# **OFFICE OF ADJUDICATIONS**

# IN THE MATTER OF

APPLICATION NO. IW-2005-1766

# CONNECTICUT DOTROUTE 63 NEW HAVEN:AUGUST 28, 2006

:

## **PROPOSED FINAL DECISION**

The Connecticut Department of Transportation (DOT) has filed an application for an inland wetlands and watercourses permit to conduct regulated activities in the area of the West River in New Haven. General Statutes §22a-39. The parties have submitted the attached *Agreed Draft Decision* (Attachment A) that describes activities associated with installing new culverts and outlets, and upgrading the existing storm drainage system in the project area.

Public comments were received from neighborhood residents and State Representatives during the June 5, 2006 hearing on this application. The comments addressed concerns that this project might have an impact on ground water tables or any other conditions that could exacerbate the occurrence of sink holes and cracking foundations experienced by some area homeowners for a number of years. There is no evidence of a direct relationship between the issues raised by the speakers and the proposed project. In addition, the applicant's approved Flood Management Certification required for this permit demonstrates that the project will not result in such adverse impacts to area properties.

The Agreed Draft Decision satisfactorily conveys the findings of fact and conclusions of law necessary to support a conclusion that the proposed project, if conducted in accordance with the terms and conditions of the draft permit (Attachment B), will comply with all relevant statues and regulations. I adopt this Agreed Draft Decision as my proposed final decision and recommend issuance of the permit.

<u>/s/ Jean F. Dellamarggio</u> Jean F. Dellamarggio, Hearing Officer

# PARTY LIST

CT DOT/Rt. 63 New Haven Application #IW-200501766

# PARTY

# **REPRESENTED BY**

## The Applicant

Connecticut Department of Transportation Environmental Planning 2800 Berlin Turnpike P.O. Box 317546 Newington, CT 06131-7546 Charles H. Walsh, AAG Office of the Attorney General 55 Elm Street P.O. Box 120 Hartford, CT 06141-0120

Department of Environmental Protection Bureau of Water Protection and Land Reuse Inland Water Resources Division 79 Elm Street Hartford, CT 06106

Sharon Yurasevecz

# Petitioner

Melanie Stengel 46 Beverly Road New Haven, Ct 06515

#### AGREED DRAFT DECISION

### I

## SUMMARY

The Connecticut Department of Transportation (the "applicant"), has applied to the Department of Environmental Protection for a permit to conduct regulated activities in the vicinity of the West River in the City of New Haven. These regulated activities are associated with the Reconstruction of Route 63(Whalley Avenue) from Route 69 to Emerson Street). The DOT has filed an application for an Inland Wetlands and Watercourses Permit pursuant to General Statutes §22a-39 of the Inland Wetlands and Watercourses Act. General Statutes §22a – 36 through 22a-45.

The applicant and Inland Water Resources Division ("staff") are the only parties in this matter. Staff supports issuance of the permit and has submitted into the record a draft permit that would authorize the applicant's proposed regulated activities.

The Reconstruction of Route 63 (Whalley Avenue) that is the subject of this permit application would improve public safety by addressing safety, capacity, and traffic operational concerns along Whalley Avenue by the partial widening and full-depth reconstruction of Whalley Avenue, the upgrading of the storm drainage system, and replacement of the sidewalks and curbing. The proposed project will alleviate these problems and provide a safer, more efficient roadway. (Ex APP-4A).

The project has been planned to minimize wetland impacts while meeting current highway design and safety standards. These proposed regulated activities, if conducted in accordance with the terms and conditions of the draft permit would be consistent with the applicable legal standards for issuance of the permit.

This permit should be issued in accordance with the terms and conditions of the draft permit (Ex. DEP - 4)

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#### FINDINGS OF FACT

#### **<u>1. The Application</u>**

On July 15, 2005, the Department of Transportation (DOT) submitted an application to the Department of Environmental Protection (DEP) Inland Water Resources Division for an Inland Wetland and Watercourses permit. A Notice of Tentative Determination and Intent to Waive the Requirement for a Public Hearing was issued on February 7, 2006. DEP – 1. The DEP received two petitions signed by at least 25 persons on March 7, 2006 and March 17, 2006. DEP – 5A and 5B, respectively. Subsequent to the receipt of the petition, a letter was issued fulfilling the requirements of CGS Section 22a-6(d). Exhibit

DEP -3. As a result of the petition, the DEP issued a notice of hearing dated May 5, 2006. DEP-6. A Hearing was held on June 5, 2006. The record remained open until June 20, 2006 to allow time for the submission of additional written public comments.

# 2. The Project

The proposed regulated activities that are the subject of this permit application (the a. "project") are all associated with the partial widening and full-depth reconstruction of Whalley Avenue, the upgrading of the storm drainage system, and replacement of the sidewalks and curbing. Whalley Avenue will be widened mostly on the north side to minimize impacts to the residential properties and businesses predominantly located on the south side. The project limits run from the intersection with Route 69 (mile marker 1.30), to the intersection with Emerson Street (mile marker 0.52) for a total length of approximately 0.78 mi. Work will be confined to Route 63 except where East Ramsdell Street will be realigned opposite Ramsdell Street. Generally, the existing roadway will be widened to a consistent 48-foot cross section from the beginning of the project to Route 122 (Dayton Street), which will accommodate two lanes in each direction. As a result of the proposed work, 1 wetland area will be impacted (herein described as Site 1). From Dayton Street to the end of the project, the roadway will be widened from an average of 38 feet to 45 feet to provide two lanes westbound and one lane eastbound, with an extra wide eastbound shoulder for parking and/or bypass. Also, a dedicated left turn lane will be provided into East Ramsdell This lane continuity can make the roadway safer and more efficient by Street. channelizing traffic and aiding in driver expectancy. Driver expectancy is a term used to describe the consistency of the general road geometry, width, signalization and signage that one would anticipate in a certain setting. APP-4A, p.3.

