetlands, the developed properties in the vicinity of the Bridge,

particularly the Metro-North Railroad and The Dock Shopping Center, and the State boat launch ramp in Milford. As noted in the Public Notice of Hearing (DEP-19), the public hearing commenced at the Flood Middle School auditorium in Stratford, CT on December 5, 2007.

Several people raised concerns regarding what were largely described as quality of life issues either through the submission of written comments (DEP-13) or through testimony at the public hearing,. Those concerns included mosquitoes breeding in the proposed stormwater pond on Ferry Boulevard and the proper maintenance of the new facility; the loss of trees; increased noise and air pollution; and existing contamination in the area. Prior to the close of the December 5, 2007 hearing in Stratford, the hearing was continued to the following day, December 6, 2007, at DEP Headquarters in Hartford.

At the December 6, 2007 hearing, the discussions focused on addressing public comments as well as remaining issues raised in a letter to Kevin Zawoy from the Town of Stratford Waterfront and Harbor Management Commission dated July 12, 2007 (DEP-13). These issues were addressed during the hearing. Paul Capotosto and Roger Wolf of the DEP Bureau of Natural Resources (DEP-15) and Christopher Samorajczyk on behalf of the Applicant, all experts on mosquitoes, dispelled concerns about mosquito breeding. Kimberly Lesay of DOT and Kevin Zawoy of OLISP, experts on wetland issues, provided credible testimony about existing resources on site and the adequacy of the proposed mitigation package. The concerns expressed by Mr. Michael Payton of the DEP Boating Division about boating access during construction were addressed by Applicant's proposal to improve the existing boat launch as part of the Project and by modifying the special conditions of the draft permit to require the Applicant to submit a prudent and feasible plan to offset the temporary loss of public access at the public boat ramp. DEP-21. The draft permit also includes language to provide for on-site evaluation, correction and reporting in the quarterly inspection reports on mosquito breeding at the proposed stormwater pond on Ferry Boulevard.

3. Project Description: The Applicant, in their initial application, sought authorization for a project to reconstruct the Moses Wheeler Bridge over the Housatonic River. The project includes the removal of the existing Moses Wheeler Bridge and the construction of a new bridge that is widened to the north to accommodate the addition of full width shoulders on both the northbound and southbound sides of traffic. The project also includes tidal wetland creation on both banks of the Housatonic River at the project site and reconstruction/enhancement of the existing State of Connecticut boat launch ramp facility in Milford. Specifically, the work that will take place waterward of the high tide line is as follows:
  1. Replace in its entirety the existing Moses Wheeler Bridge with a new three girder precast concrete segmental superstructure bridge located within the footprint and directly north of the existing bridge within an area waterward of the high tide line as follows:

- A. install two temporary trestles with associated access ramps located on the south side of the existing Moses Wheeler Bridge, including the use of 600-mm diameter pipe piles to support the trestles;
- B. remove the existing six lane Moses Wheeler Bridge which is approximately 28 meters wide by 974 meters long and replace the bridge with a new six lane solid deck concrete bridge superstructure that is 41.52 meters wide by 928.75 meters long, which will carry an IMS conduit, a cable TV conduit, two conduits for highway illumination circuits, an empty conduit for a future IMS cable, a fire protection pipe system, and a conduit for the navigation light circuits;
- C. remove nine (9) concrete piers which support the existing bridge, requiring installation of temporary sheet pile enclosures, the excavation of approximately 7,109 cubic meters of material for the removal of the piers within these temporary enclosures, and backfill with approximately 5,216 cubic meters of clean fill to the elevation of the surrounding substrate or proposed grade as follows:
  - i. remove existing Pier 4W to an elevation of no less than -0.30 meters (NAVD) 88 as follows:
    - a. install temporary sheet pile enclosure, measuring approximately 6.4 meters wide by 31.0 meters long, around the perimeter of the existing pier;
    - b. excavate a total of approximately 266 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.i.a,above;
    - c. backfill the temporary sheet pile enclosure described in paragraph 1.C.i.a above, with a total of approximately 199 cubic meters of soil material comprised of approximately 139 cubic meters of granular fill with a top layer of approximately 60 cubic meters of planting substrate/topsoil material, to the elevation of the proposed finished grade in the Tidal Wetland Creation Site in Wetland Area 1; and
  - ii. remove existing Pier 3W to an elevation no less than one meter below existing substrate as follows:
    - a. install temporary sheet pile enclosure, measuring approximately 14.5 meters wide by 31.1 meters long, around the perimeter of the existing pier and the middle and south column of proposed Pier 5;
    - b. excavate a total of approximately 975 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.ii.a, above;

- c. backfill the temporary sheet pile enclosure described in paragraph 1.C.ii.a above, with a total of approximately 886 cubic meters of soil material comprised of approximately 615 cubic meters of granular fill with a top layer of approximately 271 cubic meters of soil material that is similar to surrounding river bottom material, to the elevation of the surrounding substrate; and
  - iii. remove existing Pier 2W to an elevation no less than one meter below existing substrate as follows:
    - a. install temporary sheet pile enclosure, measuring approximately 7.3 meters wide by 32.0 meters long, around the perimeter of the existing pier;
    - b. excavate a total of approximately 562 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.iii.a, above;
    - c. backfill the temporary sheet pile enclosure described in paragraph 1.C.iii.a above, with a total of approximately 474 cubic meters of material comprised of granular fill and includes a 15 centimeter thick top layer of oyster cultch (shell) or other shell that is acceptable to the Department of Agriculture/Bureau of Aquaculture, to the elevation of the surrounding substrate; and
  - iv. remove existing Pier 1W to an elevation of no less than -8.44 meters (NAVD 88) as follows:
    - a. install temporary sheet pile enclosure, measuring approximately 9.5 meters wide by 32.0 meters long, around the perimeter of the existing pier;
    - b. excavate a total of approximately 1,456 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.iv.a, above;
    - c. backfill the temporary sheet pile enclosure described in paragraph 1.C.iv.a above, with a total of approximately 1,022 cubic meters of material comprised of granular fill and includes a 15 centimeter thick top layer of oyster cultch (shell) or other shell that is acceptable to the Department of Agriculture/Bureau of Aquaculture, to the elevation of the surrounding substrate; and
  - v. remove existing Pier 1E to an elevation of no less than -8.44 meters (NAVD 88) as follows:
    - a. install temporary sheet pile enclosure, measuring approximately 9.5 meters

wide by 32.0 meters long, around the perimeter of the existing pier;

- b. excavate a total of approximately 1,512 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.v.a, above;
  - c. backfill the temporary sheet pile enclosure described in paragraph 1.C.v.a above, with a total of approximately 1,104 cubic meters of material comprised of granular fill and includes a 15 centimeter thick top layer of oyster cultch (shell) or other shell that is acceptable to the Department of Agriculture/Bureau of Aquaculture, to the elevation of the surrounding substrate; and
- vi. remove existing Pier 2E to an elevation of no less than one meter below the existing substrate as follows:
- a. install temporary sheet pile enclosure, measuring approximately 7.3 meters wide by 32.0 meters long, around the perimeter of the existing pier;
  - b. excavate a total of approximately 887 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.vi.a, above;
  - c. backfill the temporary sheet pile enclosure described in paragraph 1.C.vi.a above, with a total of approximately 552 cubic meters of material comprised of granular fill and includes a 15 centimeter thick top layer of oyster cultch (shell) or other shell that is acceptable to the Department of Agriculture/Bureau of Aquaculture, to the elevation of the surrounding substrate; and
- vii. remove existing Pier 3E to an elevation of no less than one meter below the existing substrate as follows:
- a. install temporary sheet pile enclosure, measuring approximately 8.7 meters wide by 31.1 meters long, around the perimeter of the existing pier;
  - b. excavate a total of approximately 837 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.vii.a, above;
  - c. backfill the temporary sheet pile enclosure described in paragraph 1.C.vii.a above, with a total of approximately 564 cubic meters of material comprised of granular fill and includes a 15 centimeter thick top layer of oyster cultch (shell) or other shell that is acceptable to the Department of Agriculture/Bureau of Aquaculture, to the elevation of the surrounding

substrate; and

viii. remove existing Pier 4E to an elevation of no less than one meter below the existing substrate as follows:

- a. install temporary sheet pile enclosure, measuring approximately 7.3 meters wide by 31.1 meters long, around the perimeter of the existing pier;
- b. excavate a total of approximately 476 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.viii.a, above;
- c. backfill the temporary sheet pile enclosure described in paragraph 1.C.viii.a above, with a total of approximately 324 cubic meters of soil material comprised of approximately 96 cubic meters of granular fill and approximately 228 cubic meters of soil material that is similar to surrounding river bottom material, to the elevation of the surrounding substrate; and

ix. remove existing Pier 5E to an elevation of no less than -0.30 meters (NAVD 88) as follows:

- a. install temporary sheet pile enclosure, measuring approximately 8.7 meters wide by 31.1 meters long, around the perimeter of the existing pier;
- b. excavate a total of approximately 139 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.ix.a, above;
- c. backfill the temporary sheet pile enclosure described in paragraph 1.C.ix.a above, with a total of approximately 92 cubic meters of planting substrate/topsoil material, to the elevation of the proposed finished grade in the tidal wetland creation site in Wetland Area 2; and

