Final Environmental Impact Statement

Spaulding Turnpike Improvements

NHS-027-1(37), 11238

Newington to Dover

New Hampshire

December 2007

Volume 4

Federal Highway Administration

New Hampshire Department of Transportation

Spaulding Turnpike Improvements NHS-027-1(37), 11238

Newington to Dover, New Hampshire

Prepared for **New Hampshire Department of Transportation and Federal Highway Administration**

Prepared by ***VHB*/Vanasse Hangen Brustlin, Inc.**
Bedford, NH

December 2007

TABLE OF CONTENTS

REGIONAL PLANNING COMMISSIONS

PRIVATE ORGANIZATIONS /INDIVIUALS

3.0 PUBLIC HEARING DOCUMENTS

1.0 Summary of Public Hearing Testimony

1.0 Summary of Public Hearing Testimony

On September 21, 2006, a Public Hearing was held at the Saint Thomas Aquinas School Gymnasium in Dover, NH. This was a joint Public Hearing involving the Federal Highway Administration (FHWA), the NH Department of Environmental Services (NHDES) and the US Army Corps of Engineers (USACOE). The purposes of the hearing were:

- to determine, in accordance with the provisions of RSA 230:45 and the Surface Transportation and Uniform Relocation Assistance Act of 1987, whether there is occasion for the laying out of alterations to the Spaulding Turnpike from Exits 1 through 6 to include the Little Bay Bridges in the Town of Newington and City of Dover;
- to receive testimony, in accordance with RSA 482-A and administrative rule Env-Wt 202.01, on NHDOT's permit application to dredge and fill wetlands associated with the alterations to the Spaulding Turnpike and Little Bay Bridges;
- to fulfill USACOE's responsibilities under Section 404 of the Clean Water Act, on NHDOT's permit application to impact waters of the United States associated with alterations to the Spaulding Turnpike and Little Bay Bridges;
- to comply with the FHWA's public involvement and NEPA regulations regarding the Draft Environmental Impact Statement.

The Special Committee appointed by the Governor and Executive Council to conduct the Public Hearing included Councilor Raymond Wieczorek and Councilor Peter Spaulding. Councilor Ruth Griffin, Chairperson of the Special Committee, was unable to attend the Hearing. Rene Pelletier, Assistant Director with the Water Division of NHDES, Richard Roach, Project Manager with the New England District of the USACOE and William O'Donnell, Environmental Program Manager with the FHWA, discussed their agencies' respective roles in the hearing and the project approval process. NHDOT and consultant staff provided presentations on the project purpose and need, range of alternatives, various components of the Preferred Alternative, as well as a detailed description of the Preferred Alternative, the associated environmental impacts, and proposed mitigation package.

Approximately 250 people attended the informal afternoon session (3:30 pm to 6:30 pm) and more formal evening meeting, which began at 7:00 pm. Plans were available for public viewing for the informal afternoon session. At that time, NHDOT and consultant personnel were available to informally answer questions and discuss various aspects of the project with interested individuals on a one-on-one basis. Following the presentations made during the formal evening meeting, the hearing was open to public comments. A total of 24 persons provided oral testimony. In addition, NHDOT received 46 letters during the public comment period, which extended to October 4, 2006. Following the comment period, NHDOT produced a transcript of the proceedings, compiled with all the written testimony received, and provided copies to NHDES, USACOE, and FHWA. A number of those who commented at the Public Hearing also followed up with written testimony. Several letters from different individuals addressing a similar topic were received. The majority of letters commented on more than one issue. A summary of the comments is noted in the table below:

Summary of Public Comments

4	Impacted Residential Property Owner
4	Impacted Business Property Owner
30	Concerned Citizen
3	Concerned Business
5	Concerned Group/Organization
14	Town / City Official
3	Regional Official
3	State Official
0	Other Government Official
66	***Total Comments (Public Hearing)***

46	Comments from Dover
14	Comments from Newington
2	Comments from Other Communities
4	Comments from Agencies / Others

26	Support Project
5	Oppose Project
4	3 Lanes on LBB not 4 Lanes
6	Rail/Mass Transit (Pro)
0	Rail/Mass Transit (Con)
3	Park and Ride (Pro)
0	Park and Ride (Con)
11	Soundwalls (Pro)
2	Soundwalls (Con)
6	GSB Rehabilitation (Pro)
1	GSB Rehabilitation (Con)
6	Other Noise Mitigation
13	Other Design Issues
2	Secondary Growth Impacts
17	Environmental Mitigation
9	Other Environmental Issues
4	Economic/Planning Mitigation
13	Property Acquisitions (Pro)
0	Property Acquisitions (Con)
8	Minimization of Landscaping Mitigation / Tree Clearing
7	Impacts to Individual Properties
2	Hilton Park Improvements
10	Toll Plaza Concerns
8	Sidewalk Requests/Concerns
27	Other Issues

A tally of the hearing comments indicates the following general aspects:

- Of the 66 comments received at the Public Hearing, approximately 40% expressed support for the project. Only 5 of the 66 stated an objection to the project as presented, noting concerns with various aspects of the design.
- Most of the comments (44 of 66) were made by concerned citizens (30) or Municipal Officials (14) residing in Newington and Dover. Forty-six comments were made by individuals or residents from Dover, 14 comments were from individuals or residents from Newington.
- Four impacted residential property owners and four impacted business property owners submitted testimony regarding the project.

The comments made at the Public Hearing or in written testimony that potentially have an affect on the Layout of the Preferred Alternative fall into the following general categories:

1. Several commenters (seven in total) expressed concern with the scale of the proposed improvements noting that the proposed widening to eight lanes would have an adverse impact on Dover Point and Hilton Park. They requested assurances that the number of lanes, width of the shoulders, and other elements that contribute to the Turnpike's expansion are needed.

   Response: The EIS evaluated a number of different alternatives including a 6-lane alternative (three basic travel lanes in each direction). Traffic projections for the design year of 2025 indicate that a 6-lane alternative, in conjunction with a combination of TSM and TDM measures, would not be sufficient to accommodate the future travel demands for the corridor. A sensitivity analysis of traffic growth on the Little Bay Bridges indicates that a 6-lane bridge would reach capacity and result in unacceptable traffic operations by 2017 (eight years prior to the design year). Furthermore, beyond the limits of the bridge, construction of six lanes between Exits 3 and 6 would result in congestion and system failure in 2017.

   In addition, widening the Turnpike to provide three lanes in each direction would result in a very similar footprint as widening to provide four lanes in each direction. The typical cross-sectional width for a 6-lane highway (122 feet) is nearly as wide as the 8-lane highway (146 feet). Additionally, the interchange configurations at Exits 3 and 6 are relatively the same under both 6- and 8-lane alternatives, with the exception that the length of acceleration and deceleration lanes would be longer under a 6-lane alternative in order to better accommodate traffic entering and exiting the Turnpike. With regard to environmental impacts, the difference between a 6-lane and 8-lane footprint is minor (less than 5 percent) when comparing impacts to wetlands, wildlife habitat, groundwater, noise (number of impacted receptors), and right-of-way (number of residential and business acquisitions).

   The Selected Alternative proposes three basic travel lanes and one auxiliary lane in each direction between Exits 3 and 6. The auxiliary lanes enable traffic to safely and efficiently enter, exit and switch lanes between Exits 3 and 6. Shoulder areas are

proposed to be 10 feet to 12 feet wide. Experience and safety studies of limited access facilities have demonstrated the safety benefits associated with providing adequate space for disabled vehicles. Narrow shoulder areas are deemed to be safety hazards and are not recommended as they give the appearance of being safe areas for stopping but are not due to their confining width and the relatively high traveling speeds along the Turnpike.

2. Several commenters (seven in total) expressed opposition to the proposed modification of the Exit 6W ramp from the existing free-flow condition to a diamond configuration under signal control. They felt that the proposed signals on Dover Point Road would operate inefficiently, resulting in congestion, traffic queues on the Turnpike and Dover Point Road, and potential traffic diversion onto City streets such as Spur Road and Boston Harbor Road.

   Response: The signalized diamond interchange configuration proposed for Exit 6, as part of the Selected Alternative, will provide for safe and efficient traffic operation for northbound traffic desiring to travel west on US 4. Other potential ramp types and interchange configurations were studied in detail and were found to be less desirable. Under the Selected Alternative, the storage lengths on the proposed diamond shaped northbound off-ramp will sufficiently accommodate the anticipated traffic queues without vehicles backing up onto the Turnpike. In addition, the traffic signals proposed along Dover Point Road and US 4 will be coordinated to process traffic flow efficiently, minimizing delays and vehicle queuing. Detailed studies conducted for all three intersections indicate that backups will not occur along Dover Point Road or on the Turnpike. All three signalized intersections are projected to operate at high levels of service during the peak hours in the design year (2025).

3. Mixed comments were received relative to the elimination of Exit 5. An attorney representing the Wentworth Terrace neighborhood expressed support for the elimination of Exit 5 noting the safety benefits, as well as the fact that the perpetuation of Exit 5 would require improvements that would have serious impacts on the neighborhood. A resident expressed concern that the proposed elimination would create a dead-end road and make truck egress difficult. Two other residents noted concern that eliminating Exit 5 would result in a loss of convenient access to Hilton Park and increase in traffic on Dover Point Road and Boston Harbor Road.

   Response: The elimination of Exit 5 (NB off and on ramps) is required from a safety and traffic operations standpoint due to its proximity to Exit 6 and the projected increase in traffic (2025 travel demand) along the Turnpike between Exits 3 and 6. Insufficient distance exists between the NB on-ramp from Exit 5 and the off-ramp to Exit 6 to safely accommodate the weave between vehicles entering the Turnpike at Exit 5 and vehicles exiting the Turnpike at Exit 6. Traffic safety and efficiency aside, reconstructing Exit 5 to minimum design standards would severely impact Hilton Park and the Wentworth Terrace neighborhood, and would preclude the opportunity to construct soundwalls to reduce existing and future traffic noise levels in the neighborhood.

   The overall re-distribution of traffic associated with the Selected Alternative is anticipated to result in a modest increase in traffic along Dover Point Road in the vicinity

of Boston Harbor Road. Both Dover Point Road and Boston Harbor Road have adequate capacity to accommodate the projected traffic increases. A detailed capacity analysis conducted for the intersection of Boston Harbor Road/Dover Point Road and the proposed local connector road shows high levels of service through the 2025 design year.

Relative to commercial vehicles accessing and exiting the Wentworth Terrace neighborhood and Hilton Drive, the proposed improvements to Hilton Drive in the vicinity of Wentworth Terrace and Hilton Park (including the local connector roadway traversing under the Turnpike) will be designed to accommodate tractor-trailer trucks. Also, a portion of Hilton Drive extending north from the existing ramps to the pump station will be retained to create a loop road for trucks to more easily exit the neighborhood.

4. The Dover City Mayor, as well as several other City residents (four in total), requested a sidewalk be constructed on Dover Point Road, as well as other pedestrian and bicycle accommodation in Dover to mitigate for the projected traffic increases on the local roadways.

   Response: It is acknowledged that the section of Dover Point Road west of the Turnpike will see a moderate increase in traffic once the project is constructed and Exit 5 discontinued. To improve pedestrian safety and provide pedestrian connectivity between the proposed sidewalk at Hilton Park and the existing sidewalk opposite the Division of Motor Vehicles (DMV) property, a new sidewalk along the west side of Dover Point Road is proposed to be incorporated into the project, provided that the additional easements and/or property rights can be secured from the property owners; the additional impacts to wetlands will be permitted; and the City of Dover agrees to maintain the sidewalk in accordance with its accepted policies and practices.

   New sidewalks are proposed in the following locations: along the north side of Spur Road between the Bayview Park parking area and the Scammell Bridge; along the west side of the connector road between Spur Road and Boston Harbor Road; along the west side of Dover Point Road as described above; along the new two-way connector beneath the Little Bay Bridges; and along Hilton Drive connecting to the reconstructed walkway along Pomeroy Cove. Also as part of the project, 4-foot wide shoulder areas, which will accommodate bicycles, are proposed along the reconstructed segments of Dover Point Road, US 4, Spur Road, Hilton Drive, and the two connector roadways.

5. Newington Town Officials requested pedestrian and bicycle accommodations be provided in Newington to provide safe and convenient passage for those modes of travel to cross the Turnpike.

   Response: To improve pedestrian safety and provide pedestrians the ability to cross the Turnpike at Exit 3, new sidewalks are proposed on Woodbury Avenue within the limits of the reconstruction, as well as a sidewalk along the north side of the bridge crossing over the Turnpike and extending through the new Woodbury Avenue/Arboretum Drive/Exit 3 southbound ramps intersection, provided the Town of Newington agrees to accept maintenance responsibilities for the new sidewalks in accordance with its accepted

policies and practices. Also as part of the project, roadside shoulder areas (4 to 5 feet wide) to accommodate bicyclists are proposed within the limits of the project along Woodbury Avenue, the bridge over the Turnpike within the Exit 3 interchange area, and along the reconstructed sections of Arboretum Drive.

6. An attorney for an impacted business requested that a direct access be provided from the business to the southbound Exit 4 (Nimble Hill Road) Turnpike on-ramp, noting that this access would involve minimal changes to the Preferred Alternative.

   Response: Both of the existing driveway openings that presently service the property are proposed to be maintained. The present driveway on Nimble Hill Road is proposed to have direct access to and from the Turnpike on-ramp, but be restricted to right turns in and out, as a raised median will be constructed to separate the on- and off-ramp traffic. No direct access from the Turnpike off-ramp to this driveway is proposed. The second driveway from the Exxon Station that presently has direct access to the Turnpike is proposed to be connected to a new local connector roadway that is proposed south of the gas station and will intersect Nimble Hill Road opposite Shattuck Way Extension.

7. A Dover resident noted that the proposed road reconfigurations in Dover would change the means of access to the Division of Motor Vehicles (DMV) office on Boston Harbor Road and requested the intersection designs make accommodations for truck access to the facility.

   Response: The proposed improvements at the intersections (US 4/Spur Road, Spur Road/local connector and local connector/Boston Harbor Road) leading from US 4 to the DMV facility will be designed to safely and efficiently accommodate heavy commercial vehicles including tractor-trailer trucks.

Other comments made at the Public Hearing or in written testimony can be categorized in the following manner:

1. Several commenters (eight in total) expressed concern with the extent of tree clearing and requested that clearing, as well as the project setbacks be limited and mitigation plantings provided.

   Response: In recognition of the sensitive and scenic nature of the area, tree clearing and setback areas will be limited to the extent practicable. In addition, as part of the project's final design, a comprehensive landscaping plan will be developed showing new trees planted in select locations to mitigate for the mature trees that will be lost due to construction and to landscape other locations along the corridor, as appropriate.

2. Mixed comments were received on the General Sullivan Bridge with several commenters (6 in total) expressing support for the historic bridge's rehabilitation, one questioning the bridge's historicity due to its poor condition, and one objecting to the restoration and future maintenance as an undue burden on the taxpayers.

Response: The General Sullivan Bridge is proposed to be rehabilitated as an element of the Selected Alternative. The bridge, regardless of its present day condition, is a landmark structure, the second highest rated historic bridge in the state, and eligible for the National Register of Historic Places. The bridge offers a unique and important bicycle / pedestrian connection across Little Bay, as well as, other recreational activities, and is deemed a historic resource with protection under Federal (USDOT) law. The cost to rehabilitate the General Sullivan Bridge to a six-ton capacity is estimated at approximately $26 million dollars. This represents a net cost to the project of approximately $10 million dollars taking into account the cost that would be required to dismantle and remove the structure, along with the cost required to provide a replacement recreational connection across the Bay on the widened LBB.

3. A number of commenters (11 in total) expressed support for the installation of the proposed soundwalls, particularly in advance of the bridge and Turnpike construction. Two parties objected to the installation of the walls citing visibility and aesthetic concerns. Several others suggested other means of noise mitigation be pursued and/or aesthetic treatments be incorporated to mitigate the visual impact of the barriers.

   Response: As a result of the detailed noise analysis conducted for the project, four noise barriers totaling approximately 15,600 feet in length are proposed to be constructed in Dover. The barriers were evaluated as to their feasibility and cost-effectiveness, and will be of sufficient height and length to reduce noise levels (at least 5 decibels) at ground level locations for approximately 170 residential properties. The noise barrier along the west side of the Turnpike in Dover is proposed to end at the Little Bay Bridge, which will provide a feasible and cost-effective termination for the barrier while providing a noise reduction benefit to the Dover Point Road neighborhood. Noise barriers will not be constructed on the bridge.

   Additional meetings with the benefiting property owners will be held to discuss the noise barriers and ascertain whether the barriers are desired or not. In accordance with NHDOT Policy, a minimum of 75% of property owners, within the first row adjacent to a particular barrier, will need to support the installation of the barrier in order for it to be constructed. During these meetings with the neighborhoods, more detailed information on the type, height, special features, and length of the noise barriers will be discussed and input gathered. Barriers will be designed to be as low as possible while still achieving the necessary noise reductions. Various architectural treatments and landscaping will be considered during the final design phase of the project to help mitigate the visual impact of the barriers.

   The project's constructability will be reviewed during final design and the proposed noise barriers will be advanced in the construction schedule, where deemed appropriate and practicable. Also as part of the project's final design effort, the merits and feasibility of utilizing "quiet pavement" to reduce tire noise throughout the project area will investigated.

4. A number of commenters (ten in total) expressed toll-related concerns suggesting the existing toll plaza that is located just north of Exit 6 in Dover be eliminated or relocated.

They expressed concern that the plaza creates a large volume of diversion to local City streets and is partly responsible for the congestion of the local roads and downtown Dover.

Response: It has been consistently stated and acknowledged throughout the study and public participation process that the Dover toll facility and toll-related issues fall outside the project study area and scope of study. The project's study area was identified and established following the 1998 Route 16 Corridor Protection Study and the 2000 Newington-Dover Feasibility Study by determining that the current and future Turnpike traffic operating conditions north of the toll plaza were satisfactory. In contrast, the section of the Turnpike between Exit 1 and the Dover Toll Plaza operates at a poor level of service, both in the current and future design year. In addition, changes to the Turnpike toll system require State Legislative and Executive Council approval, and may have revenue impacts. These are state-level issues potentially affecting the entire Turnpike system, not project level matters.

The Department has reviewed the historic traffic data in the area. Since the early 1990s, the data shows an ever-increasing volume of traffic on the Turnpike, while traffic growth on Dover Point Road and US 4 has been relatively flat. This data, along with the regional travel demand projections demonstrate a greater regional use of the Turnpike over time as opposed to a large diversion of traffic to the secondary routes. The travel demand projections indicate that the design year (2025) volume of traffic between Exits 3 and 6 requires the type and scale of Turnpike improvements as reflected in the Selected Alternative.

5. Several commenters (five in total) requested more detailed information regarding stormwater management and water quality monitoring noting concerns with the water quality in Little Bay and risk associated with the potential for further degradation as a result of the project.

   Response: Additional details regarding the stormwater management system and treatment devices will be provided as the project progresses through the final design stages. The NHDOT has and is continuing to work with NHDES to develop the stormwater treatment needs and identify the available methods to assess the potential water quality impacts associated with roadway runoff. The NHDOT has also collaborated with the University of New Hampshire (UNH) Stormwater Center to explore the latest in innovative treatment measures, such as gravel wetlands and infiltration measures that can provide a high level of treatment for the various pollutants associated with highway runoff. As a result of this effort with the University and coordination with NHDES, the most current best management practices and design guidance will be incorporated into the water quality treatment measures. The NHDOT will coordinate with NHDES, and as practicable will assist with their water quality monitoring efforts in the area.

   Regarding the potential for water quality degradation, construction contractors will be required to provide detailed erosion control plans including contingency measures and periodic turbidity monitoring of site discharge during rain events. Contractors will also

be required to provide frequent inspections of construction sites to maintain compliance with permit conditions. Stringent requirements in the final design plans will be incorporated requiring contractors to minimize the movement of eroded sediment beyond the work area.

6. Several commenters expressed support for the early implementation of all proposed TDM and TSM measures identified in the DEIS to mitigate the existing traffic congestion. They encouraged the project incorporate aggressive transit alternatives and commit to fund and implement those alternatives. While supporting the transit-related recommendations, concern was also expressed that transit travel demand may have been underestimated. A number of comments noted concern that the bus expansions proposed as part of the project, particularly the local fixed-route transit services, would not be sustainable without State funding, and recommended the NHDOT commit to funding the transit operations through the project's design year of 2025. A few others noted a need for added transit funding for additional services or a need for innovative TDM measures to reduce the volume of traffic crossing the Little Bay Bridges.

   Response: The NHDOT acknowledges the support for the early implementation of the TDM and TSM elements of the Selected Alternative and will strive to implement these elements prior to or in the early stages of construction. These TDM elements, which are intended as mitigation for the potential for increased congestion during construction, will provide a more balanced transportation system in the seacoast region and travel opportunities other than single occupant vehicles (SOV). These elements include new park-and-ride facilities in Rochester, Dover and Lee, expansion of bus and rail service, and support for employer-based measures. Also proposed, as part of the Selected Alternative, is funding for the seacoast area Transportation Management Association (TMA), known as Seacoast Commuter Options, for the duration of the Turnpike's construction or a maximum five-year period to work with and encourage employers to promote employee travel by means other than SOV's. In addition to area-wide ride-sharing and guarantee-ride-home programs, Seacoast Commuter Options is educating area employers and employees about the availability of employee-paid, pre-tax transportation benefits and employer-paid transportation benefits programs, such as incentives to not driving alone.

   With respect to transit travel demand, the methodology and assumptions which form the basis of estimating future transit ridership have been updated and are presented in the FEIS and include recent ridership data, recent modeling enhancements and updated costs for parking, fuel and travel time.

   Developing and maintaining a sustainable funding source for the preservation and improvement of the area's transportation system, including transit, is a challenge that transcends the project. The need for sustainable funding has been recognized as an issue by both the NHDOT during development of the New Hampshire Transportation Business Plan and by the State Legislature. The NHDOT has proposed a maximum five-year commitment to fund the transit-related elements of the Selected Alternative as mitigating elements to the potential for increased levels of congestion during construction and overall dependency on SOV travel in the region.

7. The Seacoast MPO expressed secondary growth concerns noting that the secondary growth projected by the modeling proved to be relatively negligible. They noted anecdotal evidence suggesting that study area congestion has been influencing development decisions for years. They also noted concern regarding some of the assumptions used in estimating the percentage of wetlands within the socio-economic study area and potential wetland impacts that could be caused by the induced growth.

   Response: While the delay associated with traffic congestion in the project area is certainly a factor in determining regional economic trends, the results of the Regional Economic Model, Inc. (REMI) suggest that other factors also influence growth in the area. Individuals and businesses make decisions based upon a complex set of factors related to economic benefit and quality of life. Thus, while anecdotal evidence may suggest that the chronic congestion on the bridges plays a role in people's economic decisions, traffic congestion is just one of a number of factors, which plays a role in determining regional growth patterns. It is also important to note that nearly all of the growth in the study area is expected to occur regardless of whether the Turnpike is improved or not, in response to other influences (such as the cost of housing) involving overall quality of life and continued economic prosperity found in New Hampshire. Further, it is not clear whether the additional growth that has been identified by the REMI model, and the associated land conversion, is growth that otherwise would not occur, or growth that would simply occur later in time if the project were not completed. Thus, the NHDOT and FHWA stand by the assertion that the project will not induce substantial growth. This is corroborated by the fact that growth has and continues to occur in the communities north of the Little Bay Bridges without regard for the congestion levels within the project area.