East Ramsdell Street will be realigned approximately 70 feet to the west intersecting Whalley Avenue opposite Ramsdell Street. This requires the reconstruction of 350 feet of the East Ramsdell Street and the removal of the building located within the north western quadrant of the existing intersection. This realignment will simplify this intersection by eliminating the unsafe and confusing offset configuration that exists at this location today.APP-4A, p.3.

Two retaining walls will be constructed along the north side of Whalley Avenue behind the proposed sidewalk. These walls will reduce the impacts to adjacent properties that would otherwise be caused by the footprint of the large amount of slope fill that would be needed to retain the proposed roadway widening. The two walls will be located approximately opposite West Prospect Street and Dayton Street (Rte. 122). APP-4A, p.3.

The existing 12' x 6' arch culvert under Whalley Avenue, between Glen View Terrace and Westerleigh Road, is in poor condition and will be replaced with a new 12' x 5' concrete box culvert. APP-4A, p.3.

The DOT designed the proposed storm drainage for this project in coordination with the City of New Haven as an effort to help separate the older combined storm / sanitary system that still exists in some neighborhoods adjacent to the project. The combined system will be separated into two systems; one for sanitary sewage and one for storm drainage. Additionally, there are approximately 7 catch basins along Whalley Avenue that will be separated from the combined sanitary / storm system and incorporated into the proposed storm drainage system. The DOT sized the storm drainage system to accept the adjacent neighborhood's potential future runoff based on calculations provided by the City for its planned storm drainage system upgrade. The storm drainage design for the catch basins and piping in the project area conforms to applicable state and federal guidelines. Ex. APP-1, APP-4A.

- b. This project was initiated to address safety, capacity, and traffic operational concerns along Route 63 (Whalley Avenue). The project is intended to help improve capacity restraints and safety issues caused by current design deficiencies. Ex. APP-1, APP-4A.
- c. Route 63 is characterized as an Urban Principal Arterial. Based on standards for an Urban Principal Arterial, the road should have 11' wide (minimum) lanes and 4' wide (minimum) shoulders. The present width of the road, which varies from 42' to 44' from the beginning of the project to Dayton Street and 38' from Dayton Street to the end of the project, cannot consistently accommodate these standard widths. Ex. APP-4A.
- d. Improvements to the road include widening the roadway to a consistent 48-foot cross section from the beginning of the project to Route 122 (Dayton Street), which will accommodate two lanes in each direction. From Dayton Street to the end of the project, the roadway will be widened from an average of 38 feet to 45 feet to provide two lanes westbound and one lane eastbound, with an extra wide eastbound shoulder for parking and/or bypass. Also, a dedicated left turn lane will be provided into East Ramsdell Street. An exception to use 2' shoulders in place of the standard 4' has been approved by the Exceptions to Standards Committee. Pursuant to state design guidelines, fill slopes for the roadway will be as flat as possible for safety purposes. Part of State Project No 92-547, also includes improvements to East Ramsdell Street, which is a local road that runs north to south and intersects this area of Route 63. Ex. APP-4A, APP-6.
- e. The present horizontal and vertical alignments of Route 63 in the area of the project do not conform to federal and state operational, geometric and safety standards in several locations as specified below:

1. A dedicated left turn lane will be provided into East Ramsdell Street. This will allow two lanes of traffic to flow freely and will lessen the likelihood of rear end type accidents occurring at this location.

 East Ramsdell Street will be realigned approximately 70' to the west intersecting Whalley Avenue opposite Ramsdell Street. This realignment will simplify this intersection by eliminating the unsafe and confusing offset configuration that exists at this location today.
This section of Route 63 does not currently provide sufficient capacity to carry the 25,000 vehicles per day that utilize it as a principal arterial. This in turn creates a general deficiency and safety concern of the roadway. Ex APP- 4A, Testimony of Craig Babowicz.

f. The latest accident data shows that between January 1, 2001 and June 30, 2004 there were 409 accidents with 126 injuries within the project limits. The most prevalent accident type within the project is typically rear-end collisions. The next most common accident type is sideswipes where vehicles are traveling in the same direction. This type of collision often relates to the lack of lane continuity, where one lane ends abruptly and causes vehicles to compete for usage of the remaining lane. Without improvements to the roadway, it is reasonable to assume the rate of accidents will increase, particularly with the expected increase in traffic volumes in this area. Ex. APP-4A.

# Watercourses/ Flood Control

g. Located within the limits of the project are the West River and drainage tributaries there to. The crossing in question is located approximately 190' upstream of the tributary's confluence with West River. The confluence is located approximately 800' downstream of Lily Pond

Prior to the surrounding area being fully developed, Br. No. 02406 appeared to convey flow from an upstream open channel. Under the current condition, the bridge has been extended southerly by means of the double box culverts under private property, the open channel has been filled and the bridge now conveys area storm water from closed storm drainage systems. Two storm drainage systems, one from the east, an 18" RCP, and the other from the west, a 36" RCP, outlet directly into the sides of the arch bridge. A 60" RCP and an 18" RCP outlet into an open area at the structure's inlet. The resulting drainage area to the bridge is less than one square mile. Ex. APP-1, Attachment H.

h. A FEMA designated flood zone (Zone A3) is present in the vicinity of site #1. This designation is associated with backwater from the West River. The project will increase the hydraulic capacity of the new culverts. This will lessen the frequency and duration of floodwaters that might back up at the culvert locations and decrease the likelihood of environmentally destructive flood damage. The size of the respective drainage areas for the West River, as well as the estimated times of concentration for the highest flow volumes, will yield a negligible difference in peak flow and water

Page 4 of 16

surface elevation in storm events, including a rapidly-arriving 100-year storm. The new bridge structure will permit passage of the 100-year flood.