D. remove a total of approximately 123.4 linear meters of existing wooden bridge fender system and 138 wooden piles, of which 58.5 linear meters and 67 piles are located adjacent to existing Pier 1W and 64.9 linear meters and 71 piles are adjacent to existing Pier 1E, for the full depth of the existing fender system;

E. remove a total of approximately 30 linear meters of existing wooden bridge fender system and 32 wooden piles on the southerly side of existing Pier 2W to an elevation no less than one meter below existing substrate;

F. remove a total of approximately 43 linear meters of existing wooden bridge fender system and 27 wooden piles along the easterly side of existing Pier 3W to an elevation no less than one meter below existing substrate;

- G. remove five existing wooden pile dolphins located within the State right-of-way in the vicinity of existing Piers 2W and 1W, in their entirety;
- H. install a total of approximately 112 linear meters of wooden pile supported temporary fender system, of which 55 meters is on the west side and 57 meters is on the east side of the 24.39 meter wide temporary navigation channel to be maintained open during bridge construction between existing Piers 1W and 1E;
- I. install the drilled shaft columns for proposed bridge Piers 5, 6, 7, 8, and 9 requiring the use of temporary foundation seal assemblies and steel casings, approximately 2,948 cubic meters of excavation, 2,940 cubic meters of reinforced concrete, 138 cubic meters of granite for facing for installation of the drilled shafts, approximately 346 cubic meters of clean granular fill, and 317 cubic meters of clean soil backfill material as follows:
  - i. install Pier 5 as follows as follows:
    - a. excavate approximately 207 cubic meters of material and drive spud piles and construct erection frame to support the temporary foundation seal assemblies and steel casings described in paragraph 1.I.i.b., below;
    - b. place and secure temporary foundation seal assemblies on the erection frames described in paragraph 1.I.i.a., above and install the steel drilled shaft casings through the foundation seal assemblies to bedrock;
    - c. excavate approximately 304 cubic meters of earthen material and 19 cubic meters of bedrock from within the confines of the steel drilled shaft casing described in paragraph 1.I.i.b., above;
    - d. place reinforcing steel cage and approximately 419 cubic meters of concrete within the confines of the excavated area described in paragraph 1.I.i.c., above, to form the drilled shaft and concrete column;
    - e. dewater the temporary foundation seal assemblies described in paragraph 1.I.i.b., above, and install approximately 28 cubic meters of granite facing on the pier columns described in paragraph 1.I.i.d., above,
    - f. dismantle and remove the temporary foundation seal assemblies, erection frame and spud piles described in paragraph 1.I.i.a., above;
    - g. restore surrounding areas adjacent to the authorized pier to prework conditions by placing 169 cubic meters of granular fill and approximately 38 cubic meters of clean soil backfill material within the confines of the excavated area described in paragraph 1.I.i.a., above, to the elevation of the



surrounding substrate with soil material that is similar to surrounding river bottom material; and

- ii. install Pier 6 as follows as follows:
  - a. drive spud piles and construct erection frame to support the temporary foundation seal assemblies and steel drilled shaft casings described in paragraph 1.I.ii.b., below;
  - b. place and secure temporary foundation seal assemblies on the erection frames described in paragraph 1.I.ii.a., above and install the steel drilled shaft casings through the foundation seal assemblies to bedrock;
  - c. excavate approximately 589 cubic meters of earthen material and 19 cubic meters of bedrock from within the confines of the steel drilled shaft casing described in paragraph 1.I.ii.b., above;
  - d. place reinforcing steel cage and approximately 798 cubic meters of concrete within the confines of the excavated area described in paragraph 1.I.ii.c., above, to form the drilled shaft and concrete column;
  - e. dewater the temporary foundation seal assemblies described in paragraph 1.I.ii.b., above, and install approximately 28 cubic meters of granite facing on the pier columns described in paragraph 1.I.ii.d., above,
  - f. dismantle and remove the temporary foundation seal assemblies, erection frame and spud piles described in paragraph 1.I.ii.a., above; and
- iii. install Pier 7 as follows as follows:
  - a. drive spud piles and construct erection frame to support the temporary foundation seal assemblies and steel casings described in paragraph 1.I.iii.b., below;
  - b. place and secure temporary foundation seal assemblies on the erection frames described in paragraph 1.I.iii.a., above and install the steel drilled shaft casings through the foundation seal assemblies to bedrock;
  - c. excavate approximately 470 cubic meters of earthen material and 19 cubic meters of bedrock from within the confines of the steel drilled shaft casing described in paragraph 1.I.iii.b., above;
  - d. place reinforcing steel cage and approximately 661 cubic meters of concrete within the confines of the excavated area described in paragraph 1.I.iii.c., above, to form the drilled shaft and concrete column;

- e. dewater the temporary foundation seal assemblies described in paragraph 1.I.iii.b., above, and install approximately 28 cubic meters of granite facing on the pier columns described in paragraph 1.I.iii.d., above,
  - f. dismantle and remove the temporary foundation seal assemblies, erection frame and spud piles described in paragraph 1.I.iii.a., above; and
- iv. install Pier 8 as follows as follows:
- a. drive spud piles and construct erection frame to support the temporary foundation seal assemblies and steel casings described in paragraph 1.I.iv.b., below;
  - b. place and secure temporary foundation seal assemblies on the erection frames described in paragraph 1.I.iv.a., above, and install the steel drilled shaft casings through the foundation seal assemblies to bedrock;
  - c. excavate approximately 403 cubic meters of earthen material and 19 cubic meters of bedrock from within the confines of the steel drilled shaft casing described in paragraph 1.I.iv.b., above;
  - d. place reinforcing steel cage and approximately 554 cubic meters of concrete within the confines of the excavated area described in paragraph 1.I.iv.c., above, to form the drilled shaft and concrete column;
  - e. dewater the temporary foundation seal assemblies described in paragraph 1.I.iv.b., above, and install approximately 28 cubic meters of granite facing on the pier columns described in paragraph 1.I.iv.d., above,
  - f. dismantle and remove the temporary foundation seal assemblies, erection frame and spud piles described in paragraph 1.I.i.a., above; and
- v. install Pier 9 as follows as follows:
- a. excavate approximately 455 cubic meters of material and drive spud piles and construct erection frame to support the temporary foundation seal assemblies and steel casings described in paragraph 1.I.v.b., below;
  - b. place and secure temporary foundation seal assemblies on the erection frames described in paragraph 1.I.v.a., above and install the steel drilled shaft casings through the foundation seal assemblies to bedrock;
  - c. excavate approximately 425 cubic meters of earthen material and 19 cubic meters of bedrock from within the confines of the steel drilled shaft casing

described in paragraph 1.I.v.b., above;

- d. place reinforcing steel cage and approximately 507 cubic meters of concrete within the confines of the excavated area described in paragraph 1.I.v.c., above, to form the drilled shaft and concrete column;
  - e. dewater the temporary foundation seal assemblies described in paragraph 1.I.v.b., above, and install approximately 28 cubic meters of granite facing on the pier columns described in paragraph 1.I.v.d., above,
  - f. dismantle and remove the temporary foundation seal assemblies, erection frame and spud piles described in paragraph 1.I.v.a., above;
  - g. restore surrounding areas adjacent to the authorized pier to prework conditions by placing 265 cubic meters of granular fill and approximately 190 cubic meters of planting substrate/topsoil to the elevation of the surrounding substrate within the confines of the excavated area described in paragraph 1.I.v.a., above; and
- J. install a total of 123.4 meters of new wooden pile supported fender system, of which 58.5 meters is located along the west side and 64.9 meters is located along the east side of the navigation channel between Piers 6 and 7.

2. Conduct tidal wetland creation on the east and west sides of the river as follows:

- A. construct wetland mitigation in Wetland Area 1 on the west bank of the Housatonic River in the footprint of the proposed bridge and the area south of the bridge to the State's right-of-way limit as follows:
  - i. excavate approximately 1,900 cubic meters of material to facilitate tidal wetland creation described in paragraph 2.A., above;
  - ii. place approximately 576 cubic meters of planting substrate/topsoil material atop the excavated area described in paragraph 2.A., above;
  - iii. conduct tidal wetland plantings in the planting substrate/topsoil material described in paragraph 2.A.ii. above; and
- B. construct wetland mitigation in Wetland Area 2 on the east bank of the Housatonic River in the footprint of the proposed bridge and the area north of the bridge as follows:
  - i. excavate approximately 1,100 cubic meters of material to facilitate tidal wetland creation described in paragraph 2.B., above;