8. A fair number of comments (17 in total) were received with regard to the proposed mitigation package for the project. The majority of the comments expressed support for the proposed mitigation components in Dover, particularly the expedited acquisition of a conservation easement on the Tuttle Farm.

   Response: In response to the property owner's request, the NHDOT, in partnership with the City of Dover, has expedited the acquisition of a conservation easement on the Tuttle Farmstead to permanently preserve the 120-acre farm. The preservation was consummated on January 29th, 2007 with the conservation easements executed and property rights transferred to the City, the NHDOT, and Strafford Rivers Conservancy.

   The NHDOT is also working closely with the City to permanently protect a 105-acre parcel located in the Blackwater Brook watershed that is undergoing the threat of development. Should an agreement with the City and developer to acquire the parcel or large portion thereof not be reached, the EIS identified several other parcels in the Blackwater Brook area that are deemed worthy of preservation and permanent protection, which the NHDOT will then pursue to fulfill the mitigation requirements of the project in Dover.

The NHDOT will also continue to coordinate the restoration and preservation elements, as identified in the EIS, with the Pease Development Authority, the Town of Newington, and the property owners of the mitigation parcels to finalize the mitigation requirements of the project in Newington.

9. A number of comments were received with requests for actions relating to individual or specific property impacts including drainage, quality of life, loss of privacy, vegetative screening, physical impact, changed traffic pattern, etc.

   Response: Requests for added investigations, design changes or mitigation measures to minimize the impacts to specific properties were considered to the extent practicable within the context of the project layout and level of design data. In some cases, the comment was positively addressed with minor design modifications. Most of the comments will be considered and addressed during the development of more detailed plans during the final design phase of the project. Unavoidable impacts will be addressed, as appropriate, as elements of the right of way acquisition process.

Individual responses to issues related to the layout or property impacts associated with the project are addressed in the Report of the Commissioner, which is included in Section 3.1 of this Volume. All correspondence received during the Public Hearing process and pertaining to the DEIS is contained in the following section with the associated responses.

2.0 Comments and Responses on DEIS

Federal
(F)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

OFFICE OF THE
REGIONAL ADMINISTRATOR

October 2, 2006

William F. O'Donnell, P.E.
Environmental Program Manager
Federal Highway Administration
19 Chenell Drive, Suite One
Concord, New Hampshire 03301

Christine Godfrey, Chief
Regulatory Division, Operations Directorate
U.S. Army Corps of Engineers
New England Division
696 Virginia Road
Concord, MA 01742

RE: Draft Environmental Impact Statement for Newington-Dover Spaulding Turnpike Improvements, Stafford and Rockingham Counties, New Hampshire (CEQ# 20060335)

Dear Mr. O'Donnell and Ms. Godfrey:

The Environmental Protection Agency-New England Region (EPA) has reviewed the Federal Highway Administration's (FHWA) Draft Environmental Impact Statement (DEIS) for the improvements to the Spaulding Turnpike/NH Route 16 in Newington and Dover, New Hampshire. We submit the following comments on the DEIS in accordance with our responsibilities under the National Environmental Policy Act (NEPA), Section 309 of the Clean Air Act and Section 404 of the Clean Water Act. In addition to our NEPA comments, this letter also responds to an Army Corps of Engineers Public Notice, dated August 22, 2006.

1 The DEIS describes work necessary to reconstruct and widen a 3.5 mile section of the Spaulding Turnpike to improve safety, reduce congestion and better accommodate anticipated increases in traffic demand. EPA complements the efforts of the FHWA and New Hampshire Department of Transportation (NHDOT) to coordinate with the EPA and other federal agencies during the development of the EIS.

2 The attachment to this letter highlights comments and concerns about the DEIS related to wetlands impacts, the secondary and cumulative impacts analysis and air quality for you to consider as you develop the Final Environmental Impact Statement (FEIS) for the proposed project. We appreciate the opportunity to comment on the DEIS for the Spaulding Turnpike Improvements project and look forward to continuing to work with

your agency and NHDOT on this project. Based on our review of the DEIS we have rated the DEIS "EC-2—Environmental Concerns-Insufficient Information" in accordance with EPA's national rating system, a description of which is attached to this letter. Please contact Timothy Timmermann (617-918-1025) of EPA's Office of Environmental Review with any comments or questions about this letter. 2

Sincerely,

for

Elizabeth A. Higgins, Director
Office of Environmental Review

Attachment

Summary of Rating Definitions and Follow-up Action

Environmental Impact of the Action

LO--Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC--Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO--Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1--Adequate
EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information
The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3--Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

Additional Detailed Comments
Spaulding Turnpike Improvements
Draft Environmental Impact Statement
Stafford and Rockingham Counties, New Hampshire

Wetland Issues

The New Hampshire Department of Transportation (NHDOT) plans to expand the Spaulding Turnpike (Turnpike) for 3.5 miles in Newington and Dover, New Hampshire from 2 lanes in each direction to 4 lanes. This expansion would also take place on Little Bay Bridges and several interchanges will be reconfigured. The total project would impact 23 acres of wetlands, 290 linear feet of stream, and 2.7 acre-feet of 100-year floodplain.

3

NHDOT and Corps staffs have done a good job of coordinating with the federal agencies on this project. We have had the chance to view the likely impact areas, nearby landscape, and some of the proposed mitigation sites. We understand the project purpose and we have reviewed the alternatives analysis, the impacts, and the proposed mitigation.

Wetland Resources in Project Area

The wetlands to be filled by the proposed project drain to several tributaries that flow into the Bellamy River, Piscataqua River, and Little Bay. The Piscataqua River then drains to the Atlantic Ocean. Having recognized the exceptional value of the estuary system, EPA and the State of New Hampshire have spent millions of dollars to protect the integrity of the watershed via the EPA sponsored National Estuary Program (NEP) and other related watershed protection programs.

4

Wetlands within the study area provide valuable wildlife habitat and function to maintain water quality. Much of the study area remains forested despite considerable nearby development. Most of the larger wetland / upland systems lie in Newington to the west of the Turnpike and a part of the former Pease Air Force base. More than 60% of the wetlands are forested, but important amounts of shrub/scrub and emergent wetlands are also present.

The applicant has identified and mapped vernal pools. However, it is difficult to match the potential vernal pools listed in Table 3.6.2 of the DEIS with those mapped on Figure 3.6.3. According to the DEIS no vernal pools will be directly impacted as a result of the project. However, it is less clear if indirect and secondary impacts to other vernal pools can be expected once the road is expanded. The FEIS should produce a map and label each of the pools (PVP 1, PVP2, etc.). If any of the productive vernal pools will be within 200' of the new paved area, indirect impacts should be documented, especially from road salt.

5

Alternatives

The 404(b)(1) guidelines generally prohibit the discharge of dredged or fill material if there is a practicable alternative to the discharge which is less environmentally damaging to the aquatic environment. 40 C.F.R. §230.10(a). An alternative is practicable if it is available and capable of being done in terms of cost, technology, and logistics in light of
6 the basic project purpose.

We have worked carefully with NHDOT over the last two years to develop a reasonable range of alternatives to be considered in the DEIS. We are satisfied with the effort NHDOT has made to avoid aquatic impacts and we believe that they have complied with the alternatives test required by the guidelines.

Aquatic Impacts

According to the DEIS, the project would result in the loss of 23 acres of wetlands and 290 linear feet of stream in an existing highway corridor where there has been historical land disturbance. Much of the existing highway alignment traverses wetland areas that
7 have already been degraded and fragmented by past land use activities. The proposed project would increase the extent of this fragmentation but the impacts would be far less when compared to the likely impacts of a new alignment through intact wetland/habitat areas. Consequently, EPA does not believe that the proposed project would cause or contribute to significant degradation of waters of the U.S., provided that an adequate compensatory mitigation plan can be developed (see discussion below).

The project will directly impact streams, flood storage, water quality, and wildlife habitat functions of the affected aquatic systems. The wider roadway (roughly double in width) would substantially increase barriers to wildlife movement and will indirectly impact additional aquatic resources by placing the road much closer to other unfragmented
8 wetlands. In particular, the proposed Exit 3 would extend 1000' off the Turnpike into one of highest quality unfragmented wetland/habitat blocks in the study area (near Railway Brook). Salt laden stormwater runoff and other non-point source pollution impacts will likely degrade aquatic systems that are currently buffered by distance from the existing roadway.

Secondary impacts are also a concern. The DEIS discussion of secondary impacts is informative and it predicts that approximately 1,865 new people will move to the area due to the project—resulting in 408 acres of additional development—with 44 of these developed acres being wetland. However, we believe that several assumptions have been made in the analysis of secondary wetland impacts that will likely underestimate overall impacts. First the DEIS assumes a modest land consumption rate per person, when recent
9 trends lead us to believe that larger land consumption rates (see discussion in secondary and cumulative impacts which follow) are appropriate. Second, the analysis assumes that National Wetland Inventory (NWI) maps would provide the base map for wetlands in the
10 area. NWI maps can underestimate the actual wetlands percent on the ground by 25%.

10 Absent field data, NWI map information combined with soils maps provides a more complete basis for determining wetland limits.

11 The document states that all wetlands in New Hampshire are protected under state and federal laws and that future projects (those that will cause secondary impacts) will provide the necessary mitigation. In addition to illegal fills that may occur, we note that mitigation is often not required under existing laws for smaller wetland impacts in New Hampshire. Moreover, wetland regulatory programs at the state and federal levels are not well suited to track and consider cumulative impacts and fragmentation effects from smaller projects—making it increasingly difficult to pursue appropriate mitigation for impacts realized in the future. Thus, likely future development from this project remains a concern.

Mitigation

12 The proposed mitigation plan consists of the following:

(1) Improving up to 2,700 linear feet of Railway Brook

(2) Preservation of the following properties:

a) Watson (35 acres)
b) Tuttle Farm (part of a 120 acre protection effort)
c) Blackwater Brook (30 – 40 acres)

Overall the NH DOT and its consultants have spent a good deal of time with the agencies on the selection of possible mitigation sites. All of the sites listed above have potential. Also, two alternative sites (Knight Brook and Bellamy River) appear promising. We offer the following thoughts and suggestions on the mitigation plan presented in the DEIS:

13 1) The DEIS states that Railway Brook was the best restoration option available, but it does not provide a full accounting of the list of potential restoration options and why other options were rejected. We believe that the mitigation package should include more restoration. However, we do not want NHDOT to pursue restoration projects that would have little long-term ecological value. EPA encourages NHDOT/FHWA to identify additional restoration opportunities and discuss them in the FEIS. If this proves impractical, that should be explained as well. EPA is willing to assist in that effort.

14 2) The Railway Brook enhancement/restoration proposal offers a range of issues that should be more fully discussed. On the positive side existing concrete structures could be removed from the brook and some limited curves could be added to the stream. Unfortunately, even with these changes, much of the remaining brook (downstream from the restoration) will remain straight and adjacent to developed areas before it reaches the estuary. We encourage NHDOT to continue to work with the Corps, EPA and Fish and Wildlife Service to determine if this segmented stream restoration effort is wise

14 ecological investment. If it is, the FEIS should provide additional information to document that finding and to explain the size of the necessary restoration easement and who will be responsible for the restoration over the long-term.

15 3) We support NHDOT's efforts to work with conservation groups to help protect the Tuttle Farm (120 acres). This farm contains extensive wetlands and key tributary to the Bellamy River, and protection is a very high priority to the Town of Dover. The FEIS should explain whether NHDOT will provide the necessary financial support to protect this area. If NHDOT will be not be the sole contributor, the FEIS should explain how much will they contribute toward conservation of the parcel.

16 4) While we agree that the loss of 2.7 acre-feet of 100-year floodplain would not be a large impact, efforts should be made to explore mitigation options to replace the floodplain loss. If a site is not found, the FEIS should document the search process.

17 5) EPA expects to offer refined comments on the mitigation package/proposal for the project once additional information is provided in response to our comments above. We stand ready to participate in interagency discussions regarding mitigation as appropriate in the future.

Secondary and Cumulative Impacts

18 As you know, EPA and other natural resource agencies commented on the scope of work for the socio-economic analysis prepared for the DEIS, as well as on an early draft of the results. We appreciate having had the opportunity to coordinate with NHDOT and FHWA on this important analysis. Most of the issues and concerns that we raised to date have been answered in the DEIS. We do, however, have some remaining comments that can be found below.

19 In the comments we submitted in November 2005 on the draft socio-economic report, we recommended that the DEIS include a discussion of the major factors that can influence locational decisions of residents, since the method used to forecast population and employment changes (the REMI model) focuses on projecting changes in businesses, with the assumption that these business changes influence where people live. Certainly changes in businesses have a large influence on population (and vice versa), but there are additional factors that influence where people decide to live, such as cost of housing, quality of schools, and general quality of life. We recognize that all models are limited in what can be forecast quantitatively, and although the REMI model cannot numerically incorporate factors such as these, we recommend that the FEIS include a broader *qualitative* discussion of such factors and how they might interact with shorter commuting times along this stretch of roadway. The time savings, particularly in the 8-lane alternative, are significant, and in combination with these quality of life factors may influence the ultimate results of where people decide to live. The DEIS mentions some of these other factors in passing, but they merit some discussion, at least qualitatively.

Although we reviewed a draft of the socio-economic report earlier, this is the first time that we have seen the analysis of the environmental impacts of changes in population and employment. We believe the general approach taken in the DEIS is reasonable, but we question whether the most appropriate land consumption rate is used in the calculations of additional land that will be developed by 2025 under an 8-lane alternative. The confidence levels in the regression analyses shown in Exhibits 4.3-5 and 4.3-6 are not very high, which raises the question of whether a straight line regression best fits the data. That is, we question whether .23 acres of land consumed per capita in Strafford County and .19 acres of land consumed per capita for Rockingham County are the appropriate rates on which to base the calculations. Using a different approach, Table 4.3-5 suggests historic land consumption rates of either .42 acres per capita for the 2-county region (total amount of developed land in the two counties divided by total population) or .64 acres per capita (average rate across the 34 communities). (These calculations also could be done for each county rather than a 2-county region.) We recommend examining the issue of what historic rate to use in the FEIS.

20 In addition, we are concerned whether it makes sense to only use what amounts to a historic average, and believe it would be more appropriate to use recent rates of land consumption per person. Almost all recent studies in New Hampshire and elsewhere have shown that the amount of land consumed per capita has risen far more rapidly than population growth, with most new residential development taking place on larger lots, and much new commercial development on large sites with significant amounts of parking. One relevant study by the Rockingham Planning Commission in 2000 in which they found that development between 1975 and 1982 was consuming more than 1.5 acres per person, as compared with less than .5 acres per person prior to 1953. We recognize that recent land consumptive patterns of development may not necessarily be predictive of the future if towns adopt smart growth policies that encourage compact, pedestrian-friendly development. Nevertheless, we recommend that the FEIS present the results of an analysis that is based on recent land consumption rates. This could either be in addition to or in place of an analysis based on historic rates (see comments above on the appropriate historic rate to use). This analysis could be accomplished by comparing the most recent land cover dataset (which is what was used in the DEIS) with a prior land cover dataset (e.g., from 10-15 years earlier). This would provide an upper bound for how much land might be developed in the future, assuming the land consumption rate doesn't continue to increase.

21 We also note that the impacts to wetlands from future growth may be greater than predicted since threats come not only from direct, permitted filling, as described in the DEIS, but also from illegal, unpermitted filling and from indirect impacts. One example of an indirect impact is stormwater runoff from nearby development that may degrade wetlands and impair their functions and values. As mentioned in our wetlands comments above, we recommend that the FEIS include a caveat that wetlands can be impacted by more than direct, permitted filling.

Air Quality

Construction Impacts

The NHDOT does not commit to either diesel retrofits or the use of low sulfur fuel as mitigation as EPA has requested in our scoping comments of April 5, 2004 and in our February 11, 2005 comments on the Rationale Report for the project.

Instead, the DEIS indicates that both of these measures will be considered through the "final design process with input from the contracting community at large." (DEIS page 4-135)

22

In light of the proven air quality and health benefits derived from the use of retrofit pollution control equipment and low-sulfur diesel fuel, EPA continues to strongly encourage NHDOT to require the use of retrofits and low sulfur fuels through the project's construction contract specifications. Retrofit pollution controls such as oxidation catalysts or particulate filters installed on the exhaust of the diesel engine equipment would reduce particulate matter, hydrocarbon and carbon monoxide emissions on this roadway project as well as on any future construction project where this equipment was used.

Modeling

The MOBILE6.2 modeling for the DEIS (described in Appendix H – Air Quality Technical Information – MOBILE6.2 Input Files) uses an incorrect Reid Vapor Pressure (RVP) value of 6.8 (the summertime gasoline modeling factor) for the winter carbon monoxide modeling runs resulting in a slight under prediction of the actual carbon

23

monoxide emission factors. The correct winter RVP value is 13.0. EPA believes that correcting the RVP will not change the overall conclusion of the microscale carbon monoxide analysis. Therefore, at this time EPA does not require the existing microscale air quality analysis to be corrected unless there is some other reason for re-doing the analyses. Any future emission factor modeling must use the correct RVP value.

Response to Comments Made by
Elizabeth Higgins, Director, Office of Environmental Review
U.S. Environmental Protection Agency, Region 1 –
1 Congress Street, Suite 1100, Boston, MA 02114-2023
Letter dated October 2, 2006

1. The NHDOT and FHWA appreciate USEPA's recognition of the effort undertaken to coordinate with the USEPA and other federal agencies during the development of the EIS.

2. While the NHDOT and FHWA are disappointed in USEPA's EC-2 rating, we hope that the responses below and in the Final EIS will allow the USEPA to find the Final EIS as satisfying your agency's concerns. As noted in comment #1, there has been extensive coordination with USEPA related to the identification of alternatives, efforts to minimize impacts and develop of a mitigation plan for impacts associated with this project.

3. The NHDOT and FHWA appreciate USEPA's acknowledgement of the coordinating efforts expended on this project. Several field reviews and meetings were held to review all the potential mitigation sites and USEPA along with other natural resource agencies (both federal and state) were invited to participate.

4. So noted.

5. Potential vernal pools (PVPs) are more clearly identified in Figure 3.6-3 of the Final EIS to allow USEPA to match that figure with Table 3.6-2. To clarify, there will be no direct impacts to active vernal pools, nor will there be any indirect impacts (using the 200 ft. setback suggested in USEPA's comment).

   Although eight potential vernal pools were identified within the Study Area as described in the EIS, only two of these areas meet the NHF&GD vernal pool criteria (Vernal Pool 4 and Vernal Pool 8). None of the other six potential vernal pools meet these criteria, because no indicator species or evidence of indicator species (*i.e.*, egg masses, calls) were observed during field verification upon multiple field investigations. Further description of these potential vernal pools can be found in the EIS document.

   Vernal Pool 4 is located just west of the Newington Branch of the Guilford Railroad and approximately 1,600 feet north of Patterson Lane. Vernal Pool 8 is located approximately 200 feet west of Arboretum Drive and approximately 1,800 feet south of the existing Exit 3 interchange. Neither Vernal Pool 4 nor Vernal Pool 8 is located in the vicinity of proposed work. Vernal Pool 4 and Vernal Pool 8 are more than 2,000 feet and 800 feet, respectively, from any highway construction. Therefore, it is expected that there will be no direct or indirect impacts to these resources, thus no mitigation will be necessary.

6. NHDOT and FHWA acknowledge USEPA's finding that the Draft EIS considered a reasonable range of alternatives and that the alternatives test as required by the 404(b)(1) guidelines has been met.

7. NHDOT and FHWA agree with the USEPA's finding that the project would not cause or contribute to the significant degradation of waters of the US, and have developed a mitigation plan that has been determined to be acceptable to USEPA and other state and federal resource agencies involved in planning and reviewing the proposed project. NHDOT and FHWA believe that there is consensus among the resource agencies for the final proposed mitigation package, which is outlined in the Final EIS.

   To clarify, the Spaulding Turnpike Improvements will cause a loss of an estimated 20.4 acres of tidal and freshwater wetlands. The mitigation package, as has become common practice in New Hampshire, also proposes to compensate for approximately 2.4 acres of wetland impact associated with other smaller highway projects within the region. A table outlining these impacts is included in the EIS as Table 4.6-2.

8. USEPA's comment that the Proposed Action would roughly double the width of the Turnpike and substantially increase barriers to wildlife movement, as well as indirectly impact additional unfragmented wetlands is not entirely accurate. South of Exit 3 and north of Exit 6, the Turnpike is proposed to be widened from four lanes to six lanes. Between Exits 3 and 6 (less than a 2-mile section), the Turnpike is proposed to be widened from four lanes to eight lanes. However, as shown in Figure 2.3-1 of the EIS, the width of Turnpike in the Exit 5 area is approximately 100 feet wide. The corresponding pavement width under the 8-lane Alternative will be approximately 142 to 146 feet in width. Further, as documented in the EIS (Table 2.5-5), the difference between a 6-lane and 8-lane footprint is relatively minor with regard to the environmental impacts (typically less than 5 percent). For example, wetland impacts will be approximately 20.4 acres as a result of the 8-lane alternative in comparison to 19.7 acres (3.5 percent difference) under the 6-lane alternative. Wildlife/impacts to unfragmented lands range between approximately 9.0 acres (8-lane) and 8.7 acres (6-lane), or 3.4 percent difference. Groundwater impacts range between approximately 15.2 acres (8-lane) and 14.6 acres (6-lane), or 4.1 percent. Noise and right-of-way impacts would be relatively the same. The relatively small difference in impacts is primarily due to the fact that the cross-sectional width for a 6-lane highway is nearly as wide as the 8-lane highway and the 6-lane highway would need extensive acceleration/deceleration lanes at the closely spaced interchanges.

   NHDOT and FHWA recognize that impacts to natural resources would result from the proposed reconfiguration of Exit 3 in Newington, but believe that these impacts must be viewed relative to the overall habitat quality of the area. That is, while these impacts may be relatively greater than other project-related impacts, it must be recognized that the wildlife and aquatic resources impacted by this project are of low to moderate value when viewed alongside other habitats in the seacoast region. Impacts to the large wetland associated with the Exit 3 interchange have been minimized by all means practicable, and further measures to reduce impacts will be an important part of the final design effort.

   Additionally, the project mitigation plan proposes to restore Railway Brook in this area, which will mitigate these impacts. This restoration effort would reconnect the stream to its floodplain, and would substantially improve the hydrologic and biologic function of Railway Brook as well as enhance/expand an adjacent existing wetland system. A variety of natural

rock/boulder structures would be incorporated to ensure long term stability of the proposed channel as well as creation and maintenance of aquatic habitat features. Details of this restoration effort are provided in Section 4.6 of the Final EIS.

With regard to the USEPA's concerns about water quality impacts to aquatic resources, it should be noted that the Selected Alternative will incorporate BMPs for water quality treatment within the highway drainage system, where presently minimal treatment exists. The anticipated pollutant removal efficiency for grassed swales and extended detention basins designed for water quality treatment can generally range between 20 and 80 percent depending on the type of pollutant and the various features included in the BMP design. Advances in the design of stormwater BMPs are occurring rapidly as this issue comes to the forefront. Thus, it is expected that additional stormwater treatment would greatly reduce and potentially offset any increased pollutant loading associated with the increased roadway area.