Investigations by DOT's Hydraulic and Drainage Unit, which were submitted as Attachment H of the permit application (APP-1), and as approved by DEP staff, show that the project is 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 State Agencies (RCSA). As such, a Flood Management Certification approval was issued on January 26, 2006. (DEP-9, APP-1, testimony of Kimberly Lesay.)

Subsection (b)(1) of section 25-68d reads "The proposal will not obstruct flood flows or result in an adverse increase in flood elevations, significantly affect the storage or flood control value of the floodplains, cause an adverse increase in flood velocities, or an adverse flooding impact upon upstream, downstream or abutting properties, or pose a hazard to human life, health or property in the event of a base flood or base flood for a critical activity."

Because the flood management certification was issued, I find that the Project will not obstruct flood flows or result in an adverse increase in flood elevations, significantly affect the storage or flood control value of the floodplains, cause an adverse increase in flood velocities, or an adverse flooding impact upon upstream, downstream or abutting properties, or pose a hazard to human life, health or property in the event of a base flood or base flood for a critical activity.

i. According to current GIS data available from DEP (2005), there are no active public water supply wells within the project vicinity. Groundwater quality in the area is class GA, but is classified as not meeting current standards south of the West River. Ex. APP-1 and APP-5A.

# Wetland Impact Sites/ Proposed Activities

- j. The impacted areas on this project consist of a regulated channel which is a tributary to the West River. The current project will impact 1 wetland site. A total of 0.044 acres of wetlands (1916square feet) will be impacted by the project. These impacts are minimal and are unavoidable with the proposed alignment.
  - *1.* <u>Site 1</u> (Station 5 + 00)

• Site 1 is located approximately 350 feet from the intersection of Ramsdell Street and Whalley Avenue. Within the parking lot of the Athenian Diner, an existing 60" RCP carries drainage flows to a nonregulated concrete-bottom chamber which transfers the flows to twin  $5 \times 5$  box culvert. These twin culverts lead to existing structure #02406 (a 12' x 6' arched culvert) which carries these drainage flows from the south under Whalley Avenue. Flows from here continue toward the north to join with the West River. The chamber is comprised of concrete and stone, although in some areas where the structure has deteriorated, there are a few specimens of Japanese knotweed (Polygonum cuspidatum), bitter nightshade (Solanum dulcamara), jewelweed (Impatiens capensis) and evening primrose (Oenothera biennis) present. APP-1 Attachment K, APP-5A.

In the vicinity of the outlet for structure 02406, the banks are steep and are comprised of a mix of riprap, broken asphalt and exposed soil. The channel itself is approximately three to four feet wide (maximum) and is characterized by a silty bottom with random large stones and boulders. The dominant specie on the banks is Japanese knotweed (P. cuspidatum), with tree of heaven (Ailanthus altissima), catalpa, red maple (Acer rubrum) and black locust (Robinia pseudoacacia) present in the canopy layer. Multiflora rose, and Asiatic bittersweet (Celastrus orbiculatus) are also present in the shrub layer and as the dominant vine. APP-1 Attachment K, APP-5A.

Principal functions and values of this wetland are limited to flow conveyance, with fisheries habitat only likely closer to the actual confluence with the West River. Wildlife habitat is limited to songbirds and species tolerant of the nearby roadway and development. The value of the vegetation to perform sediment trapping or excess nutrient uptake is limited since there are only a few individual plants on the channel edges. The impact area itself is dominated by non-native invasive species. APP-5A.

• Approximately 0.044 acres of wetland, or 1916 square feet/meters, will be impacted. The total fill will be approximately 75 cubic yards (2025 cubic feet). APP-1, Attachment C, p. 3, APP-4A, p.5.

• Proposed impacts at this site consist of replacing the 12' x 6' arched culvert under Whalley Avenue with a 12' x 5' box culvert which will be approximately 60 feet longer than the existing culvert. In order to carry stormwater flows from the city, a new 30" RCP will be installed from the chamber in the parking lot to Whalley Avenue, where it will enter into a new 7' x 3' box culvert. This culvert will be used to handle flows during construction, and will be turned back over to the city for future use in updating their drainage systems. A riprap splash pad which handles flows for both box culverts will result in approximately 36 more feet of impact to the regulated area. APP-1 Attachment K, APP-5A.

Impacts at Site 1 involve the loss of approximately 100 feet of open drainage channel. The lengthening of the culvert is necessary due to the widening for adequate shoulders and the taper for the left turn lane for East Ramsdell Street. Improvements to stormwater drainage systems, outlet protection, and the removal of sediment load from the channel are expected to provide an overall improvement to water quality in the West River. A planting plan is also proposed for this area in order to promote more beneficial plant species along the channel. APP-1 Attachment K, APP-5A.