- ii. place approximately 426 cubic meters of planting substrate/topsoil material atop the excavated area described in paragraph 2.A., above;
  - iii. conduct tidal wetland plantings in the planting substrate/topsoil material described in paragraph 2.A.ii. above; and
- 3. Remove and reconstruct the State boat launch ramp in Milford on the south side of the Moses Wheeler Bridge within an area waterward of the high tide line as follows:
  - A. excavate approximately 605 cubic meters of material, including the removal of the existing boat launch ramp and concrete abutment ramp, and place approximately 44 cubic meters of granular fill to prepare the subgrade to correct line and grade on which to construct the new boat launch ramp;
  - B. place approximately 45 cubic meters of standard riprap on prepared subgrade as described in paragraph 3.A., above, at bottom of new ramp and place approximately 170 cubic meters of special riprap as subbase material under the new precast concrete panels as described in paragraph 3.D., below, from the bottom to top of the ramp;
  - C. lay steel rails on the special riprap subbase material as described in paragraph 3.B., above, and set rails into the riprap subbase to establish correct line and grade;
  - D. lower approximately 91 cubic meters of interlocking precast concrete panels into place on the steel rails described in paragraph 3.C., above, keying and pushing panels into position at the lower concrete support blocks, described in paragraph 3.E., below, and repeat this precast panel installation procedure until the boat launch ramp surface is complete;
  - E. construct two intermediate concrete support blocks by placing approximately 20 cubic meters of concrete at approximately the third points along the ramp during installation of the precast concrete panels as described in paragraph 3.D., above;
  - F. construct a concrete anchor wall at the top of the boat ramp panels by placing approximately 10 cubic meters of concrete to secure the installed precast concrete panels as described in paragraph 3.D. above;
  - G. construct two concrete abutment end blocks at the top of the boat launch ramp as ramp access to new floating docks by placing 29 cubic meters of concrete;
  - H. place approximately 72 cubic meters of bituminous concrete pavement and processed aggregate base material at the top of the boat launch ramp to meet the parking lot and access road pavement; and
  - I. install two 2.4 meter wide by 30 meter long floating docks each supported by four timber piles located along the edges of the proposed boat launch ramp.

4. Purpose and Use of Proposed Facility: The Moses Wheeler Bridge carries Interstate 95, which consists of three travel lanes in each the northbound and southbound directions, across the Housatonic River. The purpose of the proposed work is to replace the existing Moses Wheeler Bridge with a totally new structure. The Connecticut Department of Transportation classifies the Moses Wheeler Bridge as deficient, meaning the bridge has passed beyond its design life span and that a major rehabilitation or replacement of the structure is warranted. The replacement bridge is designed to conform to current design criteria and improves safety by adding full width shoulders for the travel lanes in both the northbound and southbound directions.
5. Compliance and Enforcement History: There are no previous permits or certificates issued by the DEP-OLISP that authorized work waterward of the high tide line at this site. The site has not been the subject of a DEP enforcement action for unauthorized activities waterward of the high tide line.
6. Tidal Wetlands Vegetation: On April 14 and August 21, 2006, OLISP staff conducted a site visit to verify the location of tidal wetland vegetation within the project location. The inspection revealed that the vegetative community of the tidal wetlands on the western side (Wetland Area 1) of the river and on the eastern side (Wetland Area 2) of the river consists of *Spartina alterniflora* and *Phragmites australis* as shown on the submitted plans.

Work within the vegetated tidal area of Wetland Area 1 is limited to temporary work and will consist of the demolition and removal of existing bridge Pier 4W and construction of a temporary trestle system across this area to the south of the Moses Wheeler Bridge. Regulated activities within Wetland Area 1 will result in a net restoration to tidal wetlands of 14.4 square meters. A tidal wetland creation site which involves excavation to expand the limits of tidal inundation and the placement of wetland plantings will also occur in Wetland Area 1. This area of wetland creation has been maximized to provide a wetland creation area of 701.7 square meters.

Impacts within vegetated tidal Wetland Area 2 consist of demolition and removal of existing bridge Pier 5E, the construction of a temporary trestle system across the south side of the Moses Wheeler Bridge, and the construction of three drilled shafts at new bridge Pier 9. These activities result in an impact of 31.5 square meters to the tidal vegetation in Wetland Area 2. A tidal wetland creation site which involves excavation to expand the limits of tidal inundation and the placement of wetland plantings will also occur in Wetland Area 2. This area of wetland creation has been maximized to provide a wetland creation area of 432.4 square meters.

Reconstruction to upgrade the State boat launch ramp on the east bank of the river will require excavation and fill within regulated areas. Impacts associated with this boat launch ramp upgrade will result in the restoration of 61 square meters of tidal wetland.

Overall there is a permanent net reduction of encroachment into the tidal wetland vegetated

areas as a result of this project. There will be a net restored tidal wetland area of 43.9 square meters. Impacts to vegetated wetland impacts have been minimized by the proposed bridge design which reduces the number of bridge piers within vegetated tidal wetland areas. The impact of new foundations in the regulated areas is also minimized by the use of drilled shaft foundations. Numerous features have also been included in the design to minimize temporary impacts from the project. These features include the use of temporary trestle systems to traverse wetland areas, temporary foundation seals at new bridge piers, and temporary sheet pile enclosures for demolition of existing bridge piers.

7. Shellfish: The Housatonic River is classified as a natural shellfish bed by the Connecticut DEP and licenses to harvest seed oysters in this area are issued by the Town of Stratford. OLISP staff received a Permit Consultation Form on February 28, 2007 and modified on April 3, 2007 from David Carey, Director of the State of Connecticut, Department of Agriculture, Bureau of Aquaculture (DEP-8). These transmittals stated that the proposed work at the subject site will not significantly impact any shellfish area. The initial recommendation from the Bureau of Aquaculture was to include seasonal closure periods for spawning shellfish because of concerns about an increase in turbidity during in-water work. However, this condition was later determined to not be necessary if the Permittee conducts on-site water quality monitoring for increased turbidity levels. Mr. Carey also requested that backfill material required for the removal of existing piers should contain a top layer (approximately 15 centimeters) of cultch (shell) equaling 1000 bushels to mitigate adverse environmental impacts to oysters in the area. This request has been included as a condition of the authorization.
8. Connecticut Endangered, Threatened and Special Concern Species: A review of all Endangered, Threatened, and Special Concern species was conducted for the project site by staff of DEP's Natural Resources Center, Natural Diversity Database (NDDDB). A January 31, 2007 letter from Jenny Dickson of the DEP-Wildlife Division indicated that State Endangered peregrine falcons (*Falco peregrinus*) are utilizing the airspace and are nesting near the project site at the old Devon Power Plant (DEP-7). This letter stated the Moses Wheeler Bridge project will have no impact on these birds or their habitat. Atlantic sturgeon, a State Threatened species are also known to occur within the project limits.
9. Intertidal Mudflats: An area of tidal mud flat is present on the west side of the Housatonic River from below the tidal vegetation limit to the mean low water line, below Wetland Area 1. Work proposed within this intertidal flat area consists of constructing one drilled shaft for column 5N at new bridge Pier 5; demolishing and removing existing bridge Pier 3W; removing the existing timber fender system east of bridge Pier 3W; and construction of the temporary timber trestle system across the area on the south side of the Moses Wheeler Bridge. The work in this intertidal flat area on the west side of the river results in a new restored area of 32.2 square meters.

There is also an area of tidal mud flat present on the east side of the river from below the tidal vegetation limit to the mean low water line at Wetland Area 2. Proposed work within this intertidal flat area located adjacent to Wetland Area 2 consists of the demolition and

removal of existing bridge Pier 4E; construction of a portion of the temporary foundation seals for new bridge Pier 9; and construction of the temporary timber trestle system across the area south of the Moses Wheeler Bridge. The work in this intertidal flat area on the east side of the river results in a net restored area of 54 square meters.

There is a tidal mud flat on the east bank of the Housatonic River to the south of the existing State boat launch ramp in Milford that will be impacted by the reconstruction/upgrade of the boat launch ramp. The work on the upgraded boat launch ramp will result in a permanent impact to 5 square meters to this intertidal flat area.

The cumulative impact to intertidal flat areas adjacent to Wetland Area 1, Wetland Area 2 and south of the State boat launch ramp results in a total net restored area of 81.2 square meters.

10. Finfish: The proposed project was discussed with Mark Johnson, DEP Inland Fisheries Division, by OLISP staff to determine potential impacts to fisheries and fisheries habitat that may result from the proposed activities. An April 27, 2006 letter from Mr. Johnson to OLISP staff provided comments and advise regarding fisheries habitat loss, mitigation, impacts to fisheries resources due to bridge demolition such as blasting, and special restrictions on time periods for bridge demolition activities (DEP-4). Temporary construction impacts to finfish will be minimized by the implementation of erosion and sedimentation control plan and by the proposed use of temporary sheet pile enclosures and temporary foundation seals to contain work areas. Staff has incorporated special conditions in the Draft Permit (DEP-21) regarding time of year restrictions on pile driving/sheet pile driving and requiring a Demolition Plan. Due to these precautions the project will not adversely impact fisheries resources and habitat in the Housatonic River.
11. Navigation Impacts: There is a navigation channel in the Housatonic River that is maintained by the U.S. Army Corps of Engineers. The channel is 200 feet wide through this reach of the Housatonic River. The channel width is restricted to 25.3 meters (83 feet) wide by the fender system under the lift span of the Metro North Railroad Bridge located just upstream of the project site. The defined depth of the navigation channel is 5.5 meters (18 feet) deep below Mean Lower Low Water. The elevation of the bottom of the navigation channel within the project area is -6.66 meters (-21.8 feet) NAVD datum.