With regard to USEPA's comment regarding salt impacts on the aquatic resources adjacent to the proposed Exit 3 interchange, it is important to note that there are no stream resources directly impacted in this area. And, of the streams that are crossed by the project, none are impaired by chloride. Potential water quality impacts will be minimized by appropriate measures during final design, including directing the majority of the runoff from Exit 3 to the in-field area where it should infiltrate. Additionally, we note that the project mitigation package includes a substantial restoration effort at Railway Brook, with the intent of providing a net benefit to aquatic resources in this area.

9. In response to the USEPA's concerns regarding the land consumption rate, a new analysis of historical land cover classification data was undertaken to better understand trends in the relationship between population growth and land development in the socio-economic study area. Section 4.3.3 of the Final EIS contains this additional information, which supports the approach used in the Draft EIS to estimate secondary growth impacts. Additional information on this issue is provided in Response #20.

10. NHDOT and FHWA acknowledge that the National Wetlands Inventory (NWI) may underestimate the amount of jurisdictional wetland on the landscape. Based on this comment, as well as comments from the Rockingham Planning Commission, a new wetlands dataset was examined, and the estimated amount of wetlands in the study area was revised to include hydric soils data and more refined wetlands mapping from the NHF&GD Wildlife Action Plan (2007). With this change, NHDOT and FHWA feel that the approach used to estimate the potential natural resource impact resulting from secondary growth is extremely conservative (basic assumption that future development will occur in a "spatially random" pattern regardless of the occurrence of environmental resources) and likely substantially overstates the actual amount of potential future wetland loss due to the project.

11. NHDOT and FHWA agree that in addition to permitted filling of wetlands, illegal fills, as well as fills into smaller wetlands where mitigation is often not required, may result. However, as reported in the EIS, the socio-economic study area is expected to grow to 275,029 people by 2025 for the No-Build condition. The area is projected to grow to 276,894 people by 2025 with the Selected Alternative implemented. This results in an

increase in the future population of approximately 1,865 people, or approximately 0.68%, attributed to the Selected Alternative. Although USEPA notes that future development from this project remains a concern, the NHDOT and FHWA believe that the large majority of future development is attributed to economic and social factors well outside the project's influence.

12. So noted. NHDOT and FHWA appreciate USEPA's recognition of the coordination efforts expended during the development of the proposed mitigation package.

13. The NHDOT and FHWA agree that restoration is perhaps the most cost-effective and ecologically meaningful mitigation strategy, which is why the Railway Brook component of the mitigation package was retained even though some resource agency personnel had recommended abandoning this measure in favor of additional land protection. During development of the mitigation package, the NHDOT, FHWA and their consultants conducted a review of published materials, maps and reports and contacted numerous persons and agencies familiar with restoration on the seacoast. Informational sources included:

- *Freshwater Wetland Mitigation Inventory for Nineteen Coastal Communities,* (New Hampshire Estuaries Project, September 2003)
- *Evaluation of Restorable Salt Marshes in New Hampshire,* (Natural Resource Conservation Service, October 1994, Reissued October 2001)
- *Pease International Tradeport: Development Plan Update*, (Vanasse Hangen Brustlin, Inc., et al., June 1995, Revised September 1995)
- *Coarse Filter Analysis of Potentially Significant Wildlife Habitat*, GIS data, (New Hampshire Fish & Game Department, 2005)
- Historical Aerial Photographs and USGS Topographic Maps (University of New Hampshire)
- Discussion with impacted municipalities (Newington and Dover Conservation Commissions)
- Discussions with non-profit land protection specialists such as the Nature Conservancy and local land trusts
- Resource Agency review and commentary (NHDES, NHF&G, USACOE, USFWS, USEPA)

Review of these data sources and consultations generated a long list of potential mitigation sites as reported to the resource agencies in a memo from the NHDOT's and FHWA's consultant in November, 2005. Each was visited in the field in order to gain information on resources present and the current conditions of the sites. The following potential restoration sites were evaluated:

- Unnamed Coastal Ponds, near Sprague Property, Newington
- Hodgson Brook, Portsmouth
- Stubbs Pond, Newington
- Varney Brook, Invasive Species Removal, Dover
- Varney Brook, Fish Passage (Culvert Modification), Dover
- Flagstone Brook Restoration, Newington

- Drive-in Theater, Upland Habitat Restoration, Newington
- McIntyre Brook Restoration, Newington
- Paul Brook, Newington
- Unnamed Perennial Stream, Newington

Each of the potential creation/restoration sites was ranked using the following criteria determine their suitability:

- Restoration sites are preferred to creation sites;
- The site must have a suitable geomorphic setting;
- The restoration/creation must not conflict with existing infrastructure or private properties;
- Preference should be given to restoration/creation sites that would involve only one or a small set of land owners;
- For restoration, the impairments to the system to be restored should be clearly understood and should be of relatively recent origin; and
- The site should be related to the wetland systems impacted by the project.

During prioritization, it was determined that the highly altered Railway Brook and the drive-in theater properties would be the most suitable for restoration in Newington. Feedback (lack of support from the resource agencies and local officials) prior to and during the public hearing process led the NHDOT and FHWA to the decision to abandon the Drive-in Theater property as a potential restoration site. In Dover, only two small potential restoration sites (both on Varney Brook) were identified, but neither was considered a strong candidate.

It is important to note that this information was previously provided to all resource agencies by way of a technical memorandum dated November 1, 2005, and was discussed prior to and following this memorandum. The discussion of the evaluation of restoration opportunities in the region is updated in Section 4.6.5 of the Final EIS.

14. Since publication of the Draft EIS, the NHDOT and FHWA and their consultants have continued to develop the conceptual plans for the restoration of Railway Brook. As discussed during a meeting with the resource agencies on March 21, 2007, where concurrence on the mitigation components was reached, the NHDOT and FHWA are proposing to move forward with "Restoration Alternative A" as documented in the Draft EIS and in previous written materials submitted to the resource agencies. The NHDOT and FHWA believe that the evaluation of restoration opportunities in the region was thorough and that the Railway Brook project will result in substantial environmental benefits. The EIS has also been updated to include the size of the preservation easement (and interest holders) that will be procured to protect the Railway Brook restoration area in perpetuity.

15. The NHDOT and FHWA acknowledge and appreciate the USEPA's support for the preservation of the Tuttle Farm. In response to the property owner's request, the NHDOT and FHWA, in partnership with the City of Dover, expedited the acquisition of a conservation easement on the Tuttle Farmstead to permanently preserve the 120-acre farm. The preservation was finalized on January 29, 2007 with the conservation easements

executed and property rights on 109.1 acres transferred to the City, the NHDOT, and Strafford Rivers Conservancy (SRC). A second conservation easement on 11.0 acres was secured on September 14, 2006 through the Farm and Ranch Land Protection Program with the easement rights held by the City, SPR and US Department of Agriculture (USDA).

16. Floodplain impacts were evaluated during development of the project and are documented in the DEIS and Final EIS. The Selected Alternative would affect a total of 3.9 acre-feet of 100-year floodplain volume. The majority of this impact (2.7 acre-feet) is associated with the expansion of the bridge piers.

    The floodplain impacts are considered inconsequential in the context of the tremendous volume of Little Bay and will have a negligible effect on the base flood elevations in the area. Likewise, changes to the hydraulic characteristics in the channel would have negligible effects on tidal flooding.

    A hydrodynamic model was built to analyze the potential effects of the project on the estuary and provided information on tidal heights throughout the estuary. The model compared the existing condition with the Selected Alternative and predicted that the pier extensions may change tidal maxima on the order of 0.1 to 0.2 inches, depending on the tidal condition and the location in the estuary. Similarly, current velocities and directions are expected to change only minimally. Thus, effects on local and regional flooding resulting from the additional fill in the Little Bay are considered to be negligible.

    The NHDOT and FHWA have and will continue to coordinate the project with both Dover and Newington and will seek to further minimize floodplain impacts during the project's final design, to the extent practicable.

17. The NHDOT and FHWA discussed the components of the proposed mitigation package with the natural resource agencies including a representative from the USEPA at a meeting on March 21, 2007. The main objective of the meeting was to present the recommended components of the mitigation package and gather final comments from the resource agencies prior to finalizing the FEIS. Meeting participants agreed that the overall mitigation plan is acceptable. In addition, the mitigation package is reflective of the feedback received from all of the state and federal natural resources agencies throughout the NEPA process. Additionally, public comment at the Joint Public Hearing conducted with USACOE and NHDES supported the proposed mitigation.

18. The NHDOT and FHWA appreciate the USEPA's participation in developing and commenting on the analysis of secondary and cumulative effects.

19. The Regional Economic Model, Inc. (REMI) used in this analysis is not a business model. As discussed in Section 4.3.3.2 of the EIS, REMI Policy Insight is an interactive policy model that is used to project economic and demographic changes related to potential policy change or public investment. A key element of the model is the concept of economic geography that is used to evaluate policy variables such as highway infrastructure

investments. In addition to a wide variety of economic impacts, the model also projects numerous social impacts such as:

- Population Changes
- Employment by Occupation
- Migration
- Wages and Salaries
- Values of Imports and Exports
- Labor Force Participation
- Income
- Unemployment Rates

It is recognized, as noted in the comment, that a number of factors "such as cost of housing, quality of schools and general quality of life" influence where people live. A great deal of discussion was included in the "Revised Draft of the Socio-Economic Baseline Conditions Technical Report for the Newington-Dover, Spaulding Turnpike Widening Project" (August 1, 2004) that addressed a variety of housing indicators including:

- Past housing growth by communities within the region
- Housing characteristics
- Residential construction trends (not included in the DEIS)
- Housing price trends (not included in the DEIS)
- Property values (not included in the DEIS)
- Commuting patterns (not included in the DEIS)

While a descriptive narrative of various qualitative factors might be informative, the procedure for linking this type of subjective form of analysis to the project has unique limitations. For example, there are no generally accepted criteria for the evaluation of individual school systems within the 33-community socio-economic study area. This issue becomes even more problematic for school districts that involve more than one community, or communities that operate a primary school system, but send children to neighboring communities for secondary education. Similarly, attempts to develop objective measures of quality of life are extremely difficult. It is not clear what characteristics are the most important in preparing this type of evaluation – *e.g.*, natural resources, cultural activities, sense of community, recreation alternatives. While all of these factors may play a role in location and employment decisions by individuals, linking this type of qualitative analysis to travel time and congestion was determined to be impractical and speculative. Once again, as noted in the EIS, a key factor that results in the congestion of the Little Bay Bridges is primarily due to economic and social factors relating to business and residential locations within the study area that then influence the commuting patterns outlined in the EIS.

20. This comment expresses USEPA's concern that the methodology used to develop land consumption rates, and therefore estimates of secondary impacts on natural resources, may result in an underestimation of these effects. However, NHDOT and FHWA continue to believe that the methodology is appropriate and provides conservative results, which likely over-estimates the effects of the impacts.

First, it is important to note that nearly all of the growth in the study area is expected to occur regardless of whether the Turnpike is improved or not. Growth is expected to occur, even without the project, in response to other influences (such as the cost of housing) involving the overall quality of life conditions and continued economic prosperity found in New Hampshire. In addition, it is not clear whether the additional growth that has been identified by the REMI model, and the associated land conversion, is growth that otherwise would not occur, or growth that would simply occur later in time if the project were not completed.

In response to USEPA's comment that the *"confidence levels"* associated with the regression analysis "are not very high", the regressions reported a *correlation coefficient*, which is a measure of the strength of the relationship between two variables. A *confidence level* or *statistical significance,* on the other hand, is an expression of the uncertainty involved in a statistical relationship and can be thought of as the amount of evidence or support for the relationship in the dataset. Having said that, the correlation coefficients presented in the DEIS are considered quite high, given the number of factors involved in determining land consumption rates. However, a variety of regression types were, in fact, performed during the development of the analysis presented in the Draft EIS. In addition to the linear regression reported in Exhibits 4.3-5 and 4.3-6 of the Draft EIS (now Exhibits 4.3-7 and 4.3-8 of the Final EIS), a number of other regression forms were also examined (*e.g.,* polynomial, exponential, logarithmic). It was determined that a simple linear regression provided the best fit to the data, with statistical significance ("confidence") levels exceeding 90% for both the Strafford and Rockingham County data.

The regression methodology is preferred over the approach of calculating a simple rate. Regression has the advantage that it accounts for the fact that the communities in the study area range from very urbanized to very rural, have varying degrees of commercial and industrial development, and have grown at different rates. For example, Portsmouth has developed at a much different rate than Newington and New Castle. Similarly, Rochester and Dover have grown differently than Middleton or New Durham and the regression approach accounts for these variances.

In response to USEPA's concerns regarding the land consumption rate, a new analysis of historical land cover classification data was undertaken to better understand trends in the relationship between population growth and land development in the socio-economic study area. Section 4.3.3 of the Final EIS contains this additional information, which supports the approach used in the Draft EIS to estimate secondary growth impacts. A new Table 4.3-6 was added to the FEIS to identify the historical land consumption trends. Data from 1962, 1974 and 1998 was examined to estimate the land consumption rates in each of these years. Incremental rates, representing the periods from 1962 to 1974 and 1974 to 1998, were also calculated. These new data do not support the conclusion that land consumption rates have increased in Rockingham and Strafford counties. Further discussion of this analysis is presented in detail in Section 4.3.3.3 of the Final EIS.

21. NHDOT and FHWA recognize that some amount of wetland is lost each year to unpermitted (illegal) fills. However, the analysis presented in the EIS takes this element into account.

The EIS cites the NH Wetlands Bureau data on permitted impacts simply as a check on the predictions developed by the methodology. Note that the methodology predicts a wetland impact rate that is almost three times the amount of documented wetland impacts.

22. The NHDOT and FHWA will require the contractors involved with the reconstruction of the Spaulding Turnpike to include air pollution control devices on heavy diesel construction equipment in accordance with applicable state and federal laws at the time of construction. The merits and practicality of more stringent specification measures will be considered, possibly through a voluntary incentive program, during the final design process and discussed with the contracting community at large.

23. The Reid Vapor Pressure (RVP) and corresponding mobile file were obtained from the NHDES *via* email correspondence in January 2004. The RVP in the mobile file obtained was set at 6.8 for the winter condition. We agree with USEPA that this value should be 13.0 and any future modeling will use an RVP of 13.0. However, we also agree that changing the RVP value will not affect the DEIS conclusions.

51

Christopher Waszczuk

From: Marc Laurin
Sent: Wednesday, October 04, 2006 7:51 AM
To: Christopher Waszczuk
Cc: Bill O'Donnell (E-mail); Gino Infascelli (E-mail)
Subject: FW: Spaulding Turnpike - DEIS comments

Comments on the Newington-Dover DEIS from the ACOE
-----Original Message-----
From: Roach, Richard A NAE [mailto:Richard.A.Roach@nae02.usace.army.mil]
Sent: Tuesday, October 03, 2006 8:52 AM
To: Marc Laurin
Subject: FW: Spaulding Turnpike - DEIS comments

From: Rogers, Catherine J NAE
Sent: Monday, October 02, 2006 3:31 PM
To: Roach, Richard A NAE
Cc: Rogers, Catherine J NAE
Subject: Spaulding Turnpike - DEIS comments

Rich,

Please find below my comments on the Draft EIS for the Spaulding Turnpike Improvements.

General Comments:

1) Although the DEIS includes a list of current and proposed projects in the Cumulative Impacts Section, there is no conclusion or analysis of the projects' cumulative impacts on the environment.

2) Section 4.6.5.4 - The DEIS states that a more detailed mitigation plan will be available in the FEIS. The amount of wetlands to be created and/or restored and their functions should be included in those details as well as the details on the preservation properties and how they meet the goals of the mitigation plan.

3) Section 4.10.7, last sentence - A description of the proposed mitigation if the sampling and testing plan shows the potential for significant contaminant release should be provided.

Editorial Comments:

4) Section 3.10.1, last sentence - delete the word "dredge". Section 404 of the Clean Water Act authorizes the Corps to regulate the discharge of dredged or fill material into all waters of the United States.

5) The last paragraph of Section 2.5.5.1 states that further consideration of the 6-lane option is not warranted yet the following section 2.5.6 states that the six or eight lane highway alternatives were evaluated in more detail.

Thanks,
Catherine J. Rogers
Environmental Resources Section
U.S. Army Corps of Engineers
696 Virginia Road
Concord, MA 01742
Phone - (978) 318-8231; Fax - (978) 318-8560
catherine.j.rogers@usace.army.mil

Response to Comments Made by
Catherine Rogers, Environmental Resources Section
U.S. Army Corps of Engineers
696 Virginia Road, Concord, MA 01742
Letter dated October 2, 2006

1. Section 4.3 of the Final EIS has been reorganized and updated to better address the issue of cumulative effects.

2. The mitigation plan has been developed in consultation with the Mr. Richard Roach of the USACOE, as well as other state and federal resource agency personnel. Based on discussions among the resource agencies on March 21, 2007, it appears that a consensus has emerged in favor of the NHDOT's and FHWA's preferred mitigation package, which is detailed in Section 4.6.5 of the Final EIS.

3. The NHDOT and FHWA recognize the risk posed by the suspension of potentially contaminated marine sediments and intend to develop a sediment sampling and characterization program in consultation with the NHDES, the USACOE and other agencies. This sampling would typically occur in conjunction with the geotechnical investigations during the final design phase. Even if the sediments are determined to not pose a contamination risk, stringent requirements will be incorporated into the final design plans to require the selected contractor to minimize any movement of sediment beyond the work area. It is anticipated that all work on the bridge piers will be conducted behind sealed cofferdams, which will substantially limit the movement of suspended sediments. The NHDOT and FHWA will conduct regular inspections of the measures designed to minimize this risk. Additional measures will be developed if contaminants in the marine sediments exceed NOAA thresholds for ecological or human health risk (also see Figure 4.10-16). These requirements are typically a condition of the USACOE and NHDES Wetlands Bureau permits, as well as part of the 401 Water Quality Certificate that will be required for the project.

4. & 5. The suggested editorial revisions have been made to clarify the Final EIS.

54

O'Donnell, William F

From: Mike Johnson [Mike.R.Johnson@noaa.gov]
Sent: Tuesday, November 21, 2006 2:10 PM
To: Mike Johnson
Cc: O'Donnell, William F; CWaszczuk@dot.state.nh.us; Chiarella, Lou ; Scott, Marcy
Subject: Re: Newington-Dover, Spaulding Turnpike, DEIS
Attachments: Mike.R.Johnson.vcf

Bill,

1 As per our telephone conversation today, a shortage of manpower at our regional office in Gloucester precludes us from providing detailed comments. However, my quick review of the EFH Assessment today supports my previous determination that the proposed widening of the Spaulding Turnpike should have only minimal impact to subtidal and intertidal habitats within the Piscataqua River. The EFH Assessment for the proposed project was very thorough and comprehensive regarding potential effects to EFH from the action. NMFS concurs with the assessment in the DEIS and EFH Assessment that, because of the highly dynamic current and tide conditions at the project site, there should be minimal adverse effects to benthic fauna and flora and EFH. While some suspended sediment plumes will be created during construction, the tidal current regime should preclude any permanent impacts to EFH.

Please let me know if you have any questions.

Thanks,

Mike

Mike Johnson wrote:

> Bill,
>
> Due to a shortage in manpower at this time, NMFS will not be providing comments on the DEIS for the Spaulding Turnpike project. Thank you for your consideration about our comments.
>
> Thanks,
>
> Mike
>
> O'Donnell, William F wrote:
>
> > Mike: The Federal Register noted the deadline for comments as Oct 2, 2006, that was why I was contacting you. I knew you had a strong interest in the project area and wanted to make sure we addressed your concerns. So if you or Marcy are going to submit comments, please do so soon.
> >
> > **From:** Mike Johnson [mailto:Mike.R.Johnson@noaa.gov]

Sent: Thursday, October 26, 2006 9:06 AM
To: O'Donnell, William F
Cc: Scott, Marcy
Subject: Re: Newington-Dover, Spaulding Turnpike, DEIS

Bill,

Marcy Scott, here in Gloucester, will be assuming responsibilities for NH projects and I have asked her to review the EIS. What is the due date for comments on this?

Mike

O'Donnell, William F wrote:
Mike,

Did you folks have any comments on the subject DEIS that we distributed in early August?

Response to Comments Made by
Michael R. Johnson, National Marine Fisheries Service
Northeast Region Office
1 Blackburn Drive, Gloucester, MA 01930-2298
Letter dated November 21, 2006

1. So noted. The NHDOT and FHWA appreciate NMFS concurrence with the findings of the DEIS and EFH Assessment that there should be minimal adverse effects to benthic flora and fauna and that there would be no permanent impacts to EFH.

U.S. Department of Homeland Security
United States Coast Guard

Commander
First Coast Guard District

408 Atlantic Avenue
Boston, MA 02110-3350
Staff Symbol: dpb
Phone: (617) 223-8364
Fax: (617) 223-8026
Email: john.w.mcdonald@uscg.mil

55

16594
Little Bay/0.1H/NH
November 30, 2006

Mr. Marc G. Laurin
Senior Environmental Manager
New Hampshire Department of Transportation
7 Hazen Drive
P.O. Box 483
Concord, NH 03302-0483

Dear Mr. Laurin:

This letter is in regard to the Draft Environmental Impact Statement for the Newington-Dover 112238 NHS-027-1(37) Spaulding Turnpike improvements project dated July 2006.

1 At this time we see no adverse impacts on present navigation resulting from the proposed bridge project. We do suggest, however, that present and future uses of the waterway and the project's impacts be addressed in the environmental documentation. We may have future comments should new information be brought to our attention and once the bridge design and construction methodology are clear.

2 Construction impact on navigation is the predominant issue of concern to the Coast Guard. I have attached a copy of our standard construction requirements as enclosure (1) entitled "**General Construction Requirements.**" All stipulations in enclosure (1) must be followed in their entirety for all work on, over, or affecting the waterway in any manner. We suggest these conditions be included in the contract requirements when the project is opened up for construction bids.

3 Over the past several years we have advised NHDOT that the abandoned General Sullivan Bridge should be removed as it no longer served a transportation purpose. However, it still remains. The present plan is to rebuild that structure for new uses. A clear and reasonable rationale must be presented for retaining or rebuilding the structure. The bridge permit application to be submitted to this office must address the need to retain or rebuild the General Sullivan Bridge and, if the old bridge is to be removed, should include complete removal of all parts not utilized in the new structure.

4 Keep in mind that our normal permit process takes between nine months and one year and includes a formal public review process. You should anticipate that many of the issues raised during the EIS process will resurface during our public notice phase and must be addressed again in our permit process. Depending upon how far along the design phase has progressed we suggest a meeting to review the Coast Guard's bridge permit procedures. Please contact Mr. John McDonald at our Boston office at 617 223-8364 to discuss appropriate timing of such a meeting.

Please contact me at (212) 668-7021 if you have any questions.