# 2. <u>Site 2</u> (Station 54+00 - East Ramsdell Street)

• Site 2 is located at the intersection of Whalley Avenue and East Ramsdell Street. In the vicinity of the new outfall to the West River, the low flow channel is maintained on the northern side of the river. This northern bank is dominated by silver maple (Acer saccharum) and willows (Salix sp.) in the canopy layer with elm (Ulmus sp.), green ash (Fraxinus pennsylvanica.) and red maple (A. rubrum) also present. Japanese knotweed (P. cuspidatum) dominates the herbaceous layer with multiflora rose also present. Asiatic bittersweet (C. orbiculatus) is the dominate vine. The southern bank is characterized by large cobbles and stone, with a few individual pussy willow (Salix discolor) and common reed (Phragmites) present. This side of the channel appears to only receive flows during spring flows and higher storm events, with the low flow channel displaying random larger stones and boulders. APP-1 Attachment K, APP-5A.

• Zero acres of wetland, or 0 square feet or 0 square meters, will be impacted. APP-1 Attachment K, APP-5A.

 The relocation of East Ramsdell Street and improvements to the drainage system result in the need for a new outlet through a stone retaining wall just west of the relocated portion of roadway. A hydrodynamic separator, designed off-line has been incorporated in order to treat stormwater flows. Proposed work at this site is limited to the new outfall and no riprap is proposed as the area already consists of large stone deemed adequate for outfall protection. The SCEL and floodplain boundary in this vicinity is the retaining wall. The work on the bridge structure itself is limited to milling and repaying and although beyond the SCEL boundary, is entirely above the SCEL elevation. The proposed work at Site 2 does not result in any direct impact to regulated resources. This new outlet allows for stormwater flows, which used to be directed to Site 1, to be separated, and properly treated. The improvements to the stormwater system are expected to provide an overall benefit to water quality in the West River. APP-1 Attachment K, APP-5A.

3. <u>Site 3</u> (Station 27 + 40)

• Site 3 is located east of West Prospect Street at Station 27+40 right. An existing 15" CMP currently carries stormwater flow from Whalley Avenue to an outfall in this location. At the pipe end, a non-regulated earthen ditch continues to the north toward the West River. A defined connection with the ditch and the river does not exist. The current pipe outlets into a forested upland area, dominated by elm (Ulmus sp.), black locust (R. pseudoacacia) and multiflora rose (Rosa multiflora). The tops of the bank of the earthen ditch are dominated completely by Japanese knotweed (P. cuspidatum). The ditch itself is devoid of vegetation. A steep embankment lies to the north, which then leads down to the West River. The slope is forested and dominated by sycamore (Platanus occidentalis) , maple (Acer sp.) and elm (Ulmus sp.) in the canopy layer, with wild grape (Vitis sp.)as the dominant vine. APP-1 Attachment K, APP-5A.

• Zero acres of wetland, or 0 square feet or 0 square meters, will be impacted. APP-1 Attachment K, APP-5A.

• There will be no impacts to regulated areas as a result of the upgrade to the drainage outfall in this location. The drainage improvements within the system and proper outlet protection are improvements over the present condition and will better protect the West River and the resources associated with it. APP-1 Attachment K, APP-5A.

- k. The wetlands in the proposed impact area are habitat for wildlife tolerant of nearby motor traffic and disturbance by humans. New impacts to wildlife within the project area will be minimized due to the limited impact area of the project, and the existing disturbance of the roadway and residential uses. The project is designed to minimize long-term reduction in habitat values for existing wildlife species. Ex. APP-1 and APP-5A.
- 1. DEP Fisheries Division recommended removal of invasive species and native plantings to benefit fisheries resources. DOT has incorporated these recommendations into design plans and construction contracts. In addition, any unconfined in-stream work will be limited to June 1<sup>st</sup> to September 30<sup>th</sup>. Ex. APP-1.

# 3. Mitigation

### Wetland Mitigation Site

No formal mitigation is proposed for this project as impacts are minimal due to the limited functions and values and the extent of the impacts.

# Ex. APP-1 and APP-5A.

# Construction Mitigation: Erosion and Sedimentation Controls

- a. Short-term impacts will be minimized through erosion and sedimentation control guidelines that will be included in the construction contract for the project as required by the DOT. (Standard Specifications for Roads, Bridges and Incidental Construction Form 816 and Supplemental Specifications; On-site Mitigation for Construction Activities, Connecticut DOT Environmental Planning Division 1994.) These guidelines address the installation, schedule for implementation, maintenance, inspection and expected results for the selected methods for erosion and sedimentation control. Adherence to these guidelines will assure minimization of adverse effects to fisheries or riparian habitat as a result of this project. These guidelines provide for protection of ground and surface water quality, and minimize the possibility of siltation and sedimentation within the area of regulated wetlands and watercourses. Ex. APP-1.
- b. Specific care and special construction methods will be used. In drainage installations, accepted water-handling methods will be used. At site #1, in order to carry the existing water under Whalley Avenue during the installation of the new 12' x 5' box culvert, a new 30" R.C.P. will be installed from the open area in the vicinity of Station 4 +90 (left) to divert the flow to a new junction box at Station 5+75 right on Whalley Avenue. The existing 36" pipe from the west that currently connects to the existing 12' x 6' arch culvert will now flow into this junction chamber. The new junction chamber will connect to a new 7' x 3' box culvert that will carry this flow under Whalley Avenue, and will continue through another junction box on the north side of the roadway into an additional 7' x 3' culvert that will also outlet at the new endwall. Once the new 12' x 5' box culvert is installed and in use, the 30" R.C.P. (reinforced concrete pipe) from the east that currently drains into the existing 12' x 6' arch culvert whet and abandoned in place. The existing 18" R.C.P. (reinforced concrete pipe) from the east that currently drains into the existing 12' x 6' arch culvert will be diverted under Whalley Avenue near Station 6+25 and will outlet through the wing of the new endwall. Ex. APP-1 and APP-4A.

b. The following specific erosion and sedimentation control measures are proposed:

- 1. Silt fencing will be installed in conjunction with all disturbed and new soil slopes that could affect other areas;
- 2. Exposed soils will be seeded with an approved erosion control mixture within seven days of the contractor reaching the appropriate grade;
- 3. Vegetated swales will be used in some areas; some will be lined with erosion control matting prior to turf establishment to reduce the risk of erosion and allow a quicker establishment of vegetation; and
- 4. Riprap splash pads or plunge pools, as appropriate, will be installed at stormwater discharge locations where erosion potential has been determined to be high.