The proposed project will not change, expand, or create a new navigation channel. The existing bridge Piers 1E and 1W located immediately adjacent to the navigation channel will be removed below elevation -8.44-meters NAVD 1988 datum or 7-feet below the bottom elevation of the navigation channel. No dredging is proposed to take place within this navigation channel in association with this project.

The navigation channel will be temporarily impacted by the construction of the new bridge and the removal of the existing bridge. These temporary impacts include short term closures of the navigation channel during the construction of the new bridge as follows:

1. Installation of new communication and signal (C&S) cables on the south side of the Metro North Railroad Bridge will require a temporary channel closures while the new cables are lifted into place across the navigation channel.
2. Assembling the precast concrete segmental girders will require temporary channel closures when these elements are lifted and assembled in place in the area above the navigation channel.
3. The construction of the new permanent timber fender system to replace the existing fender system along the east and west sides of the navigation channel through the project site will require temporary closures of the navigation channel to allow barges to anchor in the channel during this work.

Temporary impacts to the navigation channel during the demolition and removal of the existing bridge will require partial closures of the navigation channel. During a partial navigation channel closure a minimum of 12.1 meters (40 feet) of navigation channel width will be maintained open at all times. These activities requiring partial navigation channel closures are as follows:

1. The installation of a temporary debris shields under the existing bridge superstructure and in the vicinity of the channel will require partial navigation channel closures while barges are anchored in the channel to perform this work. The removal of the debris shields will also require partial channel closures for barge and construction access.
  2. The removal of the structural steel superstructure of the existing bridge in the span over the navigation channel will be preformed from barges anchored in the channel. This will require some temporary total channel closures and some temporary partial channel closures during this work while barges occupy the navigation channel.
  3. The removal of the existing timber fender system along the navigation channel in the project site will be preformed from barges that will have to anchor in the navigation channel while this work is being done. This will require temporary partial channel closures during this work while barges occupy the navigation channel.
  4. The construction of the temporary fender systems on the ends of the temporary trestles adjacent to the navigation channel will be performed from barges. This will require temporary partial channel closures during this work while barges occupy the navigation channel.
12. Public Trust: Impacts to public trust lands and waters have been minimized to the greatest extent practicable. The design reduces the number of bridge piers within the wetlands, intertidal flats and open water of the Housatonic River. Proposed bridge piers that will support the new bridge have been located within shoreline areas containing the least sensitive coastal resources. Existing bridge piers will be removed below the existing substrate and the surface of these excavations will be restored to a condition that is similar to



the surrounding areas. All temporary encroachments such as timber work trestles, sheet pile enclosures, temporary foundations seals, sedimentation and erosion controls and turbidity curtains will be removed upon completion of the project and will areas disturbed will be restored to pre-work conditions.

Public access to the State boat launch facility along the south side of the project site on the eastern shore of the Housatonic River will be prohibited during the bridge construction due to public safety considerations. This will be a temporary impact to the members of the public who wish to use this facility to launch boats or fish from the shoreline. To offset the loss of this boat launch facility during construction, the boat ramp access road, parking area and ramp will be reconstructed and enhanced as part of the project. The parking area will be expanded and parking stalls will be designated by painted pavement markings. A new and wider concrete boat launch ramp will be constructed and floating docks will be installed on both side of the upgraded ramp.

#### Environmental Impacts:

Environmental impacts associated with the proposed Moses Wheeler Bridge reconstruction project have been minimized to the greatest extent practicable. There is no net loss of wetland area as a result to this project and the project does include mitigation to create tidal wetlands. The construction of the proposed Moses Wheeler Bridge and reconstructed State boat launch ramp are not anticipated to adversely impact existing intertidal flats, tidal wetlands, shellfish or finfish resources.

#### Alternatives: Several project alternatives were considered by the applicant:

The Connecticut Department of Transportation classifies the Moses Wheeler Bridge as “deficient,” meaning that the bridge has passed beyond its design life span and a major rehabilitation to this structure is warranted. Therefore, the No-Build Alternative was evaluated and considered not viable for this project.

The goal of this project was to use current design criteria for the completed bridge and include the safety improvement of adding full-width shoulders (inside and outside) for the travel lanes in both directions. This bridge is a critical link in the State’s transportation infrastructure and reducing its scope and/or size is not possible. The proposed bridge replacement project evolved from a complex study of various alternatives that would fulfill the purpose and need. The proposed alternative has been shown to be the most feasible alternative because it reduces the encroachment into public trust waters and either avoids or minimizes adverse impacts on the environment, navigation and water dependant uses to the fullest extent practicable.

Two alternatives were considered and studied for the reconstruction of the Moses Wheeler Bridge project. These alternatives were:

1. Alternative 1. Replacement or widening of the bridge superstructure in conjunction with the rehabilitation and extension of the existing bridge substructure. Under this alternative existing vulnerable substructure components would need to be retrofitted to conform to current seismic design standards.
2. Alternative 2. Complete bridge replacement.

The complete bridge replacement (Alternative 2) was selected based on the following:

1. This alternative results in a substantial reduction in the number of substructure units (piers), bridge bearings and expansion joints;
2. The possibility of age related deterioration of the existing bridge foundations will be eliminated and a 75-year service life will be realized;
3. The initial cost of retrofitting the existing structure to the same seismic standard as a new bridge exceeds 80 percent of the cost for a new bridge.

Attachment B

**PERMIT**

**Permit No:** 200600415-KZ

**Municipalities:** Milford/Stratford

**Work Area:** Housatonic River off property located at the Moses Wheeler Bridge, Bridge No. 00135 Interstate 95

**Permittee:** CT DOT  
Edgar Hurlle  
P.O. Box 3175436  
Newington, CT 06131-7546

Pursuant to sections 22a-359 through 22a-363f of the Connecticut General Statutes ("CGS"), CGS sections 22a-28 through 22a-35, section 401 of the Federal Clean Water Act, as amended, and in accordance with CGS section 22a-98 and the Connecticut Water Quality Standards dated December 2002, a permit is hereby granted by the Commissioner of Environmental Protection ("Commissioner") to replace the existing Moses Wheeler Bridge, reconstruct an existing state boat launching ramp, and conduct tidal wetlands mitigation activities for transportation purposes as is more specifically described below in the SCOPE OF AUTHORIZATION, in the Housatonic River off property identified as the "work area" above.

**\*\*\*\*\*NOTICE TO PERMITTEES AND CONTRACTORS\*\*\*\*\***

**FAILURE TO CONFORM TO THE TERMS AND CONDITIONS OF THIS PERMIT MAY SUBJECT THE PERMITTEE AND ANY CONTRACTOR TO ENFORCEMENT ACTIONS, INCLUDING PENALTIES AND INJUNCTIONS, AS PROVIDED BY LAW.**

**SCOPE OF AUTHORIZATION**

The Permittee is hereby authorized to conduct the following work as described in application #200600415-KZ, including 81 sheets of plans dated November 11, 2005, November 12, 2006, and January 2, 2007 submitted by the Permittee to the Commissioner and attached hereto as follows:

1. replace in its entirety the existing Moses Wheeler Bridge with a new three girder precast segmental concrete superstructure bridge located within the footprint and directly north of the existing bridge as shown on Figures 12, 13, 14 and 15 within an area waterward of the high tide line as follows:
  - A. install two temporary trestles with associated access ramps located on the south side of the existing Moses Wheeler Bridge, including the use of 600-mm diameter pipe piles as shown on Figures 16, 17A and 17B;

- B. remove the existing six lane Moses Wheeler Bridge which is approximately 28 meters wide by 974 meters long and replace such bridge with a new six lane solid deck concrete bridge superstructure that is 41.52 meters wide by 928.75 meters long, which will carry a IMS conduit, a cable TV conduit, two conduits for highway illumination circuits, a future IMS cable conduit, a fire protection pipe system, and a conduit for the navigation light circuits;
- C. remove nine existing concrete piers which support the existing bridge, requiring installation of temporary sheet pile enclosures, the excavation of approximately 7,109 cubic meters of material for the removal of the piers within these temporary enclosures, and backfill with approximately 5,216 cubic meters of clean fill to the elevation of the surrounding substrate or proposed grade as follows:
  - i. remove existing Pier 4W to an elevation of no less than -0.30 meters as shown on Figure 19 as follows:
    - a. install temporary sheet pile enclosure, measuring approximately 6.4 meters wide by 31.0 meters long, around the perimeter of the existing pier;
    - b. excavate a total of approximately 266 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.i.a, above;
    - c. backfill the temporary sheet pile enclosure described in paragraph 1.C.i.a above, with a total of approximately 199 cubic meters of soil material comprised of approximately 139 cubic meters of granular fill and approximately 60 cubic meters of planting substrate/topsoil material as required pursuant to SPECIAL TERMS AND CONDITIONS paragraph 10., below, to the elevation of the proposed finished grade in the Tidal Wetland Creation Site in Wetland Area 1 as shown on Figures 57A and 57B; and
  - ii. remove existing Pier 3W to an elevation no less than one meter below existing substrates shown on Figures 20 and 21 as follows:
    - a. install temporary sheet pile enclosure, measuring approximately 14.5 meters wide by 31.1 meters long, around the perimeter of the existing pier and the middle and south column of proposed Pier 5;
    - b. excavate a total of approximately 975 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.ii.a, above;
    - c. backfill the temporary sheet pile enclosure described in paragraph 1.C.ii.a above, with a total of approximately 886 cubic meters of soil material comprised of approximately 615 cubic meters of granular fill and approximately 271 cubic meters of material as required pursuant to SPECIAL TERMS AND CONDITIONS paragraph 9., below, to the elevation of the surrounding substrate; and