Sincerely,

Gary Kassof
Bridge Program Manager
First Coast Guard District
By direction of the District Commander

Encl: 1) Construction requirements

Copy: CG Sector Northern New England-Waterway Management
FHWA, NH Division, Att: Bill O'Donnell

U.S. Coast Guard Bridge Administration

GENERAL CONSTRUCTION REQUIREMENTS

1. All bridge closures, or bridge operating schedule changes, must be requested in writing, 60 days in advance, from the First Coast Guard District Bridge Branch Office. No channel restrictions, or vertical clearance reductions may be made without written approval from the above office. Waterway closures or safety zones must also be requested 60 days in advance.

2. All submissions to the Coast Guard for review and approval must first be approved by the *owner of the bridge or their authorized agent*. All submission of plans, scope of work, and schedules of operation must be sent to the First Coast Guard District, Bridge Branch Office.

3. At least 30 days prior to commencement of any work, we must have for our review, a copy of the construction plans, contractor' schedule, preferably depicted in a time line graphic format, and the contractor's daily hours of operation. The construction plan package must show the following: **(1)** a plan of the entire waterway area in the vicinity of the project. **(2)** The location of work barges and any anchor lines during working and off-hours. **(3)** In addition, a drawing must be included, if applicable, depicting any scaffolding or containment used indicating the location and the total vertical or horizontal channel reduction. All vertical clearance reductions below low steel or concrete under the bridge as a result of the use of scaffolding must be clearly detailed on the drawings shown in total feet. **(4)** Emergency 24 hour telephone numbers for all responsible individuals for this project must be submitted to this office before any phase of construction begins in case of an emergency situation during off-hours.

4. Scaffolding used under ANY span of the bridge must be lighted with constant burning red lights every 50 feet and on all corners. The placement of scaffolding must not interfere with the ability of a moveable bridge to open for vessel traffic. Moveable bridges must continue to operate according to their normal schedule unless special drawbridge operation regulation changes have been requested. Warning signs must be posted on both sides of the bridge, visible for a 1-mile range, to warn mariners of the vertical clearance reduction. The signs shall face upstream and downstream so as to draw the mariner's attention to the fact that the clearance has been reduced.

5. All barges placed in the waterway must be lighted with constant burning white lights on all four corners of the barge. The contractor is required to comply with all provisions of the Navigation Rules International-Inland, regarding the use of work barges or floating equipment in the waterway. Copies are available from the U.S. Government Bookstore, Room 110, Federal Building, 26 Federal Plaza, New York, NY 10278. Telephone (212) 264-3825.

6. Placement of construction barges in the navigable channel shall be done so as to provide a minimum horizontal clearance reduction. Only one navigation channel of a swing bridge may be blocked by work equipment at anytime. Barges must be moved out of the navigable channel after working hours unless approved in writing by this office.

7. Barges held in place by anchor lines must be marked by anchor buoys, which should be lighted.

ENCLOSURE (1)

8. An as built survey must be taken upon completion of this project, approved by a professional engineer or land surveyor verifying the bridge clearances.

9. The on-scene contractor must have a VHF-FM marine radio set to the bridge communication channels 16/13 or the designated channel for the bridge. Additional marine radios monitoring the above channels must also be maintained at the main control of any floating equipment or barges on station.

10. Preventive measures must be taken to prevent any hot work, debris, or construction material from entering the waterway. This includes sandblasting material, paint, and any concrete work by-products. Welding and burning must cease upon approach of a vessel and shall not start again until the vessel has passed the bridge.

11. The project manager must contact the Coast Guard Sector Northern New England via marine radio before commencement of any and after completion of any Hot Work. A cell phone back-up may be used to contact the above Coast Guard Unit at (207) 780-3251.

12. If permanent bridge navigational lighting cannot be maintained operational during any phase of this project, temporary battery/power lights must be installed at the same locations. These temporary lights must be visible for a distance of 2,000 yards on 90% of the nights of the year. Generally, a lamp of 20 footcandles will meet these requirements. Plans for temporary lighting shall be submitted to this office for written approval. Deviations from the approved temporary lighting shall be permitted only upon written authorization from this office. **All newly constructed bridge piers, or in the process of demolition, must be lighted with red constant burning lights as well as all four corners of any cofferdams used during construction.**

13. Bridge protective fenders shall not be constructed or rebuilt with any metal surfaces on the rubbing face of the fender system. All bolts, spikes, or other metal fastening devices must be countersunk. Metal splicing plates, if used, shall be mounted on back of outer wales.

14. All piles including those previously damaged or broken that are not being used in the new or repaired fender shall be extracted rather than cut off at the mud line. Upon completion of all fender repairs a bottom sweep is required to determine if any piles or debris are present in the waterway. A wire-drag sweep or side-scan sonar is the preferred method.

15. During the progress of work should any debris or equipment enter the waterway and become a hazard to navigation, immediate notice shall be given to the Coast Guard and the object removed as soon as possible. Until removal can be effected, the obstruction shall be properly marked.

16. Spillage of oil and hazardous substances is specifically prohibited by the **Federal Water Pollution Control Act**, as amended. Approved spill containment equipment and absorbent material must be located at the project site in the event of a spill into the waterway or the shoreline. The Coast Guard must be notified immediately at (800) 424-8802.

Response to Comments Made by
Gary Kassof, U.S. Coast Guard
U.S. Department of Homeland Security
408 Atlantic Avenue, Boston, MA 02110-3350
Letter dated November 30, 2006

1. The NHDOT and FHWA appreciate the Coast Guard's concurrence that no adverse impacts to present navigation will result from the proposed widening of the Little Bay Bridges. The NHDOT and FHWA are not aware of any future use of the waterway that would change this conclusion and therefore believes its analysis is complete.

2. The NHDOT and FHWA appreciate the Coast Guard's guidance and will incorporate the requirements of the "General Construction Requirements, NH & ME," into the appropriate final design plans and construction bid/contract documents.

3. The NHDOT and FHWA propose to progress the rehabilitation of the General Sullivan Bridge as an element of the Selected Alternative identified for the project. The General Sullivan Bridge, regardless of its present day condition, is a landmark structure, the second highest rated historic bridge in the state, and eligible for the National Register of Historic Places. The bridge offers a unique and important bicycle / pedestrian connection across Little Bay, as well as other recreational activities, and is deemed a Section 4(f) resource with protection under Federal (USDOT) law. The NHDOT and FHWA have estimated the cost to rehabilitate the General Sullivan Bridge to a six-ton capacity, which will be able to accommodate pedestrians, bicycles, recreational activity, and emergency vehicles, at approximately $26 million dollars. This represents a net cost to the project of approximately $10 million dollars taking into account the cost that would be required to dismantle and remove the structure, as well as the cost required to provide a replacement recreational connection across the Bay.

4. So noted. The NHDOT and FHWA will contact Mr. McDonald during the project's final design to discuss the Coast Guard permitting process.

United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

NOV 2 8 2006

9043.1
PEP/NRM

ER 06/789

Ms. Kathleen O. Laffey
Division Administrator
Federal Highway Administration
19 Chenell Drive, Suite One
Concord, New Hampshire 03301

Dear Ms. Laffey:

This responds to a request for the Department of the Interior's (Department) review and comment on the Draft Environmental Impact Statement/Section 4(f) Evaluation for **Newington-Dover Spaulding Turnpike Improvements**, US Route 4 and NH Route 16, Stafford and Rockingham Counties, New Hampshire.

Section 4(f) Evaluation

1 We note that there are five historic properties and two public parks/recreation areas to be affected by the Preferred Alternative (Chapter 5, Pages 5-1 thru 5-15). Pursuant to the National Historic Preservation Act, Advisory Council on Historic Preservation rules (36 CFR 800), and current practices of consultation between the Federal Highway Administration (FHWA), State Historic Preservation Officer (SHPO), and the New Hampshire Department of Transportation (NHDOT) as relating to Section 4(f) Evaluation, an Adverse Effect Memorandum (AEM) concerning the five historic properties and uncompleted status of archeological investigation was signed February 9, 2006 (Appendix G – Historic Resource Documentation).

2 The presentations on each property included mitigation measures for adverse effects, as well as commitment of NHDOT to completion of ongoing archeological investigations prior to the commencement of physical project work. The AEM also indicated continuance of consultation with the SHPO throughout the progress of the project. The Measures to Minimize Harm, and Coordination Sub-sections (Chapter 5, Pages 5-12 thru 5-14), clearly embrace the terms of the AEM in a spirit of commitment. However, there seems to be lesser assurance to the measures described for impacts to the two park areas. We would encourage the project to provide a level of assurance closer to that of cultural resource protection, perhaps itemization of specific efforts that will be positively acceptable to the parties of management of the recreation use resources of those public parks subject to impact by this essential highway improvement.

3 Based on the project compliance information provided, we concur that there are no feasible and prudent alternatives to the Preferred Alternative selected in the document, and agree to the measures mentioned above to minimize harm to project resources.

Draft Environmental Impact Statement

Cultural and Recreational Resource Considerations

4 We reiterate our commentary above.

Natural Resource Considerations

5 We offer no comment.

We appreciate the opportunity to provide these comments and look forward to receiving the final documentation.

Sincerely,

Willie R. Taylor
Director, Office of Environmental
Policy and Compliance

cc: Mr. James A. Moore
Director, Project Development
New Hampshire Department of Transportation
Post Office Box 483
Concord, New Hampshire 03302-0483

Response to Comments Made by
Willie R. Taylor, Director, Office of Environmental Policy
U.S. Department of the Interior
Office of the Secretary, Washington, D.C. 20240
Letter dated November 28, 2006

1. So noted.

2. The NHDOT and FHWA understand that mitigation of impacts to the recreational properties affected by the project is important. One of the two such resources, Hilton Park is owned, maintained and managed by the NHDOT. Impacts to the park are negligible. However, NHDOT and FHWA will work with NHDHR to develop and erect an informational sign that explains the history of the GSB and significance of the park. Additionally, reasonable efforts will be made to minimize impacts to the park during construction, including preventing unnecessary disturbance of areas outside the existing right-of-way, and maintaining safe access to the park.

   Impacts to Bayview Park are similarly negligible and present no discernable impact to the recreational experience provided by this property. However, in order to benefit the park, a sidewalk will connect the park's parking area with the sidewalk network on the Scammell Bridge and to provide pedestrian connectivity to the Dover Point Road/Boston Harbor Road neighborhood. This would enhance pedestrian accessibility to the park. Parking at Bayview Park would also be expanded from eight to 12 spaces, which will benefit users of the park as well as citizens using the Scammell Bridge to fish.

3. – 5. The NHDOT and FHWA appreciate USDOI's concurrence with the provisions of Section 4(f).

Christopher Waszczuk

From: richard.doucette@faa.gov
Sent: Tuesday, December 05, 2006 9:25 AM
To: O'Donnell, William F
Cc: Christopher Waszczuk; donna.witte@faa.gov
Subject: Newington-Dover, 11238

The FAA has following comments on the Spaulding Turnpike EIS:

1 The EIS is satisfactory to the FAA New England Region. We appreciate the hard work by all parties.
Upon issuance of the Final EIS, we request one hardcopy of the document and plans. The plans (or a separate plan) should clearly show (a) the proposed land takings from Pease Development Authority and (b) a brief narrative describing the current and proposed condition/use of the land to be taken.

Richard Doucette, Environmental Protection Specialist
FAA New England Region
12 New England Executive Park
Burlington MA 01803
phone: 781-238-7613

Response to Comments Made by
Richard Doucette, Federal Aviation Administration
New England Region
12 New England Executive Park
Burlington, MA 01803

1. So noted. The NHDOT and FHWA appreciate FAA's recognition of the EIS. As requested, a hard copy of the Final EIS will be sent to FAA upon its completion. A set of plans showing the proposed land takings from the Pease Development Authority (PDA) will be developed and forwarded during the ROW negotiation process. The plans will be accompanied by a narrative describing the current and proposed conditions and uses of the land to be taken.

State (S)

DEAN AND DIRECTOR
Taylor Hall
59 College Road
Durham, NH 03824-3587
(603) 862-1520
Fax: (603) 862-1585
http://ceinfo.unh.edu

UNIVERSITY of NEW HAMPSHIRE
COOPERATIVE EXTENSION

County Offices

Belknap County
527- 5475

Carroll County
539-3331

Cheshire County
352-4550

Coös County
788-4961

Grafton County
787-6944

Hillsborough County
641-6060

Merrimack County
796-2151

Rockingham County
679-5616

Strafford County
749-4445

Sullivan County
863-9200

Family, Home & Garden Education Center
629-9494 Office
1-877-398-4769 Toll Free

September 6, 2006

Mr. James Moore JAM 9/7/06
Director of Project Development
P.O. Box 483
Concord, NH 03302

Dear Mr. Moore,

UNH Cooperative Extension is very much in support of the effort to permanently preserve the Tuttle property in Dover. I would like to request that you include this letter as part of the Public Hearing record for the Newington-Dover 11238 project. It's a historical property and the oldest family farm in America. This is an irreplaceable asset, something that New Hampshire cannot afford to lose. Additionally, protecting open space is a high priority in this state. New Hampshire is losing an estimated 12,000 to 20,000 acres of open space each year.

Farms and forests protect our water and air quality and contribute greatly to our quality of life. Open spaces are an economic value for the residents of the community. The low cost of community services produce a comparatively small drain on the tax burden. A farm operation like Tuttle's provides an important component of our tourism industry and yields environmental, economic and historic value for the community. 1

UNH Cooperative Extension has invested considerably in programming related to the permanent protection of open space and have worked to help communities address their needs in sustaining natural resources and improving the economy. We wish you and the City of Dover well in this endeavor. Please don't hesitate to call upon us to assist with our educational programs in helping the community accomplish its goals.

Sincerely,

John E. Pike

Dean & Director

Response to Comments Made by
John E. Pike, Dean and Director
UNH Cooperative Extension – Taylor Hill
56 College Road, Durham, NH 03824-3587
Letter dated September 6, 2006

1. The Tuttle Farm has been identified as one of four preferred components of the recommended mitigation package for the project. In response to the property owner's request, the NHDOT, in partnership with the City of Dover, have expedited the acquisition of a conservation easement on the Tuttle Farmstead to permanently preserve the 120-acre farm. The preservation was consummated on January 29th, 2007 with the conservation easements executed and property rights on 109.1 acres transferred to the City, the NHDOT, and Strafford Rivers Conservancy (SRC). A second conservation easement on 11.0 acres was secured on September 14, 2006 through the Farm and Ranch Land Protection Program with easement rights held by the City, SRC and US Department of Agriculture.

PEASE DEVELOPMENT AUTHORITY

360 Corporate Drive, Pease International Tradeport, Portsmouth, NH 03801
(603) 433-6088 Fax: (603) 427-0433 TDD: Relay NH 1-800-735-2964

September 21, 2006

The Honorable Ruth Griffin
Executive Councilor Special Committee Chair
The Honorable peter Spaulding Executive Councilor
The Honorable Raymond T. Weikzorek, Executive Councilor

Re: Newington-Dover Project 11230

Dear Special Committee Chair Griffin:

This is to memorialize the support of the Directors of the Pease Development Authority for the preferred alternative as described in the Layout Petition and further identified as Alternative 13 of the Little Bay Bridges and approaches improvements project and officially known as the Newington-Dover Project 11238.

During a regular business meeting this morning the Board of Directors of PDA voted in support of the proposal. They concur the preferred alternative will provide congestion relief and enhance the safety for those traveling the Spaulding Turnpike to work and to engage in business at the Tradeport. It is also recognized a new northerly entrance at Interchange 3 will help disperse travel patterns within the Tradeport and make a Pease presence more valued.

1

The Pease Development Authority is pleased the preferred alternative provides for the possibility of future railroad service to the Tradeport via an elevated crossing of the turnpike. The preservation of the right of way for a future build, while enabling a lower profile of the Turnpike is a demonstration of accommodations made by Town of Newington officials, NHDOT officials, and the PDA.

We wish to thank the NHDOT project staff and also the staff of the consulting engineering firm Vanasse, Hangen, Brustlin for the cooperation in development of the project options and accommodating concerns expressed during the extensive project development process.

We urge the Committee's rapid approval of the proposal and that construction be realized with all deliberate speed.

Sincerely,

Leon S. Kenison, P.E.
Facilities Director

cc: Richard Green, Executive Director

N:\ENGINEER\Leon\Letters\Newington Dover.doc

Response to Comments Made by
Leon S. Kenison, P.E., Facilities Director
Pease Development Authority
360 Corporate Drive, Pease International Tradeport
Portsmouth, NH 03801
Letter dated September 21, 2006

1. The NHDOT and FHWA acknowledge and appreciate the PDA's support and will progress the project, as proposed, as expeditiously as possible.

JOHN H. LYNCH
GOVERNOR

STATE OF NEW HAMPSHIRE
OFFICE OF ENERGY AND PLANNING
57 Regional Drive, Suite 3
Concord, NH 03301-8519
Telephone: (603) 271-2155
Fax: (603) 271-2615

OEP
www.nh.gov/oep

MEMORANDUM

jam 10/3/06

TO: James A. Moore, Director of Project Development
NH Department of Transportation

FROM: Jennifer DeLong, Assistant State Coordinator
National Flood Insurance Program

DATE September 28, 2006

SUBJECT: Newington-Dover
11238

I am writing in reference to the U.S. Army Corps of Engineers Joint Public Notice regarding the proposed improvement to the Spaulding Turnpike (NH Route 16) in Newington and Dover. I have detailed my comments on this proposed project below.

I have reviewed the Flood Insurance Rate Maps (FIRMs) for the proposed project area and have enclosed the portion of the FIRMs in the project area that contain special flood hazard areas. The Spaulding Turnpike in the project area appears to be near or crosses through the special flood area (Zone A and AE).

The City of Dover and the Town of Newington are both participating communities of the National Flood Insurance Program (NFIP). Therefore, if any development takes place within the special flood hazard area, the city and town should be contacted to assure that the proposed project meets the NFIP requirements contained in the city's and town's floodplain ordinance. Development is defined under NFIP as "any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials."

1

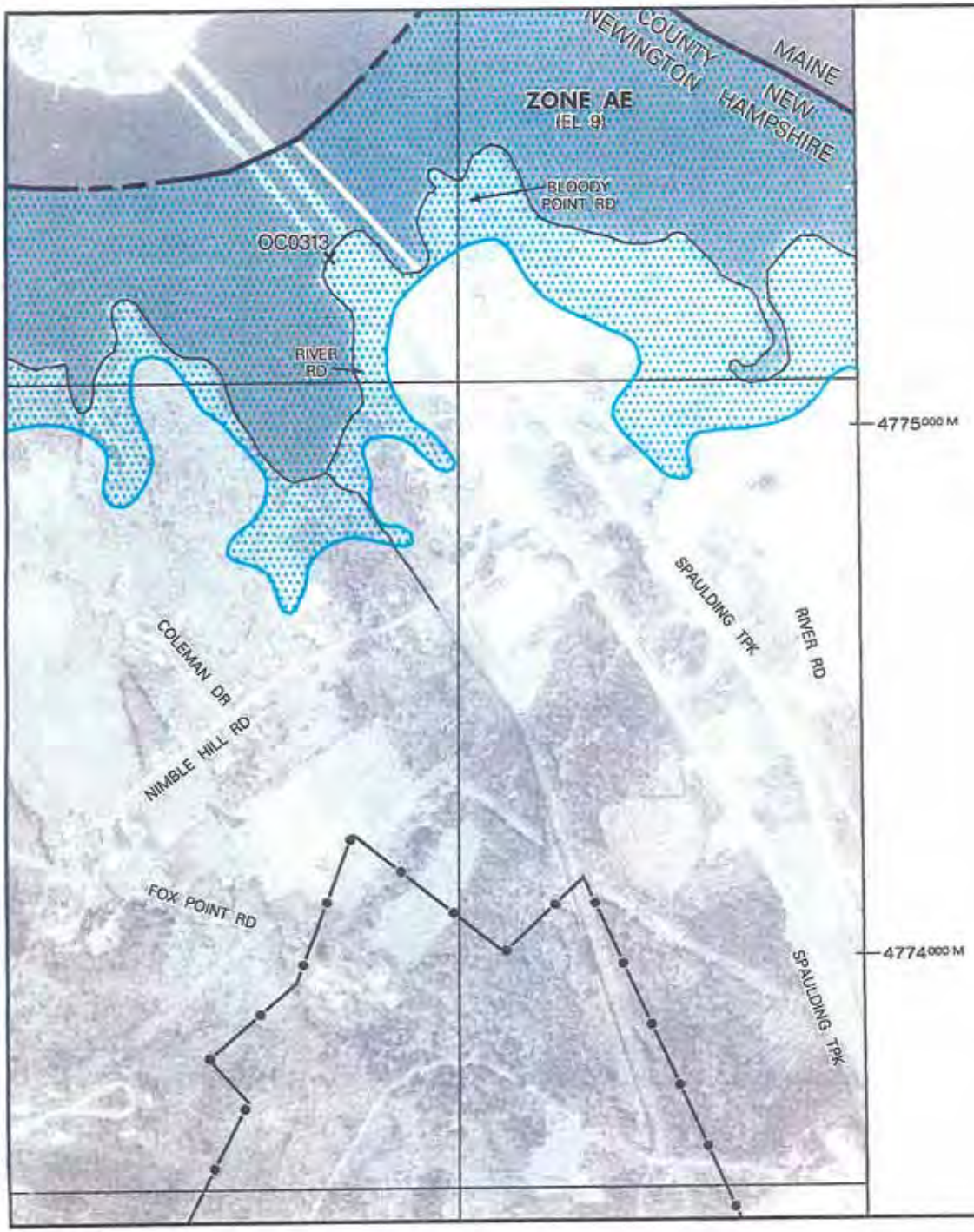
Another applicable NFIP regulation that is contained in a community's floodplain ordinance is the following:

> Until a Regulatory Floodway is designated along watercourses, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zone AE on the FIRM, unless it is demonstrated by the applicant that the cumulative effect of the proposed development, when combined with all existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

1 OEP is not authorized by the Federal Emergency Management Agency (FEMA) to make final determinations on the impacts of floodplain development. The NH Department of Transportation (DOT) should use its best judgment in determining if further study is necessary. If DOT feels that the proposed construction will have a negligible effect on flooding dynamics then additional coordination with FEMA is likely not necessary.

If you need further assistance, please contact me at 271-2155 or jennifer.delong@nh.gov.