Ex. APP-1.

#### Other Mitigative Measures

- j. During design, options to lessen impacts were explored for site #1, where a 12' x 5' concrete box culvert will replace this existing arch culvert. The new box culvert will be approximately 60 feet longer than the existing culvert and will curve to follow the natural alignment of the watercourse. A shorter culvert was investigated, but was dismissed due to potential scour and erosion that would occur at the outlet (near the post office parking lot) from the sharp angle that would be created if it were not carried farther east past this bend. The new 12' x 5' box culvert also needs the additional length to accommodate the roadway widening and to provide slope stability and adequate clear zone from the endwall structure for traffic safety. At the outlet, the DOT will install a new endwall and standard riprap scour hole. Ex. APP-4A.
- k. A DEP Stormwater Discharge Registration will be required for the project. A Pollution Control Plan will also be developed in association with that registration.
- 1. During construction, the contractor is required to inspect, report and repair any erosion. An on-site project engineer and staff of the DOT Environmental Planning Division will monitor the contractor's work to ensure compliance with DEP and DOT regulations and guidance. Ex. APP-1.

#### 4. State Threatened, Endangered, or Species of Special Concern

Although GIS mapping shows potential populations of state or federal endangered, threatened, and special concern species or natural communities nearby, correspondence from the DEP Natural Diversity Database dated May 2001, confirmed that there are no known populations of state or federal endangered, threatened, and special concern species or natural communities which occur at the project site. Ex. APP-1, APP-5A.

#### 5. Alternatives

During the planning and design of this project, a continuous examination of design alternatives was conducted. Alternatives were considered in consultation with the various units of the DOT, and the City of New Haven, concerned citizens and regulatory agencies. Among the factors considered when assessing alternatives were geometric constraints, historical and archeological concerns, impacts to private property, and environmental concerns. The following alternatives were considered when examining the potential range of alternatives.

• No Build: This option does not meet the need to address any of the existing roadway deficiencies; the high average daily traffic volumes and associated accident experience indicates a strong need for roadway and capacity improvements. Also, the existing  $12 \times 6$  arch culvert is in poor structural condition and at risk of failing. APP-4A, p.6.

• Alt. 2 - Provide Standard 4' wide shoulders throughout the project limits: This option would meet the standards; however, the overall additional impacts (environmental, right of way, effects to adjacent properties, cost) would be prohibitive.

- Adjacent properties: Whalley Avenue would have to be widened an additional 4'. The widening would take place on the north side since a significant number of buildings and retaining walls immediately adjacent to the back of the sidewalk are located on the south side.
- Environmental: -parkland: Widening on the East Side would impact additional parkland protected by Section 4(f) along the West River. Although a Programmatic Section 4(f) evaluation was prepared and approved by the Federal Highway Administration (FHWA) on November 6, 2001, the additional impacts associated with a four foot wide shoulder would require a revised Programmatic Section 4(f) evaluation and extensive coordination with the FHWA and the City to find additional property to compensate for the additional parkland to be taken in fee and used for transportation purposes.
- Inland-wetlands: The widening would increase the inland wetland areas impacted by the project since the additional four feet would have to be built on the north side where the West River is located. This would also bring the roadway closer to the river's sharp bend at this location. APP-4A, p.6-7.

• Alt. 3 - Provide 2' Wide Shoulders throughout project limits: This option was selected as the preferred alternative because it allowed for the necessary improvements with minimal impacts. This alternate has been approved by the exceptions to standards committee. Ex. APP-4A, p.7.

## II

# 1. CONCLUSIONS OF LAW

The purposes and policies set forth in the Inland Wetlands and Watercourses Act are secured through the process and criteria outlined in §22a-41 of the General Statutes. Section 22a-41(b)(1) provides that where a permit application has been the subject of a hearing, the commissioner must find that there is no feasible and prudent alternative to the proposed action before issuing a permit. In determining whether such an alternative exists, the commissioner must consider all relevant facts and circumstances, including but not limited to, the six statutory factors outlined in §22a-41 (a).

The six factors set out in § 22a-41 (a) are:

(1) The environmental impact of the proposed regulated activity on wetlands or watercourses;

(2) The applicant's purpose for, and any feasible and prudent alternatives to, the proposed regulated activity which alternatives would cause less or no environmental impact to wetlands and watercourses;

(3) The relationship between the short-term and long-term impacts of the proposed regulated activity on wetlands or watercourses and the maintenance and enhancement of long-term productivity of such wetlands or watercourses;

(4) Irreversible and irretrievable loss of wetland or watercourse resources which would be caused by the proposed regulated activity, including the extent to which such activity would foreclose a future ability to protect, enhance or restore such resources, and any mitigation measures which may be considered as a condition of issuing a permit for such activity including, but not limited to, measures to (A) prevent or minimize pollution or other environmental damage, (B) maintain or enhance existing environmental quality, or (C) in the following order of priority: Restore, enhance and create productive wetland or watercourse resources;

(5) The character and degree of injury to, or interference with, safety, health or the reasonable use of property which is caused or threatened by the proposed regulated activity; and

(6) Impacts of the proposed regulated activity on wetlands or watercourses outside the area for which the activity is proposed and future activities associated with, or reasonably related to, the proposed regulated activity which are made inevitable by the proposed activity and which may have an impact on wetlands or watercourses.