- iii. remove existing Pier 2W to an elevation no less than one meter below existing substrates shown on Figure 22 and as follows:
  - a. install temporary sheet pile enclosure, measuring approximately 7.3 meters wide by 32.0 meters long, around the perimeter of the existing pier;
  - b. excavate a total of approximately 562 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.iii.a, above;
  - c. backfill the temporary sheet pile enclosure described in paragraph 1.C.iii.a above, with a total of approximately 474 cubic meters of soil material comprised of approximately 239 cubic meters of granular fill and approximately 235 cubic meters of material as required pursuant to SPECIAL TERMS AND CONDITIONS paragraph 11., below, to the elevation of the surrounding substrate; and
- iv. remove existing Pier 1W to an elevation of no less than -8.44 meters as shown on Figures 23 and 24 as follows:
  - a. install temporary sheet pile enclosure, measuring approximately 9.5 meters wide by 32.0 meters long, around the perimeter of the existing pier;
  - b. excavate a total of approximately 1,456 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.iv.a, above;
  - c. backfill the temporary sheet pile enclosure described in paragraph 1.C.iv.a above, with a total of approximately 1,022 cubic meters of soil material comprised of approximately 719 cubic meters of granular fill and approximately 303 cubic meters of material as required pursuant to SPECIAL TERMS AND CONDITIONS paragraph 11., below, to the elevation of the surrounding substrate; and
- v. remove existing Pier 1E to an elevation of no less than -8.44 meters as shown on Figures 25 and 26 as follows:
  - a. install temporary sheet pile enclosure, measuring approximately 9.5 meters wide by 32.0 meters long, around the perimeter of the existing pier;
  - b. excavate a total of approximately 1,512 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.v.a, above;
  - c. backfill the temporary sheet pile enclosure described in paragraph 1.C.v.a above, with a total of approximately 1,104 cubic meters of soil material comprised of approximately 801 cubic meters of granular fill and approximately 303 cubic meters of material as required pursuant to SPECIAL TERMS AND CONDITIONS paragraph 11., below, to the elevation of the surrounding substrate; and

- vi. remove existing Pier 2E to an elevation of no less than one meter below the existing substrate as shown on Figure 28 and as follows:
  - a. install temporary sheet pile enclosure, measuring approximately 7.3 meters wide by 32.0 meters long, around the perimeter of the existing pier;
  - b. excavate a total of approximately 887 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.vi.a, above;
  - c. backfill the temporary sheet pile enclosure described in paragraph 1.C.vi.a above, with a total of approximately 552 cubic meters of soil material comprised of approximately 317 cubic meters of granular fill and approximately 235 cubic meters of material as required pursuant to SPECIAL TERMS AND CONDITIONS paragraph 11., below, to the elevation of the surrounding substrate; and
- vii. remove existing Pier 3E to an elevation of no less than one meter below the existing substrate as shown on Figure 28 and as follows:
  - a. install temporary sheet pile enclosure, measuring approximately 8.7 meters wide by 31.1 meters long, around the perimeter of the existing pier;
  - b. excavate a total of approximately 837 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.vii.a, above;
  - c. backfill the temporary sheet pile enclosure described in paragraph 1.C.vii.a above, with a total of approximately 564 cubic meters of soil material comprised of approximately 293 cubic meters of granular fill and approximately 271 cubic meters of material as required pursuant to SPECIAL TERMS AND CONDITIONS paragraph 11., below, to the elevation of the surrounding substrate; and
- viii. remove existing Pier 4E to an elevation of no less than one meter below the existing substrate as shown on Figures 29 and 30 as follows:
  - a. install temporary sheet pile enclosure, measuring approximately 7.3 meters wide by 31.1 meters long, around the perimeter of the existing pier;
  - b. excavate a total of approximately 476 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.viii.a, above;
  - c. backfill the temporary sheet pile enclosure described in paragraph 1.C.viii.a above, with a total of approximately 324 cubic meters of soil material comprised of approximately 96 cubic meters of granular fill and approximately 228 cubic meters of material as required pursuant to SPECIAL TERMS AND CONDITIONS paragraph 9., below, to the elevation of the surrounding substrate; and

- ix. remove existing Pier 5E to an elevation of no less than -0.30 meters shown on Figure 32 and as follows:
  - a. install temporary sheet pile enclosure, measuring approximately 8.7 meters wide by 31.1 meters long, around the perimeter of the existing pier;
  - b. excavate a total of approximately 139 cubic meters below the high tide line from within the temporary sheet pile enclosure described in paragraph 1.C.ix.a, above;
  - c. backfill the temporary sheet pile enclosure described in paragraph 1.C.ix.a above, with a total of approximately 92 cubic meters of planting substrate/topsoil material as required pursuant to SPECIAL TERMS AND CONDITIONS paragraph 10., below, to the elevation of the surrounding substrate; and
  
- D. remove a total of approximately 123.4 linear meters of existing wooden bridge fender system and 138 wooden piles, of which 58.5 linear meters and 67 piles are located adjacent to existing Pier 1W and 64.9 linear meters and 71 piles are located adjacent to existing Pier 1E, for the full depth of the existing fender system, as shown on Figure 59;
  
- E. remove a total of approximately 30 linear meters of existing wooden bridge fender system and 32 wooden piles on the southerly side of existing Pier 2W as shown on Figures 13 and 16, to an elevation no less than one meter below existing substrate;
  
- F. remove a total of approximately 43 linear meters of existing wooden bridge fender system and 27 wooden piles along the easterly side of existing Pier 3W as shown on Figures 13 and 16, to an elevation no less than one meter below existing substrate;
  
- G. remove five existing wooden pile dolphins located within the State right-of-way in the vicinity of existing Piers 2W and 1W as shown on Figures 13 and 16, in their entirety.
  
- H. install a total of approximately 112 linear meters of wooden pile supported temporary fender system, of which 55 meters is on the west side and 57 meters is on the east side of the 24.39 meter wide temporary navigation channel to be maintained open during bridge construction between existing Piers 1W and 1E;
  
- I. install the drilled shaft columns for proposed bridge Piers 5, 6, 7, 8, and 9 requiring the use of temporary foundation seal assemblies as shown on Figure 18 and steel casings, approximately 2,948 cubic meters of excavation, 2,940 cubic meters of reinforced concrete, 138 cubic meters of granite for facing for installation of the drilled shafts, approximately 346 cubic meters of clean granular fill, and 317 cubic meters of clean soil backfill material as follows:
  - i. install Pier 5 as follows as shown on Figures 20 and 21 and as follows:
    - a. excavate approximately 207 cubic meters of material and drive spud piles and construct erection frame to support the temporary foundation seal assemblies and steel casings described in paragraph 1.I.i.b., below;

- b. place and secure temporary foundation seal assemblies on the erection frames described in paragraph 1.I.i.a., above, and install the steel drilled shaft casings through the foundation seal assemblies to bedrock;
  - c. excavate approximately 304 cubic meters of earthen material and 19 cubic meters of bedrock from within the confines of the steel drilled shaft casing described in paragraph 1.I.i.b., above;
  - d. place reinforcing steel cage and approximately 419 cubic meters of concrete within the confines of the excavated area described in paragraph 1.I.i.c., above, to form the drilled shaft and concrete column;
  - e. dewater the temporary foundation seal assemblies described in paragraph 1.I.i.b., above, and install approximately 28 cubic meters of granite facing on the pier columns described in paragraph 1.I.i.d., above,
  - f. dismantle and remove the temporary foundation seal assemblies, erection frame and spud piles described in paragraph 1.I.i.a., above;
  - g. restore surrounding areas adjacent to the authorized pier to prework conditions by placing 169 cubic meters of granular fill and approximately 38 cubic meters of clean soil backfill material within the confines of the excavated area described in paragraph 1.I.i.a., above, to the elevation of the surrounding substrate and as required pursuant to SPECIAL TERMS AND CONDITIONS paragraph 9., below; and
- ii. install Pier 6 as follows as shown on Figures 23 and 24 and as follows:
- a. drive spud piles and construct erection frame to support the temporary foundation seal assemblies and steel drilled shaft casings described in paragraph 1.I.ii.b., below;
  - b. place and secure temporary foundation seal assemblies on the erection frames described in paragraph 1.I.ii.a., above, and install the steel drilled shaft casings through the foundation seal assemblies to bedrock;
  - c. excavate approximately 589 cubic meters of earthen material and 19 cubic meters of bedrock from within the confines of the steel drilled shaft casing described in paragraph 1.I.ii.b., above;
  - d. place reinforcing steel cage and approximately 798 cubic meters of concrete within the confines of the excavated area described in paragraph 1.I.ii.c., above, to form the drilled shaft and concrete column;
  - e. dewater the temporary foundation seal assemblies described in paragraph 1.I.ii.b., above, and install approximately 28 cubic meters of granite facing on the pier columns described in paragraph 1.I.ii.d., above,