Thank you.



onal Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'

00 0 1000 2000 FEET

NFIP NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0255E

FIRM

FLOOD INSURANCE RATE MAP

ROCKINGHAM COUNTY, NEW HAMPSHIRE (ALL JURISDICTIONS)

PANEL 255 OF 681

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

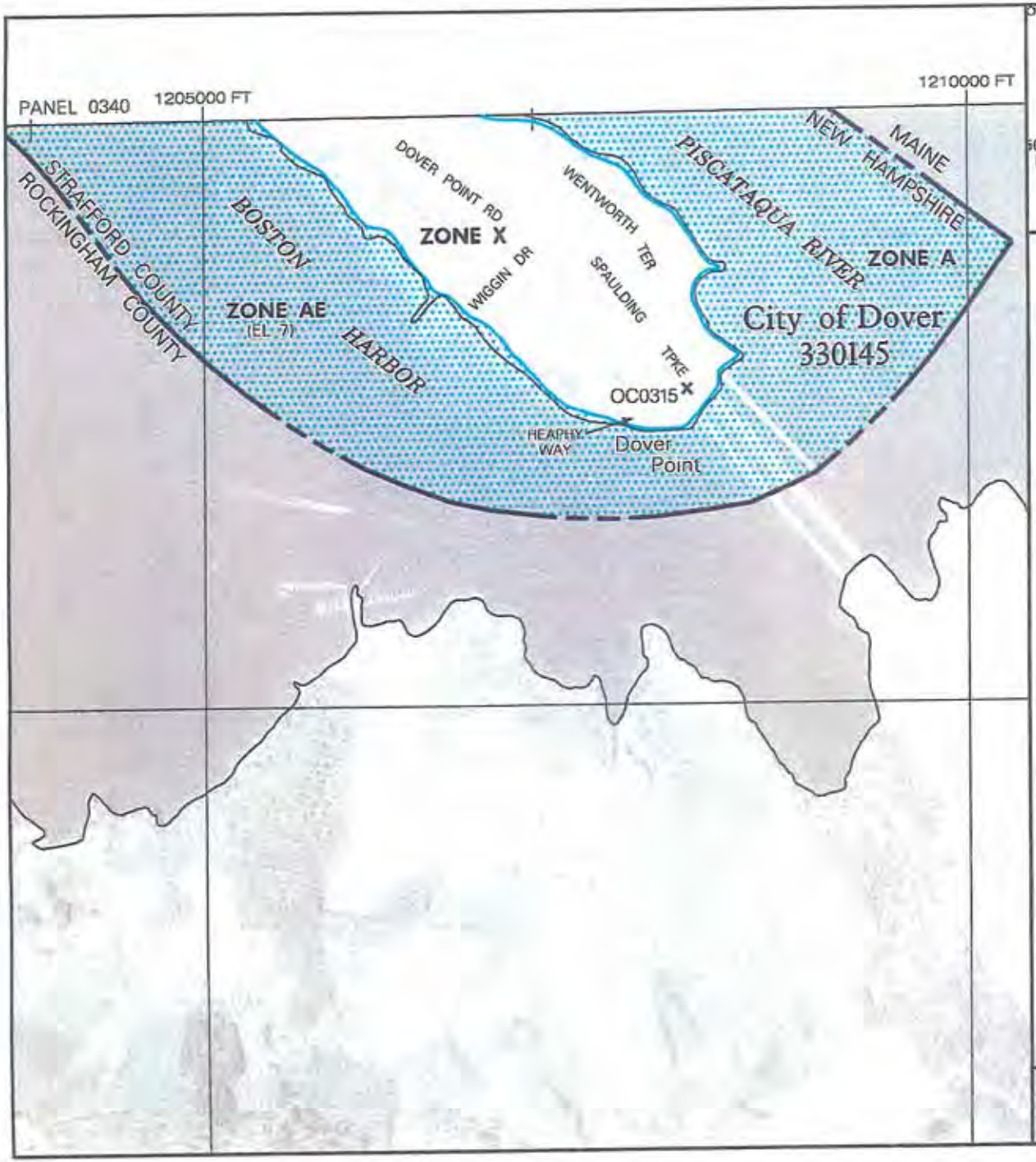
COMMUNITY	NUMBER	PANEL	SUFFIX
GREENLAND, TOWN OF	330210	0255	E
NEWINGTON, TOWN OF	330229	0255	E
PORTSMOUTH, CITY OF	330139	0255	E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
33015C0255E

EFFECTIVE DATE
MAY 17, 2005

Federal Emergency Management Agency



onal Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

NFIP NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0405D

FIRM

FLOOD INSURANCE RATE MAP

STRAFFORD COUNTY,
NEW HAMPSHIRE
(ALL JURISDICTIONS)

PANEL 405 OF 405

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

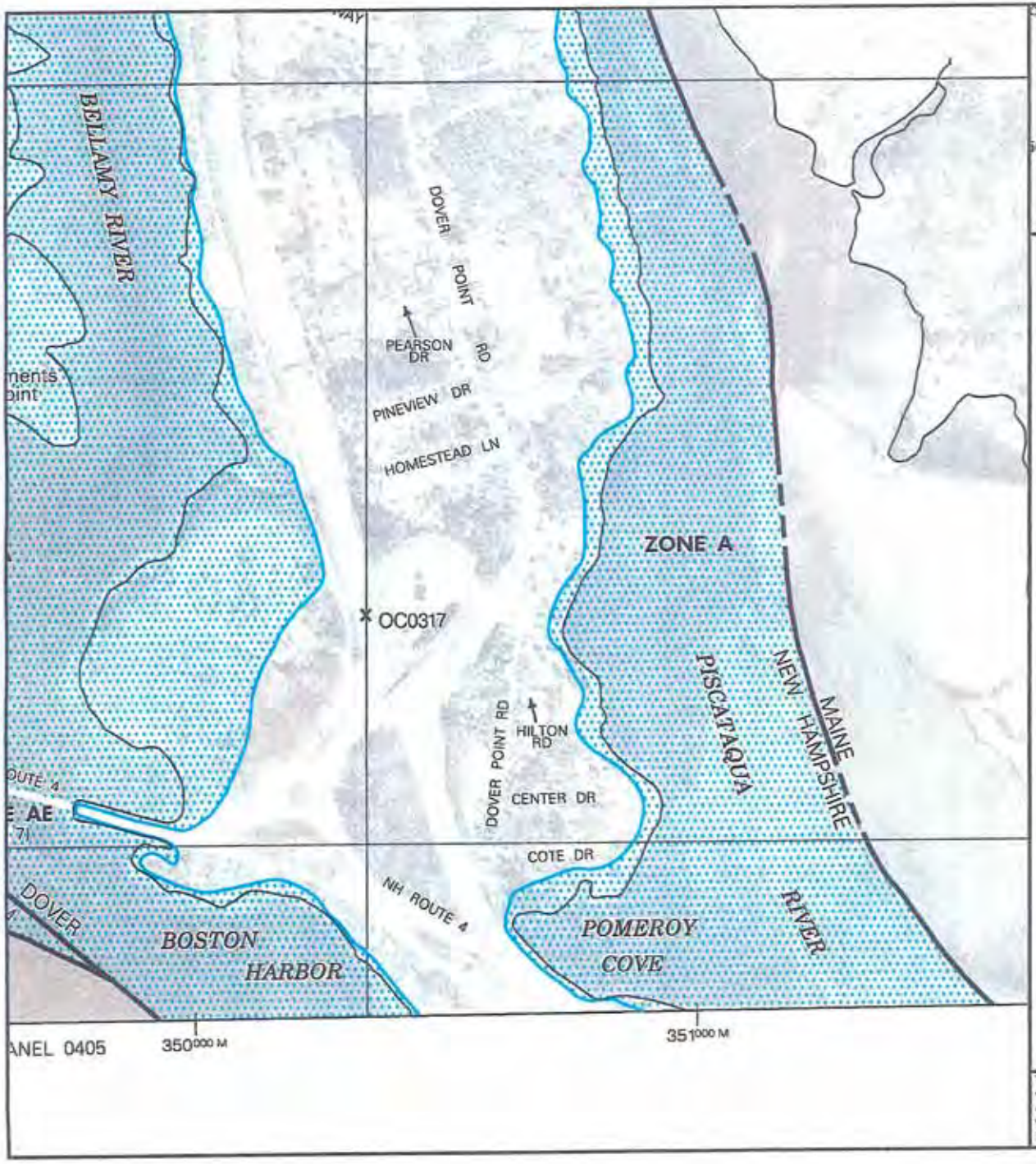
COMMUNITY	NUMBER	PANEL	SUFFIX
DOVER, CITY OF	330145	0405	D
DURHAM, TOWN OF	330046	0405	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
33017C0405D

EFFECTIVE DATE
MAY 17, 2005

Federal Emergency Management Agency



onal Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0340D

FIRM

FLOOD INSURANCE RATE MAP

STRAFFORD COUNTY, NEW HAMPSHIRE (ALL JURISDICTIONS)

PANEL 340 OF 405

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
DOVER, CITY OF	330145	0340	D
DURHAM, TOWN OF	330146	0340	D
MADBURY, TOWN OF	330219	0340	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
33017C0340D

EFFECTIVE DATE
MAY 17, 2005

Federal Emergency Management Agency

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary

0.2% annual chance floodplain boundary

Floodway boundary

Zone D boundary

CBRS and OPA boundary

Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.

513 Base Flood Elevation line and value; elevation in feet*

(EL 987) Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the National Geodetic Vertical Datum of 1929

A — A Cross section line

23 - - - - - 23 Transect line

Response to Comments Made by
Jennifer DeLong, Assistant State Coordinator
National Flood Insurance Program
Office of Energy and Planning
57 Regional Drive, Suite 3, Concord, NH 03301
Letter dated September 28, 2006

1. Floodplain impacts were evaluated during development of the project and are fully documented in the EIS. The Selected Alternative would affect a total of 3.9 acre-feet of 100-year floodplain volume. The majority of this impact (2.7 acre-feet) is associated with the expansion of the bridge piers.

   The floodplain impacts are considered negligible in the context of the tremendous volume of Little Bay and will have a negligible effect on the base flood elevations in the area. Likewise, changes to the hydraulic characteristics in the channel would have negligible effects on tidal flooding.

   A hydrodynamic model was built to analyze the potential effects of the project on the estuary and provided information on tidal heights throughout the estuary. The model compared the existing condition with the Selected Alternative and predicted that the pier extensions may change tidal maxima on the order of 0.1 to 0.2 inches, depending on the tidal condition and the location in the estuary. Similarly, current velocities and directions are expected to change only minimally. Thus, effects on local and regional flooding resulting from the additional fill in the Little Bay are considered to be negligible.

   Direct impacts to the 100-year floodplain have been minimized in the preliminary design, and they will continue to be considered during the final design by steepening highway embankments and using retaining walls, where appropriate. Additionally, as part of the mitigation package, several tracts of land within the watershed of the project corridor will be permanently preserved to offer floodplain protection.

   The NHDOT and FHWA have and will continue to coordinate the project with both Dover and Newington and will seek to further minimize floodplain impacts during the project's final design, to the extent practicable. A formal E.O. 11988 Floodplain Finding that applies specifically to the Selected Alternative is presented in Section 4.11.6 of the Final EIS. That finding concludes that there is no practicable alternative to the proposed construction in floodplains and that the Selected Alternative includes all practicable measures to minimize harm to floodplains.

New Hampshire Estuaries Project
University of New Hampshire
Hewitt Annex, 54 College Road
Durham, NH 03824-2601

October 5, 2006

Christopher Waszczuk, P.E.
Project Manager
New Hampshire Department of Transportation
P.O. Box 483
Concord, NH 03302-0483

Re: Spaulding Turnpike Improvements
NHS-027-1(37), 11238
Draft Environmental Impact Statement (July 2006)

Dear Mr. Waszczuk:

The New Hampshire Estuaries Project (NHEP) is part of the U.S. Environmental Protection Agency's (EPA's) National Estuary Program which is a joint local/state/federal program established under Section 320 of the Clean Water Act with the goal of protecting and enhancing nationally significant estuaries. The NHEP's Comprehensive Conservation and Management Plan for New Hampshire's estuaries was completed in 2000 and implementation is ongoing. The Management Plan outlines key issues related to management of New Hampshire's estuaries and proposes strategies that are expected to collectively preserve and protect the state's estuarine resources.

1 The NHEP's priorities were established by local stakeholders and include water quality improvements, shellfish resource enhancements, habitat protection, improved land development patterns, habitat restoration, and outreach activities to develop broad-based support and encourage involvement of the public, local governments, and other interested groups. The NHEP and its many partners undertake projects and activities to address these priorities in the New Hampshire coastal watershed. The coastal watershed that drains water into the state's major estuary systems – the Great Bay Estuary and Hampton-Seabrook Harbor – and other coastal waters via rivers and streams spans three states with approximately 80 percent of the area located in New Hampshire. The NHEP works with 42 New Hampshire communities that are entirely or partially located within the area.

2 The NHEP, in collaboration with the University of New Hampshire and the NH Department of Environmental Services, monitors water quality in the Great Bay estuary and Piscataqua River to document the status and trends of bacteria, nitrogen, dissolved oxygen, toxic contaminants and many other parameters. Nonpoint source pollution from stormwater runoff has been a major focus of the indicator monitoring. Therefore, the NHEP is concerned about increased stormwater runoff from the new impervious surfaces that will be created by the Spaulding Turnpike improvements. We feel that NHDOT should provide support for water quality monitoring to verify that the improvements do not significantly affect water quality. Our two major comments are listed in the following sections.

3 1. Section 4.9.7: The preferred alternative for the Spaulding Turnpike improvements will increase impervious surfaces in the watersheds of three major tidal waters: Little Bay, Bellamy River, and Upper Piscataqua River. The analysis of impervious surface creation in the EIS predicts a minimal impact on water quality due to this increase. However, the analysis in the EIS relied on predicted removal efficiencies of the proposed BMPs. The UNH Stormwater Center has documented that some BMPs do not perform as well as

expected (UNH, 2006, www.unh.edu/erg/cstev/) and all systems perform poorly if they are not maintained. It is possible that pollutant loadings to the estuary from stormwater may be higher than predicted by the analysis in the EIS and some water quality monitoring is needed to confirm the initial predications. Therefore, the NHEP recommends that NHDOT add long-term support for water quality trend monitoring in Little Bay, Bellamy River and the Upper Piscataqua River to the mitigation package described in section 4.9.7 of the EIS. The annual costs for this water quality trend monitoring would be approximately $25,000.

3

2. Section 4.9.7: The preferred alternative will impact 1,190 square feet of mussel bed beneath the expanded footprint of Pier 8. The NHEP and the Gulf of Maine Council have used this mussel bed since 1994 to monitor toxic contaminants in mussel tissue. The coordinates for the sampling station are 43.1197 N latitude and 70.8273 W longitude. The station is located between Pier 8 and the Dover shoreline. It would be impossible to replace this long-term monitoring station and the proposed work should avoid this area during construction. If this station is not disturbed, the mussel sampling station would be ideally located to monitor the cumulative effects of increased stormwater runoff from the new roadway. Funding from both the Gulf of Maine Council and the NHEP to monitor this station is tenuous. NHDOT should agree to provide long-term funding to maintain this sampling station to confirm the predictions in the EIS that pollutant loads of PAHs and toxic metals from the roadway surface have not been significantly increased. The annual cost for mussel tissue monitoring at this station is approximately $5,000.

4

Thank you for the opportunity to comment on the Draft EIS. The NHEP is willing to work with NHDOT on technical details for the proposed monitoring programs before the EIS is finalized. If you have any questions, please contact me at (603) 271-8872.

Sincerely,

Phil Trowbridge, P.E.
NHEP Coastal Scientist

Cc: Doug DePorter, NHDOT
Cynthia Copeland, SRPC
Jennifer Hunter, NHEP
Ted Diers, NHCP

Response to Comments Made by
Phil Trowbridge, P.E., NHEP Coastal Scientist
University of New Hampshire
Hewitt Annex, 54 College Road
Letter dated October 5, 2006

1. & 2. The NHDOT and FHWA concur that the Great Bay Estuary is a valuable resource, and that water quality protection is of the highest importance. The NHDOT and FHWA will provide adequate stormwater treatment using various BMPs in coordination with the UNH Stormwater Center and NHDES to avoid and/or minimize any adverse water quality effects associated with the project. Since NHDES is responsible for monitoring pollutants in the Great Bay, the NHDOT and FHWA will coordinate with NHDES and as practicable will assist and facilitate with their monitoring effort.

3. The NHDOT has worked with NHDES to develop the stormwater treatment needs and the available methods to assess the potential water quality impacts associated with roadway runoff. The NHDOT has also collaborated with the University of New Hampshire (UNH) Stormwater Center to explore the latest in innovative treatment measures, such as gravel wetlands and infiltration measures that can provide a high level of treatment for the various pollutants associated with highway runoff. As a result of this effort with the University and coordination with NHDES, the most current best management practices (BMPs) and design guidance will be incorporated into the water quality treatment measures. A predictive modeling procedure provided by NHDES will determine appropriate stormwater treatment measures, and will also be used to show that to the extent practicable, the estimated future pollutant loads resulting from the expanded roadway area will not increase over the existing conditions.

4. The NHDOT and FHWA will coordinate with the NH Estuaries Program to avoid any impacts to the sampling station located between Pier 8 and the Dover shoreline during construction. There will be no direct impacts to the station associated with the project and therefore mitigation is not warranted. The NHDOT and FHWA will work with NHDES to facilitate their monitoring efforts at the sampling station.

CHH — MGL
cc: C. Waszczuk
B. O'Donnell

New Hampshire Fish and Game Department

Region 3

225 Main Street, Durham, NH 03824-4732
(603) 868-1095
Headquarters: 11 Hazen Drive, Concord, NH 03301
(603) 271-3421

FAX (603) 868-3305
TDD Access: Relay NH 1-800-735-2964
Web site: www.wildlife.state.nh.us

Lee E. Perry
Executive Director

49

October 3, 2006

Mr. Marc G. Laurin
N. H. Department of Transportation
7 Hazen Drive
Concord, N.H. 03302

Subject: Newington-Dover, 11238 NHS - 027 - 1 (037)

Dear Mr. Laurin,

New Hampshire Fish and Game Department, Marine Fisheries Division, has reviewed the Draft Environmental Impact Statement (EIS) Vols 1, 2 & 3 and Executive Summary for the Spaulding Turnpike improvements - Newington to Dover. Our main focus has been directed to those project features that may impact marine and estuarine resources. Certainly, the expansion of the eight bridge piers received our close attention. While the preferred alternative is generally one that we favor over other options, there are still some aspects of this plan that concern us.

1

The westerly expansion of the existing bridge piers will completely eliminate approximately one half acre of benthic habitat. New Hampshire Fish and Game Department believes the section of the Draft EIS that touches on the existing conditions in the bridge pier area (i.e., 3.10.3 and Fig. 3-10-1) provides insufficient information for the characterization of this habitat . The total loss of this habitat should not occur without a more complete characterization of the community that occupies the area and that will be completely lost. This comment applies only to the sketchy treatment given fish and invertebrates where the areas' inhabitants are incompletely listed or simply implied based on the physical habitat and algal community. Apparently, there has been no sampling (other than for algae) in the area that will be lost. There is still time to undertake some actual collection of bottom fish and invertebrates here and this should be done before the construction goes ahead. We recognize the area is a difficult one to work in, but we are confident an improved sampling program can be planned that will yield a better understanding of the significance of the benthic community loss required for this project.

2

A better understanding of the near half-acre of bottom habitat required for the bridge pier extensions may serve as a basis for some suitable mitigation strategy. Depending on the areas' use by species of economic or ecosystem value further consideration as to the need for this can be made.

3 The methods and schedule for bridge pier work are not fully explained in the EIS. These project elements will be of keen interest to NHF&G and should be made available for our review as soon as possible.

In addition to the above substantive comment, a reading of the EIS shows many other less important errors. Some of the more notable ones are listed below:

4 - ES-22 NPDES stands for National Pollutant Discharge Elimination System.

Vol 1

5 - 3-107 Several taxonomic binonnials listed in this section are in error and this was brought to the attention of NHDOT in our letter of comment on the Scoping Report (J. I. Nelson to C. M. Waszczuk, 4/2/04). They remain incorrect.

6 - 3-130 NHF&G has previously offered corrections of some of this information in 3.9.3.6 by letter, J. I. Nelson to C. M. Waszczuk, 4/2/04. The same errors are once again noted.

7 - 3-132 Section 3.10.1 Arthur Mathieson is a phycologist (not a psychologist).

8 - 4-125 et seq. Here the EIS discusses the construction impact of the bridge pier extensions. What is missing is some consideration for the possibility that the operation may affect the movement of anadromous fish through the very narrow Dover Point tidal race that joins the Gulf of Maine and Great Bay (including its estuarial rivers). Clearly this water course passage is a key point for anadromous fish stocks seeking the spawning areas provided by the Oyster, Lamprey and Squamscott Rivers. Fish species of concern include rainbow smelt, alewife, blueback herring and shad. It will be extremely important that bridge construction be done in a way that does not cause migrating fish to avoid passage through the Dover Point area and thereby forego a seasonal spawning run. What is at risk is a total year class failure, something these fish stocks may suffer from over subsequent years.

9 - 6-8 A misspelling of Dr. Barbaroe Cellikol.

10 - 7-4 Mr. John Nelson's address is incorrect. He is at 225 Main Street, Durham, NH 03824.

Vol 2 - No comment

Vol 3

11 - Appendix A. The NHF&G letter of comment on the project's Scoping Report (J. I. Nelson to C. M. Waszczuk, 4/2/04) is seen as one of many agency correspondences received. What is distressing is that the same errors brought to the attention of NHDOT at that time are not corrected in the EIS.

This concludes our specific comment.

NHF&G appreciates the opportunity to participate with NHDOT in the planning of this very important project. We have no doubt as to the need for some future improvement in traffic movement at this location. However, we are very concerned as to the critical importance of this area as a conduit of coastal living resources to the Great Bay system and want to do our part to ensure the project goes forward with suitable environmental safeguards.

If there are questions on this matter, please feel free to contact me.

Sincerely,

John Nelson

John I. Nelson
Chief Marine Fisheries

JIN/BWS/rmj

Response to Comments Made by
John Nelson, Chief Marine Fisheries
NH Fish and Game Department, Region 3
255 Main Street, Durham, NH 03824-4732
Letter dated October 3, 2006

1. So noted.

2. The most extensive information on the general ecology of the area under and near the bridges is provided from a series of field studies conducted during the 1970s by Arthur Mathieson, a pychologist at UNH and senior scientist at Jackson Estuarine Laboratory, and colleagues. These studies represent most of the published research in the immediate area of the bridges.

   Bottom types and habitat types were characterized based on several methods. Intertidal bottom types and habitat types were preliminarily mapped directly from the 2002 aerial imagery and color IR imagery taken at low tide. Preliminary maps were ground-truthed by field inspection on three different days with differential GPS. Subtidal maps were constructed based on a composite, geo-referenced bathymetric map consisting of 1953 data from the entire study area under and near the bridges combined with high resolution multibeam sonar data collected in 2001 from the 18-foot contour line and deeper. Subtidal bottom types and habitat types were based on underwater videography along pre-determined transect lines using a towed video system with recording differential GPS. Intertidal bottom types and habitat types were based on geo-referenced aerial imagery with sub-meter resolution. The boundaries between most bottom types and habitat types were readily discernable from the imagery and were inspected with nearly 100% coverage on three separate field visits. Subtidal bottom and habitat types were derived from underwater videography that was collected along ship navigational tracks. Identification of the major bottom and habitat types was made directly from the video imagery. The areas between ship tracks were assigned bottom and habitat types based on standard interpolation techniques where the unsampled areas were assigned bottom and/or habitat type based on the known (video-imaged) identification of surrounding points. In some cases, the bathymetric data were used to estimate boundaries between bottom and/or habitat types.

   In combination, Mathieson's ecological descriptions along with discussion of bottom types and habitat types, as provided in the EIS, should be considered adequate and meaningful in assessing existing conditions. Further field studies designed to sample fish and the benthic community would require substantial additional effort and would not yield any substantial new information.

