STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

September 27, 2004

RECEIVED

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ENVIRONMENTAL PLANNING
DIVISION

Department of Transportation
2800 Berlin Turnpike
Newington, CT 06131

Attn: Edgar Hurle

Re: FM-2004-159, Statewide
Flood Management DOT Minor Activities

Dear Mr. Hurle:

The Inland Water Resources Division of the Department of Environmental Protection has reviewed the flood management certification application package dated June 29, 2004, prepared for the Department of Transportation by Kimberly Lesay of the DOT. The certification document states that the proposed activity has been designed in compliance with the requirements of Section 13a-94 and Section 25-68b-h of the Connecticut General Statutes (CGS) and Section 25-68h-1 through 25-68h-3 of the Regulations of Connecticut State Agencies (RCSA).

There are eleven proposed activities which will occur throughout the state: 1) Minor Safety Improvements and Streetscape Projects; 2) Roadway Repaving, Maintenance & Underground Utilities; 3) Minor Stormwater Drainage Improvements; 4) Removal of Sediment from a Floodplain; 5) Wetland Creation or Enhancement; 6) Scour Repairs at Structures; 7) Guide Rail Installation; 8) Deck and Superstructure Replacements; 9) Minor Bridge Repairs; 10) Fisheries Enhancement; 11) Surveying and Testing. A description of each type of activity as well as construction details and a flood contingency plan are included for all activities. Proper erosion and sedimentation controls will be utilized in conjunction with Best Management Practices outlined in the DOT Form 815. Temporary Hydraulic Structures will be designed in accordance with guidelines outlined in the DOT Drainage Manual. There will be no adverse impacts caused by the proposed minor activities. Therefore, the certification submitted on July 12, 2004 is approved.

The certification approval was requested for ten years and therefore will expire on September 21, 2014. No revisions or alterations to the approved plans are allowed without first obtaining written approval fro this Division of such alternations. If there are any questions, contact Sharon Yurasevecz of the Inland Water Resources Division at 860-424-3019.

Sincerely,

Denise Ruzicka
Acting Director
Inland Water Resources Division

Connecticut Department of Transportation
Flood Management General Certification

The Department of Transportation has been approved for minor activities within regulated floodplain areas across the state for a three-year period. The eleven approved activities are described in detail below:

1. Minor Safety Improvements and Streetscape Projects

Description: Projects which include minor grading and minor safety improvements including but not limited to traffic signals, signs, sidewalks, landscaping and light poles. This item does not include fencing or sound barriers.

Landscape plantings will be in accordance with the most current version of the State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, as revised by the latest supplementals and also in accordance with the State of Connecticut Department of Environmental Protection's Non-Native Invasive plant Species Policy dated November 13, 1998. Obstructions such as poles, signs and plantings will be placed in the floodplain, but not in the floodway. Any grade changes will be limited to 2.0 feet maximum over the existing ground elevation and must further be limited to the outer 20% of the floodway fringe as depicted on the relevant FEMA Floodway map. The length of the encroachment as measured longitudinally along the stream corridor will not exceed 500 feet.

2. Roadway Repaving, Maintenance & Underground Utilities

Description: Milling, repaving and associated regrading to roadsides. Also included are roadway patching and repairs to existing grade and work to the subgrade of the roadway such as utility work, underdrain and stormdrain installation, exclusive of storm drainage outfalls.

Construction under this category will allow up to a 4- inch increase in pavement height in a floodway fringe but no increase in pavement height in a floodway. This item will allow for the roadside to be graded to meet the new pavement grade. Also included are roadway patching and repairs to existing grade, and work to the subgrade of the roadway, such as utility work, underdrain and stormdrain installation when such work does not affect the elevation of the roadway within the regulated area.

3. **Minor Stormwater Drainage Improvements**

Description: Replacement with equivalent diameter pipe of drainage outfalls, replacement or placement of riprap splash pads or plunge pools set no higher than existing grade at existing outfalls

Placement of a flared end as a replacement for an endwall is acceptable provided the fill matches adjacent slope limits. The design of rip rap splash pads and plunge pools shall conform to the guidelines in the CTDOT Drainage Manual and/or FHWA Publication No – FHWA-RD-94-096, "Culvert Repair Practices Manual", Volumes 1 & 2, May 1995. Any change in outlet pipe size will necessitate an individual Flood Management Certification.

4. **Removal of Sediment from a Floodplain**

Description: Removal of sediment from a floodplain including pond and ditch cleaning.

Removal of fill also includes the cleaning of ponds when all other necessary Inland or Coastal wetland permits are approved. Sediment shall be disposed of in accordance with Best Management Practices as outlined in Section 1.10 of The State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 814A or 815, as revised by the latest supplementals.

5. **Wetland Creation or Enhancement**

Description: Removal of material and placement of organic soils and wetland plantings.

This item shall include actions necessary for creating wetland mitigation sites, such as placement of organic soils and wetland plantings. Any placement of material for soil amendment shall be an amount less than or equal to the material which was removed from the floodplain.

6. **Scour Repairs at Structures**

Description: Scour repairs which bring the streambed back to original grade, as either depicted on original as-built plans or as determined in the field by the Engineer. *Note: Municipal projects which require no other State permit approvals do not qualify for the General Certification under this item.*

Fill will be placed to an appropriate level which is at an elevation no higher than the original grade at either bridge face or points beyond the influence of local or contraction scour. The placement of riprap or alternate counter-measures must be limited to local scour holes adjacent to the bridge substructure units, retaining walls, wingwalls or culvert termini.

7. **Guide Rail Installation**

Description: Installation, replacement or repair of guide rails including minor clearing and grubbing which may be necessary to place a new system and allow for its deflection and the use of appropriate materials under guiderail to prevent erosion.