- f. dismantle and remove the temporary foundation seal assemblies, erection frame and spud piles described in paragraph 1.I.ii.a., above; and
- iii. install Pier 7 as follows as shown on Figures 25 and 26 and as follows:
- a. drive spud piles and construct erection frame to support the temporary foundation seal assemblies and steel casings described in paragraph 1.I.iii.b., below;
  - b. place and secure temporary foundation seal assemblies on the erection frames described in paragraph 1.I.iii.a., above, and install the steel drilled shaft casings through the foundation seal assemblies to bedrock;
  - c. excavate approximately 470 cubic meters of earthen material and 19 cubic meters of bedrock from within the confines of the steel drilled shaft casing described in paragraph 1.I.iii.b., above;
  - d. place reinforcing steel cage and approximately 661 cubic meters of concrete within the confines of the excavated area described in paragraph 1.I.iii.c., above, to form the drilled shaft and concrete column;
  - e. dewater the temporary foundation seal assemblies described in paragraph 1.I.iii.b., above, and install approximately 28 cubic meters of granite facing on the pier columns described in paragraph 1.I.iii.d., above,
  - f. dismantle and remove the temporary foundation seal assemblies, erection frame and spud piles described in paragraph 1.I.iii.a., above; and
- iv. install Pier 8 as follows as shown on Figures 27 and 28 and as follows:
- a. drive spud piles and construct erection frame to support the temporary foundation seal assemblies and steel casings described in paragraph 1.I.iv.b., below;
  - b. place and secure temporary foundation seal assemblies on the erection frames described in paragraph 1.I.iv.a., above, and install the steel drilled shaft casings through the foundation seal assemblies to bedrock;
  - c. excavate approximately 403 cubic meters of earthen material and 19 cubic meters of bedrock from within the confines of the steel drilled shaft casing described in paragraph 1.I.iv.b., above;
  - d. place reinforcing steel cage and approximately 554 cubic meters of concrete within the confines of the excavated area described in paragraph 1.I.iv.c., above, to form the drilled shaft and concrete column;

- e. dewater the temporary foundation seal assemblies described in paragraph 1.I.iv.b., above, and install approximately 28 cubic meters of granite facing on the pier columns described in paragraph 1.I.iv.d., above,
  - f. dismantle and remove the temporary foundation seal assemblies, erection frame and spud piles described in paragraph 1.I.i.a., above; and
  - v. install Pier 9 as follows as shown on Figures 29 and 30 and as follows:
    - a. excavate approximately 455 cubic meters of material and drive spud piles and construct erection frame to support the temporary foundation seal assemblies and steel casings described in paragraph 1.I.v.b., below;
    - b. place and secure temporary foundation seal assemblies on the erection frames described in paragraph 1.I.v.a., above, and install the steel drilled shaft casings through the foundation seal assemblies to bedrock;
    - c. excavate approximately 425 cubic meters of earthen material and 19 cubic meters of bedrock from within the confines of the steel drilled shaft casing described in paragraph 1.I.v.b., above;
    - d. place reinforcing steel cage and approximately 507 cubic meters of concrete within the confines of the excavated area described in paragraph 1.I.v.c., above, to form the drilled shaft and concrete column;
    - e. dewater the temporary foundation seal assemblies described in paragraph 1.I.v.b., above, and install approximately 28 cubic meters of granite facing on the pier columns described in paragraph 1.I.v.d., above,
    - f. dismantle and remove the temporary foundation seal assemblies, erection frame and spud piles described in paragraph 1.I.v.a., above;
    - g. restore surrounding areas adjacent to the authorized pier to prework conditions by placing 265 cubic meters of granular fill and approximately 190 cubic meters of planting substrate/topsoil material as required pursuant to SPECIAL TERMS AND CONDITIONS paragraph 10., below, to the elevation of the surrounding substrate within the confines of the excavated area described in paragraph 1.I.v.a., above; and
  - J. install a total of 123.4 meters of new wooden pile supported fender system, of which 58.5 meters is located along the west side and 64.9 meters is located along the east side of the navigation channel between Piers 6 and 7, as shown on Figures 16, 17A and 17B.
2. conduct tidal wetland creation on the east and west sides of the river as follows:

- A. construct wetland mitigation in Wetland Area 1 on the west bank of the Housatonic River in the footprint of the proposed bridge and the area south of the bridge to the State's right-of-way limit as shown on Figures 57A and 57B, as follows:
  - i. excavate approximately 1,900 cubic meters of material to facilitate tidal wetland creation described in paragraph 2.A., above;
  - ii. place approximately 576 cubic meters of planting substrate/topsoil material as required pursuant to SPECIAL TERMS AND CONDITIONS paragraph 10., below, atop the excavated area described in paragraph 2.A., above;
  - iii. conduct tidal wetland plantings in the planting substrate/topsoil material described in paragraph 2.A.ii. above, and as specified in "Notes" on Figure 57B; and
- B. construct wetland mitigation in Wetland Area 2 on the east bank of the Housatonic River in the footprint of the proposed bridge and the area north of the bridge as shown on Figures 56 and 57, as follows:
  - i. excavate approximately 1,100 cubic meters of material to facilitate tidal wetland creation described in paragraph 2.B., above;
  - ii. place approximately 426 cubic meters of planting substrate/topsoil material as required pursuant to SPECIAL TERMS AND CONDITIONS paragraph 10., below, atop the excavated area described in paragraph 2.A., above;
  - iii. conduct tidal wetland plantings in the planting substrate/topsoil material described in paragraph 2.A.ii. above, and as specified in "Notes" on Figure 57; and
3. remove and reconstruct the State boat launch ramp in Milford on the south side of the Moses Wheeler Bridge within an area waterward of the high tide line as shown on Figure 58, as follows:
  - A. excavate approximately 605 cubic meters of material, including the removal of the existing boat launch ramp and concrete abutment ramp, and place approximately 44 cubic meters of granular fill to prepare the subgrade to correct line and grade on which to construct the new boat launch ramp;
  - B. place approximately 45 cubic meters of standard riprap on prepared subgrade as described in paragraph 3.A., above, at bottom of new ramp and place approximately 170 cubic meters of special riprap as subbase material under the new precast concrete panels as described in paragraph 3.D., below, from the bottom to top of the ramp;
  - C. lay steel rails on the special riprap subbase material as described in paragraph 3.B., above, and set rails into the riprap subbase to establish correct line and grade;
  - D. lower approximately 91 cubic meters of interlocking precast concrete panels into place on the steel rails described in paragraph 3.C., above, keying and pushing panels into position at the

lower concrete support blocks, described in paragraph 3.E., below, and repeat this precast panel installation procedure until the boat launch ramp surface is complete;

- E. construct two intermediate concrete support blocks by placing approximately 20 cubic meters of concrete at approximately the third points along the ramp during installation of the precast concrete panels as described in paragraph 3.D., above;
- F. construct a concrete anchor wall at the top of the boat ramp panels by placing approximately 10 cubic meters of concrete to secure the installed precast concrete panels as described in paragraph 3.D., above;
- G. construct two concrete abutment end blocks at the top of the boat launch ramp as ramp access to new floating docks by placing 29 cubic meters of concrete;
- H. place approximately 72 cubic meters of bituminous concrete pavement and processed aggregate base material at the top of the boat launch ramp to meet the parking lot and access road pavement; and
- I. install two 2.4 meter wide x 30 meter long floating docks each supported by 4 timber piles located along the edges of the proposed boat launch ramp as shown on Figure 58 of the plans attached hereto.

**UPON INITIATION OF ANY WORK AUTHORIZED HEREIN, THE PERMITTEE ACCEPTS AND AGREES TO COMPLY WITH ALL TERMS AND CONDITIONS OF THIS PERMIT.**

**SPECIAL TERMS AND CONDITIONS**

- 1. Except as specifically authorized by this permit, no equipment, material or debris shall be deposited, placed or stored in any tidal wetland or watercourse, nor shall any tidal wetland or watercourse be used as a staging area or accessway other than as provided herein.
- 2. Prior to the demolition of the existing bridge authorized herein, the Permittee shall submit for the review and written approval of the Commissioner a temporary protective barrier system plan ("Debris Containment Plan") for the existing bridge to contain debris. The plan shall include the type, size, location, and scheduled maintenance plan of the barriers, and shall assess any navigational conflicts. The review and approval will not be unreasonable withheld.
- 3. Prior to the commencement of work on-site, the Permittee shall install and maintain a sediment control system ("SCS") along all shoreline areas to prevent sediments from migrating into the Housatonic River. The SCS shall be installed within the approximate areas identified on Figures 7, 20, 29, 40, 46 and VS-2 of the plans attached hereto and in accordance with Connecticut Guidelines for Soil Erosion and Sediment Control, DEP-Bulletin 34.
- 4. Unless otherwise authorized in writing by the Commissioner, the Permittee shall develop and submit a Temporary Boating Access Plan ("Plan") for the review and written approval of the

Commissioner. Such Plan, if found to be feasible and prudent by the Commissioner, shall provide a mitigation proposal for the temporary loss of public boating access at the Milford public boat launch facility during the reconstruction of the Moses Wheeler Bridge. Such Plan shall also include a schedule for such mitigation. Such Plan shall be submitted to the Commissioner no later than twelve months after the issuance of this authorization. The Permittee shall implement the Plan in accordance with the approval of such Plan as directed by the Commissioner.