   For additional discussion of the potential impact of the project on fisheries, we refer the NHF&GD to the formal Essential Fish Habitat Assessment (EFHA) submitted to the National Marine Fisheries Service in August, 2006. NMFS has commented on the DEIS and EFHA and has found that the EFHA *"was very thorough and comprehensive regarding*

effects to EFH," and *"concurs with the assessment in the DEIS and the EFH Assessment that…there should be minimal adverse effects to benthic flora and fauna and EFH."*

3. The construction of the expanded bridge piers is currently only at a conceptual level of design. Methods and schedule are determined during final design, which will occur after the Final EIS and the FHWA's issuance of the Record of Decision for the project. The NHDOT and FHWA will coordinate the design, methods, and anticipated schedule of the pier construction during the project's final design with NHF&GD's Durham office.

4.-7. Taxonomic binomials and other typographical errors have been corrected in the FEIS.

8. Bridge construction should have no substantial impacts to fish passage, since the piers will maintain existing alignments. The proposed widening of the Little Bay Bridges will extend the existing pier footings and sub-footings toward the General Sullivan Bridge. It is anticipated that the footings will be joined below the water level with the General Sullivan Bridge and the granite-faced pier walls will either be joined together or a very small separation will occur between the two sets of walls. Although the resulting piers will be longer than the existing structures, they will not decrease the width of the channel.

   Since fish species may be affected by tidal currents, results of a hydrodynamic model were reviewed to help determine if indirect impacts could result from changes to tidal currents. To accomplish this, the model was used to predict tidal current speeds and directions at 45 points in the immediate vicinity of the bridge (approximately 300 feet inland and seaward of the bridges).

   The data indicate that current velocity maxima will increase by no more than 0.5 feet per second, with changes typically only 0.3 feet per second. These potential changes represent only a slight change from the estimated 10 feet per second maximum tidal current under existing conditions. The model predicts that current speeds will increase in some areas near the piers, while the speeds will decrease in other areas. Additionally, the model predicts that current directions will not change substantially, at least at the scale that can be resolved by the model. The results of the hydrodynamic model suggest that changes in tidal currents at the bridges will have no measurable permanent effects on fish passage, especially since these anadromous fish likely move into and out of the Great Bay during the corresponding in-coming or out-going tides.

   However, it is possible that construction activities could have some effect on behavior of anadromous fish due to issues such as turbidity or acoustical impacts. The NHDOT and FHWA will coordinate the design, methods and anticipated schedule of the pier construction during the project's final design with NHF&GD's Durham office to lessen to the extent practicable the potential temporary effects that construction activities may have on anadromous fish.

9-11. The NHDOT and FHWA apologize for the failure to correct typographical errors in the Draft EIS after the NHF&GD took the time to issue previous comments. These errors have been corrected in the FEIS.

Christopher Waszczuk

From: Marc Laurin
Sent: Wednesday, October 04, 2006 7:36 AM
To: Christopher Waszczuk
Cc: Bill O'Donnell (E-mail)
Subject: FW: Draft Environmental Impact Statement for the Spaulding Turnpike Improvements

Here are comments on the Newington-Dover DEIS from Scott Hilton of the NHDES - Pease office.

-----Original Message-----
From: Drew, Tim [mailto:tdrew@des.state.nh.us]
Sent: Monday, October 02, 2006 12:41 PM
To: Marc Laurin
Cc: Hilton, Scott; Infascelli, Gino; Williams, Chris
Subject: FW: Draft Environmental Impact Statement for the Spaulding Turnpike Improvements

Good afternoon, Marc,

Please find below comments from Scott Hilton of our Pease Tradeport office. I intended to forward all DES comments under one cover letter, but that doesn't appear to be feasible. You will receive comments from individual programs instead.

Tim

-----Original Message-----
From: Hilton, Scott
Sent: Friday, September 29, 2006 3:03 PM
To: Drew, Tim
Subject: RE: Draft Environmental Impact Statement for the Spaulding Turnpike Improvements

Tim
I have a memo from Marc Laurin that says comments should be addressed to his attention and recieved by October 6, 2006.

-----Original Message-----
From: Drew, Tim
Sent: Friday, September 29, 2006 2:47 PM
To: Hilton, Scott
Subject: RE: Draft Environmental Impact Statement for the Spaulding Turnpike Improvements

Thank you, Scott. When are the comments due?

Tim

-----Original Message-----
From: Hilton, Scott
Sent: Friday, September 29, 2006 12:00 PM
To: Drew, Tim
Cc: Pease, Richard; dave.strainge@afrpa.pentagon.af.mil; 'Daly.Mike@epamail.epa.gov'; 'Maria Stowell'
Subject: RE: Draft Environmental Impact Statement for the Spaulding Turnpike Improvements

Tim

A Draft Environmental Impact Statement (EIS) for the Spaulding Turnpike Improvements (# NHS-027-1(37),11238), dated July 2006, was sent to Richard Pease, Supervisor of the Superfund Section of the Waste Management Division. Richard asked that I review the Draft EIS and provide to you any comments I had on the proposed project with respect to its impact on the Air Force's environmental clean-up activities at the former Pease Air Base (now known as the Pease Tradeport). My review focuses solely on impacts from the proposed Spaulding Turnpike project on the Air Force's environmental remediation activities at the former Pease AFB.

As described in the EIS, the Spaulding Turnpike Improvement project involves a combination of highway and related infrastructure improvements along a three and a-half mile corridor beginning just north of Exit 1 in Newington and extending to the Dover Toll Plaza. The main element of the project is widening the Turnpike from 4 lanes to 8 lanes. The proposed project includes construction of a second exit into the Pease Tradeport, connecting into Arboretum Drive in the Northeast section of the Tradeport. This exit is identified as Exit 3 on the plans and includes a large interchange structure located on the former Air Base property. It appears the Exit 3 interchange is the only aspect of the project that involves actual road construction on the former Pease Air Force Base property. The other construction activity occurring on the property is a wetlands mitigation project proposed for Flagstone Brook. I have several comments on the proposed Exit 3 project and the recommended wetlands mitigation actions for Flagstone Brook;

Comments

1) Exit 3 is proposed to be located in a wooded area of the Tradeport just north of Landfill 5. There are no known Air Force related contaminated sites or use restriction zones (URZ's) in the proposed Exit 3 area. The northern boundary of the Landfill 5 Groundwater Management Zone (GMZ) however appears to abut (or slightly overlap) the southern edge of the Exit 3 interchange area and GMZ wells are located in this area that will need to be protected during construction activities. Also, in accordance with the Pease Deed (Section VI.B.), any groundwater extraction, injection or application of surface water that could cause the migration of any contaminated groundwater in excess of ambient groundwater quality standards to a point beyond a GMZ is prohibited. Therefore any significant groundwater extraction/dewatering or water injection or application activities that are conducted on the Tradeport should be coordinated with the Air Force, PDA and DES before they are undertaken to insure these activities will not affect the integrity of the GMZ. 1

2) There is an abandoned Air Force underground petroleum pipeline that runs through the Exit 3 area. The pipeline runs from the Defense Fuel Supply Point Terminal on the Piscataqua River to the Air Force's former Bulk Fuel Storage area on the Tradeport. The pipe line consists of an 8 inch and 10 inch pipe that crosses both the highway widening zone and the Exit 3 interchange. Available information indicates the line was taken out of service and capped. Previous investigations along the pipeline did not find any soil contamination in the area of Exit 3 or the highway widening zone. The pipeline is owned by the Air Force and managed by the Defense Logistics Agency, Defense Fuel Supply Center, Alexandria, Virginia 22303-6160, the contact person is Stephen Deatherage (telephone # 703-767-8315). (There is also a underground gas line that runs through this area, however this is not an Air Force related structure, the PDA would have contact information regarding this structure). 2

3) The other activity that is being proposed on the former Pease Air Force Base is a wetlands mitigation action along what the Air Force calls "Flagstone Brook" but is identified as the Railway Brook in the EIS. This proposed action involves 2 alternatives identified as 3

Alternative A and Alternative B in the EIS.

Alternative A calls for creating a new meandering channel and flood prone area for Flagstone Brook through the portion of the Tradeport property north of Landfill 5. This area is outside the Landfill 5 GMZ and URZ. The alternative calls for raising the stream bed above its existing elevation to allow flooding into the wetlands that exist to the west of the present stream. The EIS calls for hydrologic/hydraulic modeling of the watershed and stream valley to aid the actual design. Raising the streambed will likely cause changes in groundwater conditions downgradient of the Landfill and while it appears unlikely these changes will effect groundwater flow or elevations in the Landfill 5 area, if this alternative is chosen, the design model should verify the final design would not raise groundwater elevations under the landfill or change flow conditions that would result in a GMZ violation.

Alternative B calls for moving the Flagstone Brook channel section that is currently located on the west side of Landfill 5 to a new position, approximately several hundred feet further west. It also calls for creating a new channel just north of the Landfill 5 detention basin that will connect, what the Air Force calls the Railway ditch, (the stream channel located on the east side of Landfill 5) to Flagstone Brook. This alternative has the potential to affect groundwater flow in the Landfill 5 area and it appears a small portion of Alternative B construction may be within the Landfill 5 URZ. In accordance with the Pease Deed (Section VI.B.), any digging, excavation or construction in a URZ is prohibited unless approval from the Air Force is obtained. If Alternative B is chosen to be implemented, to insure all aspects of the proposal are reviewed by the Air Force, an Area of Special Notice request will need to be submitted to the Air Force prior to construction.

3

4) Figure 3.18-1; This figure does not accurately identify Landfill 5 or other Pease AFB sites. It appears all Pease AFB sites are listed under one location (location 32).

4

-----Original Message-----
From: Pease, Richard
Sent: Thursday, September 21, 2006 11:02 AM
To: Hilton, Scott
Cc: Drew, Tim; Baxter, Carl
Subject: FW: Newington-Dover, 11238 - DEIS Distribution

Scott,

I think the Department typically coordinates its review of environmental impact statements to provide a single comment letter. Please send your comments on the Newington-Dover, 11238 - Draft Environmental Impact Statement to Tim Drew, unless directed otherwise.

Richard Pease
Tel.: 603-271-3649
Fax: 603-271-2181
email: rpease@des.state.nh.us

-----Original Message-----
From: Marc Laurin [mailto:MLaurin@dot.state.nh.us]
Sent: Tuesday, August 22, 2006 9:44 AM
To: Drew, Tim
Cc: Pease, Richard
Subject: Newington-Dover, 11238 - DEIS Distribution

The attached memo is to inform you of the Department of Transportation's recent transmittal of a copy of the Draft Environmental Impact Statement

for the above referenced project to several Divisions in the Department of Environmental Services.

Please contact me if you need more information.

Response to Comments Made by
Scott Hilton, Hazardous Waste Remediation Bureau
NH Department of Environmental Services
Portsmouth, NH 03801
Letter dated September 29, 2006

1. The NHDOT and FHWA appreciate the information provided by NHDES, and, while we do not anticipate undertaking any action that would affect the Landfill 5 Groundwater Management Zone (GMZ), the presence of the GMZ is more specifically identified in the Final EIS and will be noted on project plans during development of the final design. The NHDOT will coordinate the details of the Railway Brook restoration mitigation effort with the US Air Force, PDA (Pease Development Authority), ACOE and NHDES during the project's final design stage.

2. The NHDOT and FHWA appreciate the information regarding the abandoned Air Force petroleum pipeline as well as the active natural gas pipeline in the vicinity of the proposed Exit 3 interchange. The NHDOT and FHWA will coordinate with Mr. Stephen Deatherage, the contact person at Defense Logistics Agency, Defense Fuel Supply Center in Alexandria, Virginia, which manages the pipeline for the Air Force and Granite State Gas (the owner of the active gas pipeline) during the project's final design.

3. While the Draft EIS identified two alternatives for restoration of the brook, recent coordination with the PDA, the NHDES - Waste Management Division and the US Air Force has highlighted the environmental risk associated with "Alternative B" which lies in close proximity to Landfill 5 of the former airbase. Groundwater in this area is being monitored in association with the remediation of hazardous waste contamination at Landfill 5. The NHDOT and FHWA therefore propose to pursue Alternative A, since it lies mostly outside of the groundwater management zone and therefore has relatively minimal environmental risk. As discussed with the NHDES, the final design of the Restoration Alternative will examine in more detail the potential effects on groundwater conditions upgradient of Restoration Alternative A, which are currently thought to be negligible based on a qualitative assessment.

4. Figure 3.18-1 has been updated in the Final EIS to reflect information provided by the NHDES and the PDA regarding hazardous waste sites.

The State of New Hampshire
Department of Environmental Services

Michael P. Nolin
Commissioner

October 6, 2006

Christopher Waszczuk, P.E.
Chief Project Manager
New Hampshire Department of Transportation
P.O. Box 483
Concord, NH 03302-0483

RE: Spaulding Turnpike Improvements Draft Environmental Impact Statement

Dear Mr. Waszczuk:

The New Hampshire Coastal Program (NHCP) appreciates the opportunity to review the above-referenced Draft Environmental Impact Statement (DEIS) for the proposed improvements to the Spaulding Turnpike. Based on our review of the DEIS, we wish to provide the following comments:

1. Should the Department of Transportation choose to pursue restoration of Railway Brook as a component of its compensatory mitigation package for proposed project-related wetlands impacts in the Town of Newington, the NHCP recommends restoration alternative B. This alternative, unlike alternative A, would reconnect the brook with its historic channel and floodplain. In addition, it would move a significant portion of the channel away from its current location immediately adjacent to the existing closed landfill. Moreover, as stated in the DEIS, alternative B "...would have a high probability of achieving a stable and ecologically healthy stream corridor since it would reestablish natural conditions for the stream valley." 1

2. Section 4.10.7 of the DEIS discusses potential water quality impacts that may occur as the result of the construction of temporary cofferdams and excavation associated with the proposed expansion of the bridge piers. As this work will disturb bottom sediments that may contain toxic pollutants, such as heavy metals, the NHCP recommends that a comprehensive sediment sampling and analysis program be conducted prior to construction to ensure that potential water quality impacts are avoided or minimized to the greatest extent practicable. 2

Again, thank you for the opportunity to review and comment on the DEIS. Should you have any questions, please contact me at (603) 559-0025.

Sincerely,

Christian P. Williams

Christian Williams
Federal Consistency Coordinator
NH Coastal Program

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095
Telephone: (603) 271-3503 • Fax: (603) 271-2867 • TDD Access: Relay NH 1-800-735-2964
DES Web site: **www.des.nh.gov**

Response to Comments Made by
Christian Williams, Federal Consistency Coordinator
NH Department of Environmental Services
29 Hazen Drive, Concord, NH 03302-0095
Letter dated October 6, 2006

1. The NHDOT and FHWA acknowledge the Coastal Program's recommendation to pursue Restoration Alternative B, since this alternative has features that would increase the likelihood of the ecological success of the restoration efforts. However, recent coordination with the PDA, the NHDES - Waste Management Division and the US Air Force has highlighted the substantial environmental risk associated with "Alternative B" which lies in close proximity to Landfill 5 of the former airbase. Groundwater in this area is being monitored in association with the remediation of hazardous waste contamination at Landfill 5. We therefore propose to pursue Alternative A as discussed in the Draft EIS, since it lies mostly outside of the groundwater management zone and therefore has relatively minimal environmental risk. This decision does not preclude the restoration of the brook adjacent to Landfill 5 at some point in the future when the environmental risk has attenuated.

2. The NHDOT and FHWA recognize the risk posed by the suspension of potentially contaminated marine sediments and the NHDOT will develop a sediment sampling and characterization program in consultation with the NHDES, the USACOE and other agencies. This sampling would typically occur in conjunction with the geotechnical investigations during the final design phase. Even if the sediments are determined to not pose a contamination risk, stringent requirements will be incorporated into the final design plans to require the selected contractor to minimize any movement of sediment beyond the work area. It is anticipated that all work on the bridge piers will be conducted behind sealed cofferdams, which will substantially limit the movement of suspended sediments. The NHDOT will conduct regular inspections of the measures designed to minimize this risk. Additional measures will be developed if contaminants in the marine sediments exceed NOAA thresholds for ecological or human health risk. These requirements are typically a condition of the USACOE and NHDES Wetlands Bureau permits, as well as a USEPA Remedial General Permit (RGP) which may be required for the project.

cc: C. Waszczuk
B. O'Donnell

53

The State of New Hampshire
Department of Environmental Services

Michael P. Nolin
Commissioner

October 9, 2006

Marc Laurin
Project Manager
NH Department of Transportation
7 Hazen Drive
Concord, NH 03302-0483

Re: Comments from DES Air Resources Division on the Spaulding Turnpike Improvements Newington to Dover DEIS

Dear Mr. Laurin:

This letter provides comments from the Department of Environmental Services (DES) Air Resources Division and Carolyn Russell, DES's Environmental Quality Impact Planner, on the *Spaulding Turnpike Newington to Dover* Draft Environmental Impact Statement (DEIS) prepared by Vanasse Hangen Brustlin, Inc, and dated July 2006. We appreciate you allowing us an additional day to submit these comments which were delayed due to staff issues in the Air Resources Division.

Emissions from motor vehicles and other mobile sources contribute 1/3 to 1/2 of smog-forming pollutants in New Hampshire. Additionally, over half of all air toxics nationwide come from mobile sources, and over 44% of human health risk from air toxics in NH comes from mobile sources. To reduce the impact of this project, DES encourages that DOT place significant emphasis on mitigation efforts discussed in this proposal, and work to ensure these efforts are adequately funded to remain in place and viable for the life of this project.

1 DES appreciates DOT's consideration of a wide range of mitigation strategies to reduce the number of vehicles on the roadway, including rail, bus, high occupancy vehicle lanes, and employer/employee transportation demand management (TDM) programs. We do, however, have some concerns with the analysis of the potential benefits of each of these strategies and feel that in some instances the potential benefits of the alternative travel modes may be under-estimated. Because these estimates are used to support the conclusion in Chapter 2 that a 6 lane upgrade does not meet the purpose and need of the project, and the subsequent exclusion of that option from further discussion in the analysis, this should be carefully evaluated. DES has reviewed the comments provided by the Seacoast Metropolitan Planning Organization relating to the analysis of the transit and TDM components in the analysis and found that they address the key shortcomings of this analysis. Rather than reiterate their comments regarding the methodology and assumptions used in this analysis we feel it is sufficient to simply state that DES supports their comments.

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095
Telephone: (603) 271-1370 • Fax: (603) 271-1381 • TDD Access: Relay NH 1-800-735-2964
DES Web site: **www.des.nh.gov**

In Section 2.4.4.3, relative to bus options, the reports states that some level of operating subsidy would be necessary in order for operators to provide the proposed service, yet operating
2 costs are only reviewed for 5 years, not the life of the project. The report does not include a discussion of the source of future operating subsidies.

Section 3.13.2 of the DEIS states that in order to satisfy conformity requirements of the Clean Air Act Amendments of 1990 (CAA) this project was included, in the preferred alternative format, in a regional analysis referred to, in short, as the FY 2005-2007 Conformity Determination (May 2005). Sections 3.13.2 and 4.13.5 go on to state that because of the existence of this conformity demonstration, no mesoscale analysis of this project for ground level
3 ozone impacts was conducted. However, even without this mesoscale analysis Section 4.13.5 states that in the FY 2005-2007 Conformity Determination "the proposed project's air quality emissions were evaluated as an improvement." DES does not find supporting documentation for this statement in either this report or in the FY 2005-2007 Conformity Determination documents and feels that the utility of a conformity demonstration is somewhat misunderstood.

The DEIS correctly states that the preferred alternative was included in the most recent air quality conformity demonstration and that the region was able to demonstrate that the mix of transportation projects for the region do indeed meet the conformity requirements. However, a conformity demonstration only serves to show that implementation of *all* projects in a transportation improvement program (TIP) will conform to air quality goals. It does not evaluate the impact of a project individually, with the exception of some small projects that are analyzed using "off model" evaluation techniques. The Spaulding Turnpike project was not analyzed "off model" and the impact of implementing just this project cannot be determined from the existing conformity document. In addition, only the preferred alternative was evaluated in the conformity
4 process.

NEPA requires that the DEIS show, in a comparative format, the relative environmental impact, including air quality impacts, of all options[1]. This DEIS does not provide the analyses necessary to make such a comparison. The area in which this project is located has been categorized as non-attainment with national ambient air quality standards for ground level ozone. Through the consultative process a methodology for evaluating the impacts of this proposal and proposed mitigation strategies, separate from other transportation projects in the region, should be developed. A comprehensive impact analysis of this project should include a discussion of the impacts of each of the alternatives as well as the proposed mitigation strategies.

The DEIS contains very complete data on the carbon monoxide (CO) analysis done for this project which are summarized in tables in Chapter 4. The MOBILE model input file used to derive the CO emission factors used in this analysis are contained in Appendix H. A review of the input files reveals numerous errors in the criteria used in the input files, including the fuel Reid vapor pressure (should be 12.9 for winter fuel), the VMT Fractions assumptions that under-
5 estimate the percentage of light duty trucks and sport utility vehicles in all model years, and that

[1] Council on Environmental Quality Regulations for Implementing NEPA (40 CFR Parts 1500-1508)

do not adjust the vehicle mix for the various analysis years, and finally, the input files do not utilize the appropriate National Low Emission Vehicle North East external file. The input files also identifies the file as an input file for the MOBILE6 model, not the MOBILE6.2 model, making it unclear which version of the model was used for this analysis. Development of these MOBILE input files should be done in consultation with DES, recognizing that inputs to the MOBILE model are constantly updated by DES to reflect current assumptions and data as required by the Clean Air Act. That said, it does appear that the errors to the MOBILE model inputs have resulted in emission factors that overestimate CO emissions, therefore the conclusion that CO impacts will be well under the national ambient air quality standard (NAAQS) of 35 ppm for 1 hour and 9 ppm for 8 hour is likely correct. However, the final EIS should use the correct MOBILE model inputs, the most recent MOBILE model, and correct the CAL3QHC input files that used the MOBILE model outputs.

5

The discussion in Section 4.13.6 appears to confuse the utility of the MOBILE model with that of Transportation Demand models used by the regional planning commissions as it refers to the MOBILE model as "a trip based model" that can "approximate operating speeds and levels of congestion." This is an incorrect description of the MOBILE model and this section of the report should be corrected.

6

Section 4.13.6 also states that since the VMT of all the alternatives is roughly the same there is no way to judge the difference in the impact of the various options. Where are the VMT impacts of all the options documented so that this statement can be verified? Such documentation should include link and speed information as emissions do, as noted in the report, vary according to speed.

7

The assessment of indirect and secondary impacts in Section 4.3.3, Indirect/Secondary Impacts, should be focused on the 33-communities that are defined as the study area for the project. Thus, total current population, employment, and housing figures should be adjusted to reflect just the study area (i.e., presenting values for only those towns in the affected portion of Rockingham County, not the County as a whole). The predicted changes with the project should then be compared to these adjusted numbers.

In addition, given that the 33-community study area was selected to represent the area that would be affected by the project, the *total* estimated changes predicted by the REMI model for Rockingham County should be assumed to occur in the portion of Rockingham County that is within the study area. It is inappropriate to discount the results from the REMI model for Rockingham County by 60%, as is suggested on page 4-33 discussing the estimated change in the number of households and presented again on page 4-37. Later analyses and description of results, including the estimated change in the amount of developed land, should be confirmed to reflect the total estimated change as well (while it appears that they do, the discussions on pages 4-33 and 4-37 are confusing). Additionally, the results should be compared to the baseline for just the portion of Rockingham County falling within the study area (e.g., the increased number of households under the 8-lane scenario represents an increase of about 3.7 percent in the study area).