Jersey type solid safety barriers may not be placed under this item.

8. **Deck and Superstructure Replacements**

Description: Replacement of the superstructure or deck of a structure where both the existing and proposed low chord elevation is above the floodway elevation. Temporary impacts for construction may include but are not limited to; scaffolding, ladders, sandbags, cofferdams and sedimentation control devices necessary to perform the work. This item includes necessary modifications to the substructure to accommodate the new superstructure if the modifications are above the floodway elevation.

No modifications below the floodway elevation are included in this item. No decrease in hydraulic capacity will occur as a result of any work under this item. Any temporary impact items will be able to be removed in a timely manner from the site in case of a flood warning, except for items designed under the CT DOT Drainage Manual as temporary structures, and will allow for the passage of fish, with minimal disturbance to the streambed.

9. **Minor Bridge Repairs**

Description: Repairs to bridges, culverts or pipes including such actions as repairs to spalling concrete, repointing, painting, replacement of wood on wooden bridges, or other maintenance activity which would not diminish the hydraulic capacity of the structure. Temporary impacts for construction may include but are not limited to: scaffolding, ladders, cofferdams, sandbags and sedimentation control devices necessary to perform the work.

10. Fisheries Enhancements

Description: Work in waterways to create or enhance fisheries habitat. Such work may include placement of boulders, riparian plantings, vortex rock weirs, log structures, wing deflectors, channel blocks, cover logs and rootwads, bank cribbing and other enhancements such as scour pool excavation and stream bank stabilization. This item includes any temporary impacts necessary for construction. This item may **not** be used for construction of fishways or fishladders.

All enhancements must be approved by the DOT Hydraulics and Drainage Section. Boulders or groupings of boulders placed will be no wider than 20% of the stream width and there will be no more than one boulder or boulder grouping per 300 square feet of channel. Boulders will be placed only downstream of any bridge structure. Riparian plantings will be conducted in accordance with the State of Connecticut Department of Environmental Protection's Non-Native Plant Species Policy dated November 13, 1998. Temporary floodplain impacts for construction necessary to perform the work shall be allowed

11. Surveying and Testing

Description: This item includes activities such as field survey, excavation of utility test pits, physical testing or the installation of monitoring devices to determine surface or subsurface engineering site data.

Conventional land survey activities will be accomplished in accordance with standard Department of Transportation practice. Minor manual clearing of brush or undergrowth will be allowed to establish lines of sight necessary for geodetic survey. Soil borings using mechanical drill rigs will be allowed provided that no fill is placed for access to the drilling site. The installation or use of temporary or permanent monitoring devices to record or provide real time data relative to bridges, culverts, streams or subsurface characteristics will be allowed providing that there is no resultant permanent reduction in hydraulic capacity at a waterway crossing site. Any devices shall be approved by the Hydraulics and Drainage Unit of DOT. The excavation of utility test pits using mechanical excavators is acceptable providing that there is no change in the final ground elevation at the test pit site.

The following practices shall be followed for **ALL** activities covered under this General Certification:

- ***Proper erosion and sedimentation controls will be utilized in conjunction with Best Management Practices as outlined in Section 1.10 of The State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 814A or 815, as revised by the latest supplementals.***
- ***Any temporary facilities or equipment requiring work in, or placement in a waterway, must be able to be removed in a timely manner from the site in case of a flood warning, except for items designed as temporary structures, in accordance with the guidelines outlined in the CTDOT Drainage Manual for Temporary Hydraulic Structures.***
- ***Temporary facilities will allow for the passage of fish with minimal disturbance to the streambed.***
- ***Unconfined in-stream work must be limited to the period June 1 to September 30th.***

Projects will be screened through the Department's Hydraulics and Drainage Unit, using the memo attached. The Office of Environmental Planning and DEP will be provided with a copy of this memo for each project approved.

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

m e m o r a n d u m

FLOOD MANAGEMENT GENERAL CERTIFICATION
Project No.:
Description:

Town:
Date:

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to: Mr. Michael E. Masayda
Trans. Principal Engineer
Hydraulics and Drainage
Bureau of Engineering and Construction

from:

Please review this request for Flood Management General Certification and indicate your concurrence below.

Certification (to be completed by designer)

I have read the Flood Management General Certification and the descriptions for the approved DOT minor activities. This project qualifies for the Flood Management General Certification under:

( ) Minor Safety Improvements and Streetscape Projects
( ) Roadway Repaving, Maintenance & Underground Utilities
( ) Minor Stormwater Drainage Improvements
( ) Removal of Sediment from a Floodplain
( ) Wetland Creation or Enhancement
( ) Scour Repairs at Structures; (*Must acquire another State permit to be eligible*)
( ) Guide Rail Installation
( ) Deck and Superstructure Replacements
( ) Minor Bridge Repairs
( ) Fisheries Enhancements
( ) Surveying and Testing

The following required documentation is attached in support of this certification:

- Project description
- Location plan
- Description of Floodplain involvement and how project qualifies for general certification
- 8-1/2" by 11" excerpt copy of the FEMA Flood Insurance Rate Map (FIRM) and Floodway Boundary Map (if applicable)
- Design plans, (dated _____) with FEMA floodplain and floodway boundaries plotted, cross sections and profiles, as necessary, that clearly depict the floodplain involvement
- FEMA 100-year flood elevation plotted on elevation view (for structures)

Print Name	Title
Signature	Date

Concurrence (to be completed by Hydraulics and Drainage)

Based on the documentation submitted, I hereby concur that the project qualifies for Flood Management General Certification.

If there are any changes to the proposed activities within the floodplain or floodway, the project must be re-submitted for review and approval.

Signature	Date

Rev. 5/11

cc: Manager of Design Services
Environmental Planning File
DEP Flood Management Certification File
Hydraulics and Drainage File