5. Prior to the reconstruction of the public boat launch ramp described in the SCOPE OF AUTHORIZATION paragraph 3., above, the Permittee shall install and maintain in optimal operating condition around the perimeter of the work site a turbidity control curtain until the work is completed and the site has been stabilized. All in water work to complete the reconstruction of the boat launch ramp shall also take place during low water conditions.
6. Not later than thirty (30) days prior to the mooring of barges authorized herein, the Permittee shall submit for the Commissioner's review and written approval a Barge Location Plan for construction and dewatering barges.
7. The Permittee shall maintain a minimum of a 12.1 meter (40-foot) wide navigational channel under the Moses Wheeler Bridge at all times except for the designated full channel closure time periods described in Figure CHN-1 of the plans attached hereto
8. Prior to the demolition of the existing bridge piers authorized in the SCOPE OF AUTHORIZATION paragraph 1.C., above, the Permittee shall submit for the review and written approval of the Commissioner a plan ("Backfill Plan") for backfilling existing Piers 3W and 4E, and proposed Pier 5 as described in the SCOPE OF AUTHORIZATION paragraphs 1.C.ii. and 1.C.viii., and 1.I.i., respectively with a top 1 meter layer of soil material that is similar to surrounding harbor bottom material. The plan must include sediment grain size data that characterizes the top 33 cm layer of bottom sediment material adjacent to each bridge pier authorized to be removed from areas waterward of the high tide line. Such sediment sample data must contain the existing grain size data and a sediment description.
9. The Permittee shall place a 0.3 meter deep layer of natural or manmade planting substrate ("soil") containing no less than 75% sand by weight and with an organic content no less than 10% and no more than 15% for the backfilling of the demolished upper 33 cm layer of existing bridge Piers 4W and 5E, all disturbed areas waterward of the high tide line associated with the tidal wetland mitigation plan, and the backfilling of proposed bridge Pier 9 as described in the SCOPE OF AUTHORIZATION paragraphs 1.C.i. and 1.C.ix., 2., and 1.I.v., respectively. The soil must be analyzed by USDA-approved methodology for organic matter by loss-ignition of oven-dried samples dried at 105 degrees centigrade. The mineral fraction must be analyzed to determine weight percentage of sand, as determined after passing a 2-millimeter sieve. Sand particles are defined to be between 0.05 and 2.0 millimeters in diameter. The soil must be free of seed and roots of invasive species and inspected and approved by the Connecticut Department of Transportation Office of Environmental Planning prior to its use.

10. The Permittee shall backfill existing demolished Piers 2W, 1W, 1E, 2E and 3E described in the SCOPE OF AUTHORIZATION paragraphs 1.C.iii. through 1.C.vii. with 1 meter layer of material that includes a top 15 cm layer of oyster cultch (shell) or other shell that is acceptable to the Department of Agriculture/Bureau of Aquaculture.
11. The Permittee shall conduct water monitoring for elevated turbidity levels from June 1<sup>st</sup> through September 30<sup>th</sup>, inclusive, of any year while conducting work to remove existing bridge piers or to install new bridge piers authorized in the SCOPE OF AUTHORIZATION paragraphs C. and I., above, to protect spawning shellfish. Such water monitoring shall include taking sample readings hourly no more than 50 feet upstream and downstream of either bridge pier demolition or installation work. If at any time during such activity water readings are increased by more than 5 n.t.u. over ambient, the Permittee shall immediately cease all work and modify work conditions to reduce on-site turbidity levels. The Permittee shall not recommence work until water readings have resumed to a level that is not more than 5 n.t.u. over ambient.
12. The Permittee shall not conduct any pile driving or driving of sheet pile with impact hammers for more than twelve hours per day from April 1<sup>st</sup> through June 30<sup>th</sup>, inclusive, of any year in order to protect the upstream migration of anadromous fish. Such work is prohibited during any two consecutive 12-hour periods during which pile driving or driving of sheet pile with impact hammers occurs during a 24-hour period.
13. Prior to the demolition of the existing bridge authorized in the SCOPE OF AUTHORIZATION paragraph 1.C., above, the Permittee shall submit within thirty (30) days prior to the commencement of demolition activities, a Demolition Plan for the Commissioner's review and written approval. Such Demolition Plan must contain a description of the proposed methods for removal of the existing piers, including: the equipment that will be utilized; a discussion of how potential adverse environmental impacts to fisheries resources will be eliminated or minimized; and a timetable for implementation and completion. The Permittee shall conduct all demolition activities in accordance with the plan approved in writing by the Commissioner. If the Permittee elects to utilize blasting to remove the existing piers, then the following conditions shall apply:
  - A. blasting activities are prohibited between April 1<sup>st</sup> and June 30<sup>th</sup>, inclusive, of any year in order to protect anadromous fish during the spawning period. The Commissioner may consider a written request from the Permittee to modify the closure period. Such request must detail how impacts to anadromous fish will be minimized;
  - B. during the blasting activities authorized herein, the Permittee shall conduct an underwater blasting monitoring study. The purpose of the study will be to measure underwater pressure waves, assess fish affected by the blasts and evaluate the effectiveness of mitigation measures. The Permittee shall retain one or more qualified consultants acceptable to the Commissioner to prepare the documents and implement or oversee such study. Not later than one hundred eighty (180) days prior to planned commencement of blasting, the Permittee shall submit for the Commissioner's review and written approval a scope of study that has been prepared in consultation with DEP Inland Fisheries Division staff. The results of such study must be submitted for the Commissioner's review and written approval no later

than six (6) months following the completion of blasting associated activities authorized herein;

- C. the Permittee shall notify the DEP-Fisheries Division in writing a minimum of two (2) weeks before blasting is proposed to commence. Such notification shall include a contact person and the dates, times, and locations of proposed blasting;

If the Permittee chooses to utilize hoe ramming to remove the existing piers, then the following conditions shall apply:

- D. hoe ramming is prohibited between April 1st and June 30th, inclusive, of any year in order to protect anadromous fish during the spawning period. The Commissioner may consider a written request from the Permittee to modify the closure period. Such request must describe how impact to anadromous fish will be minimized. In particular, the request shall describe the hoe rams that are proposed to be employed and evaluate, either by field study or literature review, the underwater sound levels such hoe rams may produce relative to levels that are harmful to fish;
- E. if the applicant demonstrates that the hoe rams to be employed are unlikely to produce harmful sound levels, then hoe ramming may be allowed during the period April 1<sup>st</sup> and June 30<sup>th</sup>, inclusive, but only during a period of 12 consecutive hours during any 24 hour period. There are to be no two consecutive 12 hour periods of hoe ramming;
- F. the Commissioner may consider a written request from the Permittee to modify the 12 hour closure period. Such request must include the results of a field study or literature study that demonstrates the underwater acoustics produced by the proposed hoe rams will not interfere with the migration of anadromous fish; and
- G. if the Commissioner approves hoe ramming activities between April 1<sup>st</sup> and June 30<sup>th</sup>, the Permittee may be required to conduct an underwater acoustic monitoring study. The purpose of the study will be to measure and characterize the underwater acoustics generated by the hoe rams and to evaluate, based on existing literature, such acoustics relative to levels that may be harmful to fish or deter fish migration. The Permittee shall retain one or more qualified consultants acceptable to the Commissioner to prepare the documents and implement or oversee such study. The study shall be developed in consultation with the DEP Inland Fisheries Division staff. Not later than one hundred eighty (180) days prior to planned commencement of hoe ramming, the Permittee shall submit for the Commissioner's review and written approval a scope of study for implementing such monitoring study. The results of such study must be submitted for the Commissioner's review and written approval no later than six (6) months following the completion of hoe ramming associated activities authorized herein.

- 14. The Permittee shall complete the tidal wetland mitigation work described in the SCOPE OF AUTHORIZATION paragraph 2., above, prior to the completion of the construction of the bridge.