8

While there are some Federal, State and local laws to protect certain types of resources, it is important to also note that much of the new development occurring in this region is happening on marginal land (e.g., land with a higher percentage of wetlands) and in more rural communities with less rigorous standards and often lacking professional planning staff, potentially resulting in
9 increased impacts of future development on natural resources of concern. As a result, because the types of land that will be developed in the future will be different from that developed previously, the approach to estimate potential impacts might underestimate of the potential nature of the impacts on various natural resources with the additional development. The EIS ought to recognize this possibility as well.

Finally, while there are efforts underway to improve local planning and management for future development to minimize impacts, there is a need to bolster these efforts. Although the effect of continuing growth in this region is substantial, the effect of this project is not insignificant, representing about a 2 percent increase in the amount of developed land from the No Build scenario in the study area (as currently represented in the DEIS). Opportunities to direct additional support to local communities for planning for and better managing future growth should be explored as part of this significant project. One idea is that NHDOT and
10 FHWA explore approaches to bolster the level of funding to existing programs designed to assist local communities in such efforts, including, for example, the New Hampshire Estuary Project's Local Community Assistance Program, which provides grant funds to support local planning initiatives aimed at reducing the environmental impacts of future development, and the Natural Resource Outreach Coalition (NROC) program, which provides education and technical assistance directly to local municipalities to develop a local action plan for improving planning, land conservation programs, and local education efforts to better manage future growth.

Thank you for your consideration of our comments. The Department of Environmental Services looks forward to continued work with you as this project comes to fruition.

Very truly yours,

Rebecca E. Ohler

Rebecca E. Ohler
Mobile Source Planning Unit
Air Resources Division

Response to Comments Made by
Rebecca Ohler, Air Resources Division
NH Department of Environmental Services
29 Hazen Drive, Concord, NH 03302-0095
Letter dated October 9, 2006

1. With respect to transit service, the methodology and assumptions which form the basis of estimating future transit ridership have been updated for presentation in the FEIS and include recent ridership data, recent model (NCHRP Report 365, 1998) and updated costs for parking, fuel and travel time. For example, analyses were re-run where original fuel prices of $2.00 per gallon were increased to $3.00. A sensitivity run assuming $4.00 per gallon was also conducted. Average parking costs were increased from $14.00/day to $17.05 for Boston, and from $2.00 to $3.63 for Portsmouth. The value of travel time was reduced from 100 percent to 50 percent of the average hourly wage; and avoided automobile ownership costs were revised to reflect full cost for 10 percent of the population, and marginal cost for 90 percent of the population. Based on the updated model and model assumptions, future transit ridership for each alternative was re-estimated and combined with other TSM, TDM and infrastructure alternatives (e.g., No Build, 6-lane, 8-lane) to estimate peak hour SOV diversions. In addition, the USEPA COMMUTER Model was rerun with the localized and updated cost data to estimate employer-based programs which reduced the number of SOVs on the Turnpike. In general, SOV diversions due to re-estimated transit ridership have increased ranging between 20 and 100 vehicles in comparison to previous estimates documented in the DEIS. When combined with the aggressive employer-based TDM program under the previously considered and discounted 6-lane alternative, SOV diversions increase by approximately 7.5% in comparison to the DEIS estimate. However, these increases are not substantial enough to change the conclusions, findings and recommendations with respect to the Selected Alternative. Safety and traffic operations between Exits 3 and 6 on the Turnpike require an auxiliary traffic management lane, in addition to three travel lanes in each direction.

   A revised sensitivity analysis was also conducted using the updated model (NCHRP 365) and revised variables including updated parking costs and the value of travel time. The sensitivity analysis tested the effect of an increase in gasoline cost to $4.00 per gallon from the base cost of $3.00 per gallon. Rail Alternative 2B was used for the revised sensitivity analysis because it was used in the original (DEIS) analysis. An increase in gas cost from $3.00 to $4.00 per gallon yields an increase of seven diverted vehicles from 152 to 159 and reflects a revision to the manner in which vehicle operating cost savings are calculated and distributed to transit users. With the original model (DEIS), the diversion increased by 43 vehicles from 160 to 203. None of these diversions are sufficient to reduce the need for roadway improvements.

   The USEPA model does not use input related to the cost of fuel, travel time and automobile ownership. However, it does include the use of coefficients for parking costs and transit fare costs. The coefficients for these costs used in the mode choice model were input to the

COMMUTER model and used to recalculate the diversion of vehicles from the highway. The result was a reduction of about 17 percent in the diversions projected for the Aggressive TDM program. The original COMMUTER calculations used default coefficients in that model.

Both NCHRP Report 187 and NCHRP Report 365 contain mode choice models based on the relative impedances of using transit or driving. The initial model (NCHRP187) used for the Newington-Dover analysis was originally developed for the study of the rail extension to Nashua. Because it had been calibrated to New Hampshire conditions, it appeared to be appropriate to use for the Spaulding Turnpike. Further investigation indicated that the Nashua model was effective with projections of long distance transit travel (such as to Boston) but may have underestimated shorter travel such as from Dover or Rochester to Pease and Portsmouth. The ridership analysis was rerun using the equations specified in NCHRP Report 365 along with all the updated input variables.

None of the changes in projected vehicle diversions from the Spaulding Turnpike resulting from the revised transit ridership analysis in and of themselves, or in combination with the HOV and the aggressive TDM Alternatives, are sufficient to have an impact on the needed roadway improvements identified in the DEIS. The mode choice model was revised to reflect the equations recommended in NCHRP 365 and several input variables were updated. Under the best case scenario for Bus Alternative 1 (with busway), the revised analysis results in an increased diversion of 25 vehicles. The best case for Bus Alternative 3 (also with busway) is an increased diversion of 97 vehicles. The aggressive TDM program was also re-analyzed using cost coefficients from NCHRP 365 (the only common variables) and resulted in a decrease in peak hour vehicle diversions.

2. Developing and maintaining a sustainable funding source for preservation and improvement of the area's transportation system, transit included, is a challenge that transcends the Newington-Dover, Spaulding Turnpike improvement project. The need for sustainable funding has been recognized as an issue by both the NHDOT during development of the New Hampshire Transportation Business Plan and by the State Legislature. The NHDOT has proposed up to a maximum five-year commitment to fund the transit-related elements of the Selected Alternative as mitigating elements to the potential for increased levels of congestion during construction and overall dependence on SOV travel in the region.

3. So noted. Section 4.13-5 of the FEIS has been modified to reflect that the proposed project was included in the NHDOT's State Transportation Improvement Program (STIP) for the Fiscal Year 2005-2007 and its effect on air quality was evaluated in the regional conformity analysis. The conformity analysis was reviewed by USEPA and was found to be in conformance by the USDOT. As such, this project conforms with the State Implementation Plan, no additional analysis of emissions is required and none have been instituted.

The statement in the DEIS that refers to "improvement" is meant to mean "project." The proposed project was evaluated as part of the Statewide Transportation Improvement Program (STIP) that was determined to meet the transportation conformity requirements. We recognize that this project was evaluated as part of the STIP, which is based on regional

emissions from all projects, and that it is difficult to determine an individual air quality impact from an individual project.

4. The air quality evaluation for the EIS does not include a mesoscale analysis of the project alternatives. Ozone, hydrocarbons, and nitrogen oxide concerns are regional in nature and as such their evaluation on a project-by-project basis does not contain meaningful results and could be misleading.

   Furthermore, at 40 CFR 93.115(b)(1) a project is considered to be from a conforming transportation plan if the project is specifically included in the conforming transportation plan and the project's design concept and scope have not changed significantly from those which were described in the transportation plan, or in a manner which would significantly impact the use of the facility. As the Selected Alternative's design and scope has not changed substantially from that described in the STIP, a comprehensive analysis of the alternatives, as well as the proposed mitigation strategies, are not required.

   The proposed project was evaluated as part of the Statewide Transportation Improvement Program (STIP) that was determined to meet the transportation conformity requirements. The difference in VMT for each alternative is small and the comparative evaluation of the air quality from each alternative would not demonstrate a significant change in emissions. Therefore, a comparative evaluation of emissions from the alternatives is not needed.

5. The comment outlined errors in the MOBILE file.

   The RVP value, VMT mix, and the related MOBILE input file were obtained by the NHDOT/NHDES at the start of the project (2004). Subsequent to the DEIS being completed, the NHDOT/NHDES updated these files. We agree that updating the air quality analysis with the revised MOBILE 6.2 files will not change the conclusions in the EIS. At this time, we do not expect to revise the air quality analysis. The air quality analysis utilized the correct version of MOBILE, MOBILE 6.2. While the input files states "MOBILE6 INPUT FILE:," this is the command that is used regardless of what version is run. The emission factors were generated using the MOBILE 6.2 version that has been officially approved by USEPA.

6. Typically, the term "trip based model" applies to a travel demand model. However, in this case, the term "trip based model" is intended to apply to the federal test procedure that is used in MOBILE to calculate emission rates. The air toxics section is a qualitative discussion that demonstrates that a proposed project that has an AADT of 150,000 vehicles or less does not have the potential to result in an adverse impact on air toxics. As such, specific VMT and speeds were not discussed in this section.

7. The traffic analysis evaluated the changes in traffic volumes by each alternative. These values are presented in Table 1. As shown in Table 1, these traffic volumes are approximately the same for each alternative. Link and speed data for selected scenarios used in the air quality modeling are contained in Appendix H, Volume 3. The complete air quality modeling input and output data are available upon request.

Table 1
Traffic Volumes (vph)

Segment	Direction	Alternative 2 AM Peak	Alternative 2 PM Peak	Alternative 3 AM Peak	Alternative 3 PM Peak	Alternative 10A AM Peak	Alternative 10A PM Peak	Alternative 12A AM Peak	Alternative 12A PM Peak	Alternative 13 AM Peak	Alternative 13 PM Peak
Exit 1 - Exit 3	NB	-	-	-	-	1,755	4,015	1,755	4,015	1,755	4,015
	SB	-	-	-	-	3,900	1,755	3,900	1,755	3,900	1,755
	Total	-	-	-	-	5,655	5,770	5,655	5,770	5,655	5,770
Exit 3 - Exit 4	NB	-	-	-	-	2,225	5,500	2,225	5,500	2,240	5,580
	SB	-	-	-	-	4,960	2,560	4,960	2,560	5,245	2,780
	Total	-	-	-	-	7,185	8,060	7,185	8,060	7,485	8,360
Exit 4 - Exit 6	NB	2,150	5,850	2,150	5,850	2,150	5,850	2,150	5,850	2,150	5,850
	SB	5,505	2,925	5,505	2,925	5,505	2,925	5,505	2,925	5,505	2,925
	Total	7,655	8,775	7,655	8,775	7,655	8,775	7,655	8,775	7,655	8,775
Toll Plaza - Exit 6	NB	1,200	3,330	1,200	3,330	-	-	-	-	-	-
	SB	3,120	1,650	3,120	1,650	-	-	-	-	-	-
	Total	4,320	4,980	4,320	4,980	-	-	-	-	-	-

8. As discussed in Section 4.3.3.2, the method selected for evaluating indirect economic and social impacts involved the use of projections prepared with Regional Economic Model, Inc. (REMI). Specifically the Policy Insight component of REMI was selected for this evaluation. As noted in Section 4.3.3.2 of the DEIS "The model is multi-regional to the *County level* (emphasis added), and is based on a comprehensive model of the national economy, developed and maintained by Regional Economics Model, Inc. of Amherst, Massachusetts".

Due to how model input data is collected by various Federal and State agencies, the county level is the smallest unit for measuring possible social and economic impacts. The model does not allow for analysis of population, employment and housing below the county level. A simple proportional approach was therefore used to compare and analyze potential economic impacts for the Rockingham County portion of the Socio-economic Study Area – which is a standard and accepted statistical practice for this type of analysis. Thus, as noted in the EIS, the projected number of households due to the Build Alternatives was reduced because only 40 percent of the households in Rockingham County are located in the Socio-economic Study Area. This represents a difference of 178 households for the 8-lane alternative over a 20-year (2005 to 2025) period, or less than one half household per year per municipality in the Rockingham County portion of the study area.

However, given the concerns expressed by the NHDES and Seacoast MPO, the sections of the Final EIS that discuss secondary growth issues have been updated to consider the effects of allocating 100% of the secondary growth to the Rockingham County communities within the Socio-economic Study Area. This represents an absolute "worst case scenario". It is important to note that this will not change the estimates of indirect land use impacts discussed in Section 4.3.5 of the EIS, as the analysis already assumed that 100% of the

population growth predicted by the REMI model would occur within the Socio-economic Study Area.

9. The NHDOT and FHWA believe that the approach taken to estimating secondary impacts on natural resources is very conservative and therefore likely overestimates the true impacts. As discussed in the Draft EIS (Section 4.3.5.3), this is supported by independent data from the NH Wetlands Bureau that indicates that the analysis may overstate the estimated per capita wetland impacts by as much three times the actual rate currently occurring in the state.

   However, given the concerns expressed by the NHDES and others, the sections of the Final EIS that discuss secondary growth issues have been updated to allocate this future growth to undeveloped land to account for the potential that future development in this region will occur on marginal land. Consistent with this approach, the proportion of wetlands and other natural resources within the study area have been re-assessed and data updated to reflect the amount of natural resources in the undeveloped portions of the Socio-economic Study Area. The resulting analysis is highly conservative.

10. Due to the very minor level of secondary growth related to the project, the NHDOT and FHWA do not propose additional mitigation of the sort suggested in this comment. The NHDOT and FHWA have funded a Community Technical Assistance Program (CTAP) program for the I-93 corridor that has developed several practical resource booklets to help other communities statewide proactively plan and manage growth in their communities. These booklets, as well as, other pertinent material are available on the NHDOT's website at http://www.rebuildingi93.com/content/ctap.

Local (L)

WEST ENVIRONMENTAL INC.

122 Mast Road, Suite 6, Lee, NH 03824
603-659-0416 ♦ Fax 603-659-0418 ♦ westenv@lobo-software.com

Newington Conservation Commission
205 Nimble Hill Road
Newington, NH 03801

September 21, 2006

RE: Spaulding Turnpike Improvements Wetlands Application –August 2006
SUBJ: Comments and Response

Dear Commission Members:

West Environmental, Inc. submits this preliminary review of the above referenced wetlands application to provide an overview of the proposed wetland impacts and compensatory mitigation package. This report evaluates only that portion of the project in Newington.

Wetland Impact Assessment

1. Total permanent wetland impacts 11.9 acres mostly forested and emergent wetlands with approximately 1 acre of scrub-shrub and impacts to the bay associated with the bridge piers.
2. Wetland Evaluation is summarized only and does not include photos and data but indicates that groundwater recharge, production export, nutrient removal/transformation and wildlife habitat are the main functions impacted.
3. Temporary wetland impacts are not as clearly defined and their restoration is not detailed in the application package.
4. The majority of the impacts in Newington are associated with the new Exit 3 connection to Arboretum Drive.
5. No discussion of tidal buffer zone impacts is included in the application package.

Recommended Mitigation Package

Railway Brook Restoration

6. The Habitat Assessment of the brook is not provided in the application package but should be reviewed and could be applied to McIntyre Brook for future reference. This information is included in the Draft EIS.
7. A Risk Assessment regarding potential contamination needs to be completed prior to pursuing this wetland restoration work. Alternative sites may need to be substituted if contamination risks are unacceptable.
8. The wetland areas restored and buffers to the new stream system should be protected by a conservation easement. This is discussed in a VHB Memo dated 11-1-05 but is not detailed in the application package.
9. Alternative A (Arboretum Drive north to Pickering Brook intersection) 2,542 linear feet of stream with newly created wetlands that are not estimated for size. Adjacent to Upper Pickering Brook Prime Wetland.

- Alternative B (Arboretum Drive south to airport runway) 2,700 linear feet of stream with newly created wetlands that are not estimated for size and are adjacent to North Ramp Prime Wetland. Landfill may cause unacceptable risks. Treatment of runway runoff discharging into stream is not discussed. 10
- The VHB Memo dated 11-1-05 indicates 10 total acres of wetland restoration for the combined wetland restoration alternatives but this is not detailed in the application package. 11
- Protection of the existing prime wetlands adjacent these two sites is an important consideration. 12

Preservation

Watson Property - This 35 acre parcel would permanently protect Trickey's Cove and Shackford Lot Prime Wetlands and the scenic view from the bridge. This parcel is very high value frontage on Great Bay. No discussion of an easement holder or local access was included in the application package. 13

Alternate Mitigation Options

Preservation

Knight Brook - Three parcels totaling 100 acres that would provide permanent protection to the Knight Brook Prime Wetland. Diverse upland and wetland complex. No discussion of an easement holder or local access was included. 14

Restoration/Preservation

Drive-Inn Theater Property – 16 acre site includes potential grassland species habitat. No wetland restoration acreage is given in the application package but the VHB Memo dated 11-1-05 indicates 1.6 acres. This site rated low on previous reviews. 15

NHDES Requirements.

Based on almost 12 acres of wetland impact the ratios required for mitigation are as follows:

* Wetland Restoration 1.5 to 1 or 18 acres
* Preservation of Upland Buffer 10 to 1 or 120 acres 50% of which can be wetland

The Railway Brook Restoration Alternatives do not give acreage of proposed wetland restoration however the VHB Memo dated 11-1-05 estimates 10 acres. The protection of the 35 acre Watson Parcel represents 29% of the required mitigation. Therefore 8.2 acres of wetland impact remain to be mitigated. The railway brook restoration would need to include 12.3 acres of wetland restoration/creation to meet the NHDES requirements. The additional preservation of the restoration site and its buffers will likely meet the mitigation requirements for the Town of Newington. More information would need to be provided as to the risk and benefits of this restoration project including how much wetland will be restored or created by this alternative. The commission may wish to pursue protection of some of the Knight Brook area to compensate for any additional mitigation required to meet the NHDES ratios. 16

17 Three of the four proposed mitigation parcels appear to be good options with the reservation that the Railway Brook Restoration presents both challenges and potential risks. It appears that Alternative A is the more attractive option because of its distance from the runways however the ideal scenario would be to restore both stretches if either is pursued to create a more complete wetland system.

18 The success of the preservation parcels is easier to predict however the easement holder and restrictions are key components to evaluating the mitigation benefits to the Town of Newington.

Additional information identified in this letter would provide a better understanding of the value of the proposed mitigation. Some of this information may be contained in the EIS and should be reviewed prior to making final recommendations.

This completes out report at this time. Please call our office if you have any questions.

Sincerely,
West Environmental, Inc.

Mark West, President
Wetland Scientist

Response to Comments Made by
Mark West, Wetland Scientist, President
West Environmental, Inc.
122 Mast Road, Suite 6, Lee, NH 03824
Letter dated September 21, 2006

1. So noted.

2. The Wetlands Permit Application follows accepted procedure for projects of this scope and incorporates by reference the entire Draft EIS. Neither the Army Corps nor the NHDES has requested individual photographs of wetlands.

3. The NHDOT and FHWA also agree that temporary impacts to wetland resources must be identified. It is expected that all wetland impacts will be contained within the footprint as shown on the project wetland plans. However, additional temporary impacts may be required. These impacts are typically a function of construction sequencing and procedures, and will be determined during the final design or construction phase. As is standard practice for projects such as this, the NHDOT and FHWA will continue to track actual wetland impacts during final design and construction of the project and will submit those updated impacts to the regulatory agencies for their review. It should be noted that temporary impacts are not subject to mitigation requirements. The NHDOT and FHWA will restore any temporarily impacted wetlands as part of the project.

4. So noted.

5. The NHDOT and FHWA agree that it is appropriate to identify impacts to the tidal buffer zone. This information has been developed and will be reported in the Final EIS and submitted as an addendum to the NHDES Wetlands Permit application.

6. So noted. The biological assessment of Railway Brook is reported in the Draft EIS and raw data is included as an appendix to the DEIS. McIntyre Brook is outside the project study area.

7. While the Draft EIS identified two alternatives for restoration of the brook, recent coordination with the PDA, the NHDES - Waste Management Division and the US Air Force has highlighted the environmental risk associated with "Alternative B" which lies in close proximity to Landfill 5 of the former airbase. Groundwater in this area is being monitored in association with the remediation of hazardous waste contamination at Landfill 5. Therefore, the NHDOT and FHWA have chosen to pursue Alternative A as discussed in the Draft EIS, since it lies mostly outside of the groundwater management zone and therefore has relatively minimal environmental risk. The state and federal resource agencies concurred with this approach during a mitigation review meeting on March 21, 2007. Based on the fact that Alternative A will not involve work within a groundwater management zone, the NHDOT and FHWA feel that a formal risk assessment is not warranted.

8. A revised conceptual plan (as shown in Figure 4.6-4) for the restoration of Railway Brook has been developed and is presented in Section 4.6.5 of the Final EIS. The plan shows a

conservation easement totaling approximately 23 acres will be procured to preserve the area in its restored state in perpetuity.

9. The estimated riparian wetland creation associated with the Railway Brook restoration is approximately 5.4 acres, while the restored stream would be approximately 1.5 acres, for a total of about 6.9 acres. It is expected that this estimate will change as the conceptual plan progresses through the design process.

10. So noted. As discussed in Response 7, the NHDOT and FHWA are no longer pursuing Restoration Alternative B as an option.

11. So noted. The intent of the wetland application package is to provide basic information to the USACOE for public notice purposes.

12. The NHDOT and FHWA agree that the existing prime wetland adjacent to the restoration site is an important consideration. The wetland is a relatively narrow drainage that appears to result from modifications made by the Air Force during construction of the former Pease Air Force Base. The restoration plan calls for creation of floodplain and wetland adjacent to the restored brook which will have the effect of connecting the existing prime wetland to the restoration area, which will enhance its value.

13. The NHDOT and FHWA are continuing to work with The Nature Conservancy to potentially acquire an easement on the Watson Property, in combination with the Railway Brook restoration, as part of the mitigation plan. Easement and interest holders, as well as access rights, will be determined during right-of-way negotiations.

14. The three parcels totaling 100 acres along Knight Brook are the second alternative in the mitigation plan. Should an easement on the Watson Property be unachievable, a conservation easement on two of the three Knight Brook parcels would be acquired. Easement and interest holders, as well as access rights, will be determined during right-of-way negotiations.

15. The Drive-In Theater Property has been removed from mitigation alternatives due to its low ecological value as a mitigation site.

16. NHDOT and FHWA have met numerous times with state and federal resource agencies to craft a mitigation strategy that is acceptable under both state and federal mitigation policies. The Final EIS contains details of the final proposed mitigation package, which includes the following components:

- Restoration (Alternative A) of approximately 3,100 linear feet of Railway Brook, as well as preservation of approximately 23 acres, in Newington.
- Preservation of the Watson property (35 acres) in Newington.
- Preservation of the 120-acre (±) Tuttle Farm in Dover.
- Preservation of approximately 30 to 40 acres of the Blackwater Brook Area in Dover.

If negotiation of an easement on the Watson Property is not successful, then the NHDOT and FHWA would pursue preservation of approximately 60 to 70 acres of the Knight Brook area in Newington.