# 2. APPLICATION OF FINDINGS OF FACT TO THE STATUTORY AND REGULATORY STANDARD FOR PERMIT ISSUANCE

# (1) <u>Environmental Impacts</u>

The proposed project will result in minimal loss of wetlands and minimal disturbance to wetlands during the construction phase.

The project has been designed and planned to reduce impacts on wetlands to the greatest extent possible. Recommendations of DEP Fisheries Division have been incorporated into design plans and construction contracts, minimizing impacts to fisheries resources. Impacts to wildlife as a result of the project will be limited due to the restricted area of the project, and the existing disturbance of the area due to the existing roadway and residential properties. A shorter culvert was investigated at Site 1, but was dismissed due to potential scour and erosion that would occur at the outlet (near the post office parking lot) from the sharp angle that would be created if it were not carried farther east past this bend. The new 12' x 5' box culvert also needs the additional length to accommodate the roadway widening and to provide slope stability and adequate clear zone from the endwall structure for traffic safety.

Short-term impacts during construction will be reduced through Best Management Practices, proper measures to control sedimentation and erosion, proper water handling and time-of-year restrictions on unconfined in-water work. These controls will assure that no permanent adverse effects will impact fisheries or riparian habitat. These measures will minimize the chance that siltation and sedimentation will encroach into the area of the regulated wetlands and watercourses. Ground and surface water quality will also be protected.

Long-term impacts to the wetland system as a habitat for wildlife and fish will be minimal. The overall long-term impacts to the wetlands will be minimal or positive. The impact area contains invasive species and displays signs of erosion. The improved stability of slopes and improvements to the stormwater drainage system will minimize sedimentation of regulated areas. Long-term impacts will include the loss of 0.044 acre of inland wetland and watercourse.

## (2) <u>Alternatives</u>

There are no feasible or prudent alternatives to the present proposed plan for the project. The alternative of taking no action, or the "no build alternative", would not meet the goal of the project and obligation of the applicant to provide for a safe roadway. The project has been designed to minimize environmental impacts to the greatest extent possible. Where safety would be significantly and negatively impacted, the DOT reasonably rejected changes to the design that would only minimally improve the impact to the environment. The proposed plan for the reconstruction of Whalley Avenue is reasonable in view of the social benefits to be derived from an improved and safer roadway. The applicant has adequately demonstrated that the proposed plan is a feasible and prudent choice.

# <u>Short and Long-term Impacts /Maintenance and Enhancement of Long-</u> <u>Term Productivity</u>

(3)

. . The record demonstrates that the short-term impacts of the project, primarily due to the construction activities that will be necessary, will be minimized through erosion and sedimentation control guidelines that will be included in the construction contract as required by the DOT. These guidelines will protect ground and surface water by minimizing the possibility of siltation and sedimentation within the area of the wetlands and watercourses impacted by the project. Adherence to these guidelines and the terms and conditions of the permit will assure that temporary impacts to the environment will be minimal.

The project will improve the functioning of some areas of the present wetland systems as the impact area contains invasive species and displays signs of erosion. The improved stability of slopes and improvements to the stormwater drainage system will minimize long-term sedimentation of regulated areas. Native tree and shrub plantings have also been incorporated into the project. The DOT designed the proposed storm drainage for this project in coordination with the City of New Haven as an effort to help separate the older combined storm / sanitary system that still exists in some neighborhoods adjacent to the project. The combined system will be separated into two systems; one for sanitary sewage and one for storm drainage.

# (4) <u>Irreversible/Irretrievable Loss of Wetlands and Watercourses Resources</u> <u>and Mitigation Measures</u>

The proposed project keeps to a minimum the irreversible and irretrievable commitment of wetlands resources. In recognition of wetlands as an indispensable, irreplaceable fragile natural resource, the project is designed to protect existing wetland areas to the greatest extent possible.

The project will improve and enhance some of the functions of the existing wetlands through improved stormwater system treatments and separation of stormwater flows from sanitary flows. Significant structural drainage improvements throughout the project will provide a long-term benefit to water quality. Removal of invasive species present and the addition of native plantings have been included in the project plans. The

commitment of wetland resources to the proposed project will not result in an unacceptable loss of irretrievable or irreplaceable wetland resources.

## (5) Impact on Safety and Health or Reasonable Use of Property

The project, which will result in a safer roadway, has been designed to avoid adverse impacts to the wetlands to the greatest extent possible. The applicant will take measures to mitigate the potential for harm during construction, including the protection of ground and surface waters. The success of these measures will be monitored through regular inspections during the construction phase of the project. Potential impacts to wildlife and fisheries resources will be minimized through measures that include the incorporation of recommendations of the DEP. When concluded, the improvements to existing Whalley Avenue (Route 63) the construction of a new culvert and drainage outfall structures will enhance the ability of the wetland system to control stormwaters. The improvements as a result of the project will provide a safer Whalley Avenue, (Route 63) for the public. These improvements will also enhance the functioning of the overall wetland systems to be impacted by the project. The impacts to the wetlands do not pose a threat of injury or interference with the public health or safety or the reasonable use of property.

# (6) <u>Impacts on Wetlands Outside the Area and Inevitable Future Activities</u>

There is no evidence that the proposed project will have a negative impact on wetlands outside of the project area. The measures that will be taken during construction will prevent erosion and sedimentation that could encroach upon surrounding wetlands. Improvements as a result of the project, such as separation of stormwater flows from sanitary flows and significant structural drainage improvements throughout the project will provide a long-term benefit to water quality. Removal of invasive species present and the addition of native plantings have been included in the project plans to offset the impacts to wetlands. The project as designed will not prevent future activities in and around Whalley Avenue (Route 63).