15. The Permittee shall only use plant species that are native to Long Island Sound to plant the tidal wetland mitigation areas described in the SCOPE OF AUTHORIZATION paragraph 2. Prior to the initiation of work to complete these activities, the Permittee shall provide to the Commissioner the name and address of the company where the plant source material utilized to complete this work will be secured.
16. The Permittee shall comply with the Monitoring Report and the Maintenance Report as described on sheet MON1 of the plans attached hereto for a minimum of two growing seasons following the completion of work. The Permittee shall complete the Monitoring Report and Maintenance Report for the tidal wetland mitigation areas described in the SCOPE OF AUTHORIZATION paragraph 2., above.
17. Prior to the completion of the work authorized herein, the Permittee shall install along the western side of the project site pre-cast infiltration chambers and the six hydrodynamic separators, four located just prior to the infiltration chambers and two located just prior to the discharge into Ferry Creek as shown on Figures nos. 4, 5, 7, 39, 40, EN-1 and EN-2 of the plans attached hereto, to improve the water quality of discharged stormwater into the harbor. The hydrodynamic separators shall be obtained from an approved vendor on the DOT approved products list. In addition, during the first year of operation of the infiltration system and hydrodynamic separators, the Permittee shall submit for review of the Commissioner quarterly inspection reports that document site observations, necessary modifications or repairs, and the volume of sediment removed.
18. Prior to the completion of the work authorized herein, the Permittee shall install wet ponds No.1, 2 and 3 along the project site as shown on Figures nos. 2, 5, 6, 8, 46 and 48 of the plans attached hereto. In addition, during the first year of operation of the detention basins, the Permittee shall submit for review of the Commissioner quarterly inspection reports that document site observations including the presence of mosquitoes during the breeding season, necessary modifications or repairs, methods to address any mosquito breeding concerns, and the volume of sediment removed.
19. The Permittee shall obtain all necessary permits from the DEP Bureau of Water Management for temporary water discharges during construction into the Housatonic River in accordance with sections 22a-430 and 22a-430(b) of the CGS.
20. All temporary trestles authorized herein shall be removed within six (6) months from the completion of the bridge construction and demolition work. Removal shall consist of pulling the piles out entirely. Removal of the trestles shall be conducted in the reverse order of the installation process, to eliminate the staging of construction equipment within regulated areas
21. Any area disturbed by the work authorized herein including areas affected by the placement of temporary fill, shall be restored to their pre-work conditions including reestablishing all original contours and revegetating with suitable vegetation as required in SPECIAL TERMS AND CONDITIONS paragraph 15., above.



22. The Permittee shall not store materials that are either hazardous or prone to erosion, or clean or repair any machinery within 8 meters of a tidal wetland or tidal watercourse.
23. A complete copy of this permit, including its drawings, special conditions, and any amendments, shall be maintained at the work site whenever work is being performed. The Permittee shall assure that all contractors, subcontractors and other personnel performing the authorized work are aware of and understand all permit terms and conditions.
24. Dragging the bottom with a spoil barge, scow, vessel, beam or similar equipment outside of the area authorized by this permit to be dredged or excavated is prohibited.
25. Side casting or in-water rehandling of excavated material is prohibited.
26. Scows or barges shall be loaded and navigated in a manner that prevents spillage and washout of dredged or excavated material. Any incidents shall be immediately reported to the Commissioner.

**GENERAL TERMS AND CONDITIONS**

1. All work authorized by this permit shall be completed within eight years from date of issuance of this permit (“work completion date”) in accordance with all conditions of this permit and any other applicable law.
  - a. The Permittee may request a two-year extension of the work completion date. Such request shall be in writing and shall be submitted to the Commissioner at least 30 days prior to said work completion date. Such request shall describe the work done to date, work which still needs to be completed and the reason for such extension. The Commissioner shall grant or deny such request in her sole discretion.
  - b. Any work authorized herein conducted after said work completion date or any authorized one year extension thereof is a violation of this permit and may subject the Permittee to enforcement action, including penalties, as provided by law.
2. Not later than two weeks prior to the commencement of any work authorized herein, the Permittee shall submit to the Commissioner, on the form attached hereto as Appendix A, the name(s) and address(es) of any contractor(s) employed to conduct such work and the expected date for commencement and completion of such work.
3. On or before (a) 90 days after completion of the work authorized herein, or (b) upon expiration of the work completion date or any authorized one year extension thereof, whichever is earlier, the Permittee shall submit to the Commissioner “as built” plans prepared by a licensed engineer, licensed surveyor or licensed architect, as applicable, of the work area showing all contours, bathymetries, tidal datums and structures.

4. In conducting the work authorized herein, the Permittee shall not deviate from the attached plans, as may be modified by this permit. The Permittee shall not make de minimis changes from said plans without prior written approval of the Commissioner.
5. The Permittee shall maintain all structures or other work authorized herein in good condition. Any such maintenance shall be conducted in accordance with applicable law including, but not limited to, CGS sections 22a-28 through 22a-35 and CGS sections 22a-359 through 22a-363f.
6. Prior to the commencement of any work authorized hereunder, the Permittee shall cause a copy of this permit to be given to any contractor(s) employed to conduct such work. At the work area the Permittee shall, whenever work is being performed, make available for inspection a copy of this permit and the final plans for the work authorized herein.
7. The Permittee shall notify the Commissioner in writing of the commencement of any work and completion of all work authorized herein no later than three days prior to the commencement of such work and no later than seven days after the completion of such work.
8. The Permittee shall dispose of aquatic sediments in accordance with the terms and conditions of this permit. All waste material generated by the performance of the work authorized herein shall be disposed of by the Permittee at an upland site approved for the disposal of such waste material, as applicable.
9. In undertaking the work authorized hereunder, the Permittee shall not cause or allow pollution of wetlands or watercourses, including pollution resulting from sedimentation and erosion. For purposes of this permit, "pollution" means "pollution" as that term is defined by CGS section 22a-423.
10. Upon completion of any work authorized herein, the Permittee shall stabilize all areas impacted by construction, or used as a staging area or accessway in connection with such work.
11. Any document required to be submitted to the Commissioner under this permit or any contact required to be made with the Commissioner shall, unless otherwise specified in writing by the Commissioner, be directed to:

Permit Section  
Office of Long Island Sound Programs  
Department of Environmental Protection  
79 Elm Street  
Hartford, Connecticut 06106-5127  
(860) 424-3034  
Fax # (860) 424-4054

12. The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date

three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" as used in this permit means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or a Connecticut or federal holiday.

13. The work specified in the SCOPE OF AUTHORIZATION is authorized solely for the purpose set out in this permit. No change in the purpose or use of the authorization work or facilities as set forth in this permit may occur without the prior written authorization of the Commissioner. The Permittee shall, prior to undertaking or allowing any change in use or purpose from that which is authorized by this permit, request authorization from the Commissioner for such change. Said request shall be in writing and shall describe the proposed change and the reason for the change.
14. This permit may be revoked, suspended, or modified in accordance with applicable law.
15. This permit is not transferable without prior written authorization of the Commissioner. A request to transfer a permit shall be submitted in writing and shall describe the proposed transfer and the reason for such transfer. The Permittee's obligations under this permit shall not be affected by the passage of title to the work area to any other person or municipality until such time as a transfer is authorized by the Commissioner.
16. The Permittee shall allow any representative of the Commissioner to inspect the work authorized herein at reasonable times to ensure that it is being or has been accomplished in accordance with the terms and conditions of this permit.
17. In granting this permit, the Commissioner has relied on representations of the Permittee, including information and data provided in support of the Permittee's application. Neither the Permittee's representations nor the issuance of this permit shall constitute an assurance by the Commissioner as to the structural integrity, the engineering feasibility or the efficacy of such design.
18. In the event that the Permittee becomes aware that he did not or may not comply, or did not or may not comply on time, with any provision of this permit or of any document required hereunder, the Permittee shall immediately notify the Commissioner and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the Commissioner, the Permittee shall state in writing the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and the Permittee shall comply with any dates which may be approved in writing by the Commissioner. Notification by the Permittee shall not excuse noncompliance or delay and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically stated by the Commissioner in writing.

19. In evaluating the application for this permit the Commissioner has relied on information and data provided by the Permittee and on the Permittee's representations concerning site conditions, design specifications and the proposed work authorized herein, including but not limited to representations concerning the commercial, public or private nature of the work or structures authorized herein, the water-dependency of said work or structures, its availability for access by the general public, and the ownership of regulated structures or filled areas. If such information proves to be false, deceptive, incomplete or inaccurate, this permit may be modified, suspended or revoked, and any unauthorized activities may be subject to enforcement action.
20. The Permittee may not conduct work waterward of the high tide line or in tidal wetlands at this permit site other than the work authorized herein, unless otherwise authorized by the Commissioner pursuant to CGS section 22a-359 et. seq. and/or CGS section 22a-32 et. seq.
21. The issuance of this permit does not relieve the Permittee of his obligations to obtain any other approvals required by applicable federal, state and local law.
22. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this permit shall be signed by the Permittee and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense."
23. This permit is subject to and does not derogate any present or future property rights or powers of the State of Connecticut, and conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the property or activity affected hereby.

Issued on \_\_\_\_\_, 2008

STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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**Gina McCarthy**  
**Commissioner**

**Permit Application No. 200600415-KZ**

**OFFICE OF LONG ISLAND SOUND PROGRAMS**

**APPENDIX A**

**TO: Permit Section  
Department of Environmental Protection  
Office of Long Island Sound Programs  
79 Elm Street  
Hartford, CT 06106-5127**

**PERMITTEE:** CT DOT  
Edgar Hurle  
P.O. Box 316546  
Newington, CT 06131-7546

**Permit No:** 200600415-KZ, Milford/Stratford

**CONTRACTOR 1:** \_\_\_\_\_

Address: \_\_\_\_\_

Telephone #: \_\_\_\_\_

**CONTRACTOR 2:** \_\_\_\_\_

Address: \_\_\_\_\_

Telephone #: \_\_\_\_\_

**CONTRACTOR 3:** \_\_\_\_\_

Address: \_\_\_\_\_

Telephone #: \_\_\_\_\_

**EXPECTED DATE OF COMMENCEMENT OF WORK:** \_\_\_\_\_

**EXPECTED DATE OF COMPLETION OF WORK:** \_\_\_\_\_

**PERMITTEE:** \_\_\_\_\_  
(signature) (date)