## **RECOMMENDATION**

The requirements of General Statutes §22a-41(b) have been met by this permit application. The record presented and consideration of all the relevant facts and circumstances pursuant to the six factors outlined in §22a-41(a) demonstrate that there is no feasible and prudent alternative to the proposed project that meets the purpose of the project and that would cause substantially fewer impacts to the natural resources.

The reconstruction of Whalley Avenue (Route 63) will result in a safer and better roadway and a more efficient transportation system. The proposed plan strikes an appropriate balance between the obligation of the applicant to improve a road that is presently a risk to human health and safety and the mission of the DEP to protect the environment. I recommend that the Commissioner issue the permit that is the subject of this proceeding.

Applicant, Department of Transportation

Date

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#### ATTACHMENT B

# **DRAFT PERMIT**

Permittee: Connecticut Department of Transportation 2800 Berlin Turnpike P.O. Box 317546 Newington, CT 06131-7546

Attn: Edgar T. Hurle

Permit No: IW-200501766 Permit Type: Inland Wetlands and Watercourses Town: New Haven Project: DOT Project Number 92-547

Pursuant to Connecticut General Statutes Section 22a-39 the Commissioner of Environmental Protection hereby grants a permit Connecticut the Department of Transportation (the to "permittee") to conduct activities within inland wetlands and watercourses in the City of New Haven in accordance with its application and plans which are part thereof filed with this Department on July 13, 2005 signed by Edgar T. Hurle and dated July 15, 2005, revised through November 29, 2005 (the "plans"). The purpose of said activities is the reconstruction of Route 63 from Route 69 to Emerson Street (the "site").

#### AUTHORIZED ACTIVITY

Specifically, the permittee is authorized to alter approximately .044 acres of inland wetlands or watercourses for the wdiening and full-depth reconstruction of Route 63 including upgrading the storm drainage system and constructing sidewalks and curbing in accordance with said application.

This authorization constitutes the permits and approvals required by Section 22a-39 of the Connecticut General Statutes and is subject to and does not derogate any present or future property rights or other rights or powers of the State of Connecticut, 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, local laws or regulations pertinent to the property or or activity affected hereby.

# PERMITTEE'S FAILURE TO COMPLY WITH THE TERMS AND CONDITIONS OF THIS PERMIT SHALL SUBJECT PERMITTEE AND PERMITTEE'S CONTRACTOR(S) TO ENFORCEMENT ACTIONS AND PENALTIES AS PROVIDED BY LAW.

This authorization is subject to the following conditions:

## SPECIAL CONDITIONS

- 1. If any changes are proposed in the water handling plan at the site from that which is shown on the permit plates, the permittee shall submit such changes to the Commissioner for review and written approval. The permittee shall not implement any such plan until an approval is issued.
- 2. If any changes are proposed in the storm drainage system at the site, including any proposed swales, from that which is shown on the permit plates, the permittee shall submit such changes to the Commissioner for review and written approval. The permittee shall not implement any such plan until an approval is issued.
- 3. If any changes are proposed in the bank protection from that which is shown on the permit plates, the permittee shall submit such changes to the Commissioner for review and written approval. The permittee shall not implement any such plan until an approval is issued.
- 4. The permittee shall make necessary modifications to the project soil erosion and sedimentation controls at the site of the project, during construction and thereafter, to prevent pollution to wetlands and watercourses. The permittee shall report on such modifications as part of the monthly monitoring requirement in General Condition number 8. Such modifications shall comply with the "Connecticut Guidelines for Soil Erosion and Sediment Control", as revised. If design and implementation of such modifications require temporary alterations to regulated areas in excess of permanent or temporary disturbance shown on approved permittee permit plates, the shall submit such modifications, including hydraulic design of such, to the Commissioner for review and written approval prior to implementation at the site. If such implementation is required prior to continuation of work at the site, such work shall cease until such modifications are approved and implemented.

5. The permittee shall implement the invasive species removal plan and the planting plan dated March 2005 by the expiration date of this permit.

# GENERAL CONDITIONS

- Initiation and Completion of Work. At least five (5) days 1. prior to starting any construction activity at the site, the permittee shall notify the Commissioner of Environmental Protection (the "Commissioner"), in writing, as to the date activity will start, and no later than five such activity, (5) after completing notify the days Commissioner, in writing, that the activity has been completed.
- 2. **Expiration of Permit.** If the activities authorized herein are not completed by five years after the date of this permit, said activity shall cease and, if not previously revoked, this permit shall be null and void.

Any application to renew or reissue this permit shall be filed in accordance with Sections 22a-6j and 22a-39 of the General Statutes and Section 22a-3a-5(c) of the regulations of Connecticut State Agencies. In order to be considered timely, any such application must be filed at least 120 days prior to the expiration date of this permit.

- All 3. Compliance with Permit. work and all activities authorized herein conducted by the permittee at the site shall be consistent with the terms and conditions of this Any regulated activities carried out at the site, permit. including but not limited to, construction of anv structure, excavation, fill, obstruction, or encroachment, that are not specifically identified and authorized herein shall constitute a violation of this permit and may result modification, suspension, in its or revocation. In constructing or maintaining the activities authorized herein, the permittee shall not store, deposit or place equipment or material including without limitation, fill, construction materials, or debris any wetland in or watercourse on or off site unless specifically authorized permit. Upon initiation of the by this activities authorized herein, the permittee thereby accepts and agrees to comply with the terms and conditions of this permit.
- 4. **Transfer of Permit.** This authorization is not transferable without the written consent of the Commissioner.

- 5. <u>Reliance on Application.</u> In evaluating the permittee's application, the Commissioner has relied on information provided by the permittee. If such information subsequently proves to be false, deceptive, incomplete or inaccurate, this permit may be modified, suspended or revoked.
- Best Management Practices. In constructing or maintaining 6. activities authorized herein, the permittee the shall employ best management practices, consistent with the terms and conditions of this permit, to control storm water discharges and erosion and sedimentation and to prevent pollution. Such practices to be implemented by the permittee at the site include, but are not necessarily limited to:
  - a. Prohibiting dumping of any quantity of oil, chemicals or other deleterious material on the ground;
  - b. Immediately informing the Commissioner's Oil and Chemical Spill Section at 424-3338 of any adverse impact or hazard to the environment, including any discharges, spillage or loss of oil or petroleum or chemical liquids or solids, which occurs or is likely to occur as the direct or indirect result of the activities authorized herein;
  - c. Separating staging areas at the site from the regulated areas by silt fences or haybales at all times.
  - d. Prohibiting storage of any fuel and refueling of equipment within 25 feet from any wetland or watercourse.
  - e. Preventing pollution of wetlands and watercourses in accordance with the document "Connecticut Guidelines for Soil Erosion and Sediment Control" as revised. Said controls shall be inspected by the permittee for deficiencies at least once per week and immediately after each rainfall and at least daily during prolonged rainfall. The permittee shall correct any such deficiencies within forty eight (48) hours of said deficiencies being found.
  - f. Stabilizing disturbed soils in a timely fashion to minimize erosion. If a grading operation at the site

will be suspended for a period of thirty (30) or more consecutive days, the permittee shall, within the first seven (7) days of that suspension period, accomplish seeding and mulching or take such other appropriate measures to stabilize the soil involved in such grading operation. Within seven (7) days after establishing final grade in any grading operation at the site the permittee shall seed and mulch the soil involved in such grading operation or take such other appropriate measures to stabilize such soil until seeding and mulching can be accomplished.

- g. Prohibiting the storage of any materials at the site which are buoyant, hazardous, flammable, explosive, soluble, expansive, radioactive, or which could in the event of a flood be injurious to human, animal or plant life, below the elevation of the five-hundred (500) year flood. Any other material or equipment stored at the site below said elevation by the permittee or the permittee's contractor must be firmly anchored, restrained or enclosed to prevent flotation. The quantity of fuel stored below such elevation for equipment used at the site shall not exceed the quantity of fuel that is expected to be used by such equipment in one day.
- Immediately informing the Commissioner's Inland Water h. Division Resources (IWRD) of the occurrence of pollution or other environmental damage resulting from construction or maintenance of the authorized activity or any construction associated therewith in violation of this permit. The permittee shall, no later than 48 hours after the permittee learns of a violation of permit, report writing this same in to the Commissioner. Such report shall contain the following information:
  - (i) the provision(s) of this permit that has been violated;
  - (ii) the date and time the violation(s) was first observed and by whom;
  - (iii) the cause of the violation(s), if known
  - (iv) if the violation(s) has ceased, the duration of the violation(s) and the exact date(s) and times(s) it was corrected;

- (v) if the violation(s) has not ceased, the anticipated date when it will be corrected;
- (vi) steps taken and steps planned to prevent a reoccurrence of the violation(s) and the date(s) such steps were implemented or will be implemented;
- (vii) the signatures of the permittee and of the individual(s) responsible for actually preparing such report, each of whom shall certify said report in accordance with section 9 of this permit.

For information and technical assistance, contact the Department of Environmental Protection's Inland Water Resources Division at (860)424-3019.

- 7. Contractor Liability. The permittee shall give a copy of this permit to the contractor(s) who will be carrying out the activities authorized herein prior to the start of construction and shall receive a written receipt for such and dated such contractor(s). copy, signed by The permittee's contractor(s) shall conduct all operations at the site in full compliance with this permit and, to the extent provided by law, may be held liable for anv violation of the terms and conditions of this permit.
- 8. Monitoring and Reports to the Commissioner. The permittee shall record all actions taken pursuant to Condition Number 6(e) of this permit and shall, on a monthly basis, submit a report of such actions to the Commissioner. This report shall indicate compliance or noncompliance with this permit for all aspects of the project which is the subject of this permit. The report shall be signed by the environmental inspector assigned to the site by the permittee and shall be certified in accordance with Condition Number 9 below. Such monthly report shall be submitted to the Commissioner no later than the 15th of the month subsequent to the month being reported. The permittee shall submit such reports until the subject project is completed.
- 9. <u>Certification of Documents.</u> 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, a responsible corporate officer of the permittee, a general partner of the permittee, or a duly

authorized representative of 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 submitted information in this document and all certify that based attachments and 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 in accordance with Section 22a-6 under Section 53a-157b of the Connecticut General Statutes."

10. <u>Submission of Documents.</u> 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. Except as otherwise specified in this permit, the word "day" as used in this permit means the calendar day. Any document or action which falls on a Saturday, Sunday, or legal holiday shall be submitted or performed by the next business day thereafter.

Any document or notice required to be submitted to the Commissioner under this permit shall, unless otherwise specified in writing by the Commissioner, be directed to:

The Director DEP/Inland Water Resources Division 79 Elm Street, 3rd Floor Hartford, Connecticut, 06106-5127

Issued by the Commissioner of Environmental Protection on:

Date

Gina McCarthy, Commissioner