NHDOT and FHWA believe that the mitigation package complies with the latest guidance on mitigation from the USACOE (RGL 06-03) as well as NHDES administrative rules (Env-Wt 800). The compensatory strategy contains a combination of stream and wetland restoration, preservation of wetlands and upland buffer preservation that will compensate for unavoidable impacts from the proposed Spaulding Turnpike Improvements project. The restoration portion of the package will replace lost wildlife habitat and water quality functions, while the preservation component will help to ensure the future integrity of the important Blackwater Brook wetland complex which provides important wildlife habitat and is within the recharge area for Dover municipal water supply wells. Based on the discussion at a meeting of state and federal resource agencies on March 21, 2007, a consensus was reached that the mitigation package as outlined in the Final EIS is acceptable.

17. As discussed above, the NHDOT and FHWA have chosen to pursue Restoration Alternative A. (Also see response #7)

18. The conditions of the conservation easement, as well as easement interest holders, will be identified during the right-of-way process. The NHDOT's standard conservation easement language or language that is approved by the USACOE and NHDES will be used. An environmental steward will be identified to ensure the easement conditions are being met.

WEST ENVIRONMENTAL INC

122 Mast Road, Suite 6, Lee, NH 03824
603-659-0416 ♦ Fax 603-659-0418 ♦ mark@westenv.net

Chairman of the Special Committee
c/o James Moore, Director of Project Development
NHDOT
PO Box 483
Concord, NH 03302-0483

September 27, 2006

JM 9/28/06

RE: Spaulding Turnpike Improvements Wetlands Application –August 2006
SUBJ: Follow-up Comments to Public Hearing

Dear Sirs:
West Environmental, Inc. submits these comments with the Newington Conservation Commission(NCC) as a follow-up to our comments submitted at the Public Hearing on September 21, 2006.

Wetland Impact Assessment/Stormwater Management

1 Due to the extent of wetland impact and amount of proposed impervious surface in close proximity to Great Bay tidal wetlands, details of the proposed storm water management system are needed in order to understand the potential wetland and surface water impacts. This information should be included in the Final EIS so that the Newington Conservation Commission can adequately assess the projects impacts.

Recommended Mitigation Package

Railway Brook Restoration

2 The NCC strongly urges the NHDOT to evaluate and pursue this restoration alternative as we have identified both this site and McIntyre Ditch as significantly degraded stream systems that drain directly into Great Bay. This project presents an excellent opportunity to restore wetland/stream systems that continue to degrade the water quality of Great Bay and its tributaries.

Drive-Inn Theater Property –

3 The NCC voted to not recommend this as a mitigation alternative based on the lower ecological value of the site. We request that the NHDOT remove this as a mitigation alternative.

We appreciate the opportunity to comment on this project.

Sincerely,
West Environmental, Inc.

Mark West, President
Wetland Scientist

Newington Conservation Commission

Vincent Frank

Vincent Frank
Chairman

Response to Comments Made by
Vincent Frank, Chairman
Newington Conservation Commission
205 Nimble Hill Road, Newington, NH 03801
Letter dated September 27, 2006

1. Additional details regarding the stormwater management system and treatment devices will be provided as they become more fully developed as the project progresses through the final design stages. At the EIS phase, the general drainage patterns and approximate locations for detention basins have been identified. These locations and the estimated size of the area needed are rough approximations and generally do not account for site-specific constraints. The presence of wetlands and other site constraints are factored into the sizing and final layout of the treatment devices as they are refined during the final design process.

   Also, see Letter S-4, response #3.

2. The NHDOT and FHWA acknowledge and appreciate the NCC's support for the restoration of Railway Brook. The NHDOT and FHWA plan to progress Alternative A as the preferred restoration alternative for Railway Brook.

3. Based on public comment, the Drive-In Theater Property has been removed as a mitigation alternative.

Submitted 9/21/06

9

BEFORE THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION
AND THE FEDERAL HIGHWAY ADMINISTRATION

Spaulding Turnpike Improvements
Newington to Dover, New Hampshire
NHS-027-1(37), 11238

COMMENTS OF JUSTIN C. RICHARDSON

I. BACKGROUND & SUMMARY

- Justin C. Richardson, Esq., Newington Resident, and Member of the Newington Conservation Commission (Vice chair 2005).

- Background in Environmental Law. Former Assistant Attorney General in the NH Department of Justice, Environmental Protection Bureau (1996-2000); NHDES Employee and Intern, Water Management Bureau & Planning Unit (1990-1993).

- Concerns regarding discharge of stormwater to Little Bay resulting from the NHDOT construction at Exit 4 in Newington. Prepared reports documenting stormwater discharges from NHDOT projects in violation of state water quality standards to the Newington Conservation Commission (attached).

- Little Bay, Great Bay & the Piscataqua River are an extremely valuable environmental resource, yet these bodies of water do not meet state water quality standards.

- Because of these concerns, limited space and proximity of Little Bay, significant stormwater treatment and prevention measures should be in place prior to significant construction to mitigate stormwater discharges into Little Bay, both during and post construction.

- Draft EIS does not provide any details that would allow reader to determine that adequate measures will be in place, prior to, during or post construction. Final EIS should require measures in place at critical locations around Little Bay, and eliminate stormwater at its source.

II. COMMENTS

Stormwater runoff is the #1 pollution problem in the State of New Hampshire.

1 - Runoff from rainstorms and snowmelt is the *most significant source of water pollution today*. Stormwater carries sediment, oil, grease, nitrogen, phosphorus,

and other pollutants into storm drains and then, untreated, into nearby waterbodies. [1]

- The New Hampshire Department of Environmental Services (NHDES) ranks stormwater runoff as the highest priority source of non-point source pollution in the state of New Hampshire due to its impact on public health and receiving waters.[2]

1

- According to the University of New Hampshire Stormwater Center, "Urban stormwater is the second largest source of water quality impairment in estuaries."[3]

Great Bay (including Little Bay) is an extremely valuable environmental resource to the region.

- Great Bay, including Little Bay, has been identified by the NHDES as "one of six high priority areas in the state".[4]

- Great Bay contains salt marsh habitats that are recognized as one of the highest priorities for protection by the NHDES's rules which state that "[p]reserving the integrity of saltmarshes and other tidal wetlands *shall be given highest priority by the department*, because of the high productivity, rarity of such wetlands, and difficulty in restoration of value and function for those environments." Env-Wt 302.01 (a) (emphasis added).

- According to the NHDES Fact Sheet WMB-CP-07 (2004), salt marsh grasses are a critical environmental resource. In addition to their aesthetic value, "salt marsh provides the food for larger fish that are important to the New England fishing industry. Over the past decade, fishery stocks in New England have seriously declined. There is evidence that restoring marshes, along with improved fishing management, will help to restore these fish stocks."

2

- According to the NHDES Fact Sheet WMB-CP-03 (2004), mud flats present at Great Bay adjacent to the project are an important environmental resource and "provide important habitat for bottom-dwelling invertebrates, such as clams and mussels, and thus provide food for predatory fish, birds and invertebrates such as the horseshoe crab, mudsnail and shellfish species."

---

[1] USEPA *Getting the Word Out...The Role of Local Governments In Implementing the NPDES Stormwater Program for Construction Sites.* EPA 833-F-06-0022. (emphasis added).
[2] NHDES, Nonpoint Source Management Plan (1999), Page ES-2.
[3] Thomas Ballestero, University of New Hampshire Stormwater Center, May 2005 Presentation to NRPC. Available at http://www.unh.edu/erg/cstev/Presentations/index.htm
[4] NHDES Fact Sheet R&L-6 (1997).

- The United States Environmental Protection Agency has identified three priorities for protection of Great Bay as a natural resource.[5] These priorities are:

  Triple the acreage of open shellfish beds (to 75% of all beds) and triple number of harvestable clams and oysters in NH estuaries.

  Preserve open space in Great Bay watershed area.

2 Increase the acreage and value of salt marshes, wetlands and other estuarine habitats.

- The areas of Little Bay adjacent to the project provide a critical habitat function. In a technical report entitled *Important Habitats of Coastal New Hampshire* the United States Fish and Wildlife Service listed and ranked priority species important for wildlife protection and conservation. Many of these important species and habitats are located at or near the proposed project.

Water Quality of Little Bay at the project location (Little Bay) does not meet state water quality standards.

- The NHDES reports that the sections of Little Bay and the Piscataqua River adjacent to the proposed project do not meet the state's water quality standards.[6] The Piscatqua River is categorized as a Category I water body in need of restoration.[7]

- Past (and much smaller scale NHDOT projects) have resulted in discharges of turbid water to Little Bay, in violation of state water quality regulations.[8] See
3 Attached Reports. The proposed project, due to its larger scale, presents an even greater risk.

- Impervious cover in the Newington sections of the project is a serious problem. According to the Draft EIS, in Newington Lower Pickering Brook is 19% impervious.[9] It is generally recognized that stormwater discharges are a concern when imperviousness exceeds 10%.[10] The Draft EIS further reports that the

[5] USEPA, *Great Bay and the Seacoast*, Fact Sheet (June 2002).
[6] See generally, NHDES *2004 Section 305(b) and 303(d)Surface Water Quality Report.*
[7] NHDES Nonpoint Source Management Plan, Table 1-1 (1999).
[8] Under the Department of Environmental Services regulations, Env-Ws 415.04 Water Quality Degradation Prohibited, "[n]o person undertaking any activity for which a permit is required *shall cause or allow the activity to cause any water quality degradation, including siltation or turbidity in surface water.*" (emphasis added).
[9] Draft EIS, Page ES-14.
[10] Center for Watershed Protection, www.cwp.org.

capacity of the drainage pipes may also be deficient at some locations due to the amount of impervious area that has been added from development in the area.[11] Stormwater runoff from the project and adjacent impervious areas will add pollutants to the system.

- It is critical that stormwater prevention and treatment measures be in-place prior to construction to (a) prevent stormwater discharges and sediments at their source; and (b) treat stormwater discharges prior to reaching Little Bay. 3

- The Draft Environmental Impact Statement states that stormwater treatment facilities will be constructed, but does not specify their location.[12] Location is critical in order to evaluate whether the protections will be sufficient to prevent violations of water quality laws and regulations.

RECOMMENDATIONS

- Stormwater treatment *prevention and treatment* measures be in place prior to construction. 4

- FEIS should identify, evaluate and make recommendations concerning the need for stormwater treatment and mitigation measures at specific locations. 5

- Treatment systems are needed adjacent to Little Bay. Newington/Exit 4 should be considered. 6

- Project specific environmental inspectors reporting to NHDES should be considered given compliance concerns Exit 4. 7

[11] Draft EIS, Page 3-23.
[12] Draft EIS, Pages ES-18; 2-108.

NEWINGTON EXIT FOUR EROSION / TURBITY
DISCHARGING INTO GREAT BAY

Pictures taken on July 11, 2006 at 7:30 PM, following a rainstorm that ended (approximately) at 4:00 PM. Significantly greater volumes of stormwater discharging directly to Great Bay (Little Bay near Bloody Point) than those depicted were observed earlier in the day but were not photographed. This storm event (and sediment levels) are substantially less than those observed earlier in the day, and during all other rain events in May and June of this year.

Photo A. Culvert discharging to Great Bay immediately to the east of the Exit 4 underpass to the Spaulding Turnpike. Although only 1" deep (approx, not measured) water is opaque due to sediment and turbidity from DOT construction sites west of the turnpike.

Photo B. Looking Southeast towards Nimble Hill Road from Exit 4. No erosion controls or swales present. Storm drain is located adjacent to the road near the standing water. Water containing sediments is washing off the site directly on to the road or into the storm drain.

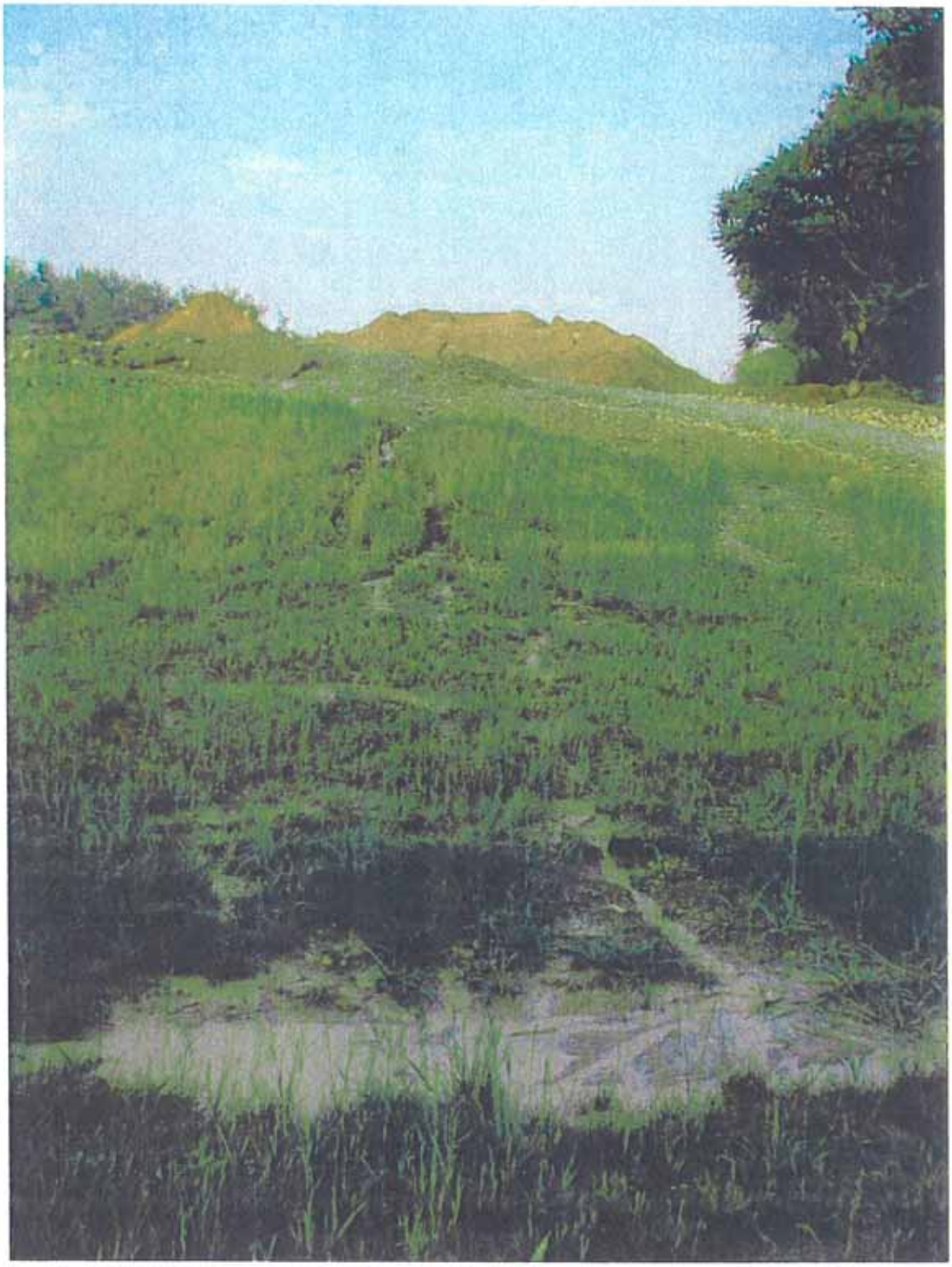


Photo C. North of Photo B looking up at the spoils area west of the Turnpike. Runoff containing high sediment levels is washing down and eroding the slope into drains and onto the road.

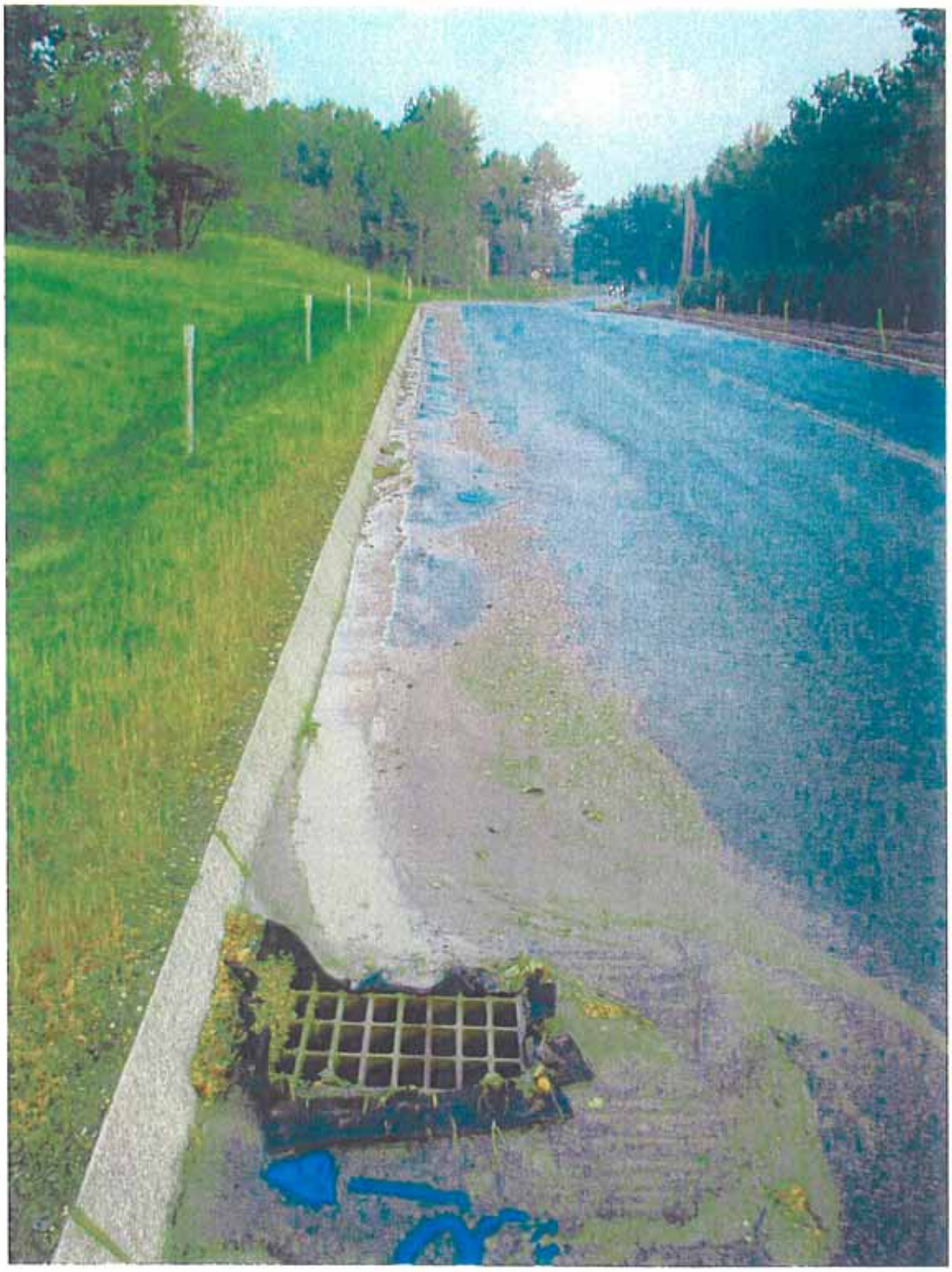


Photo D. Looking south from Photo C. Large volumes of opaque stormwater containing sediments have been observed following rainfall events. Course sediments settled when high discharge volumes decreased shown here. Fine suspended sediments are visible similar to those shown discharging directly into Great Bay (Photo A).

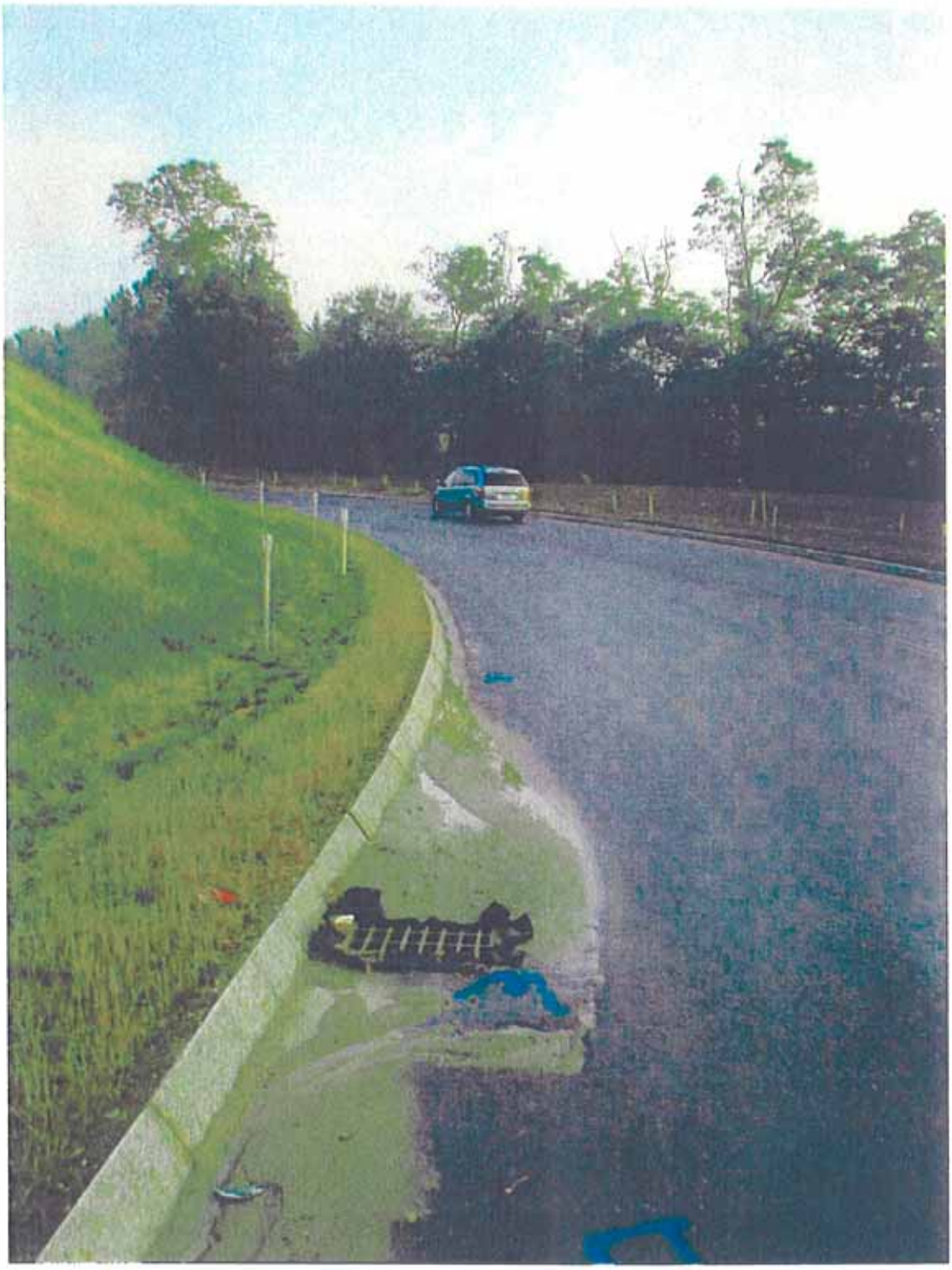


Photo E. More sediments, taken further down from Photo D.

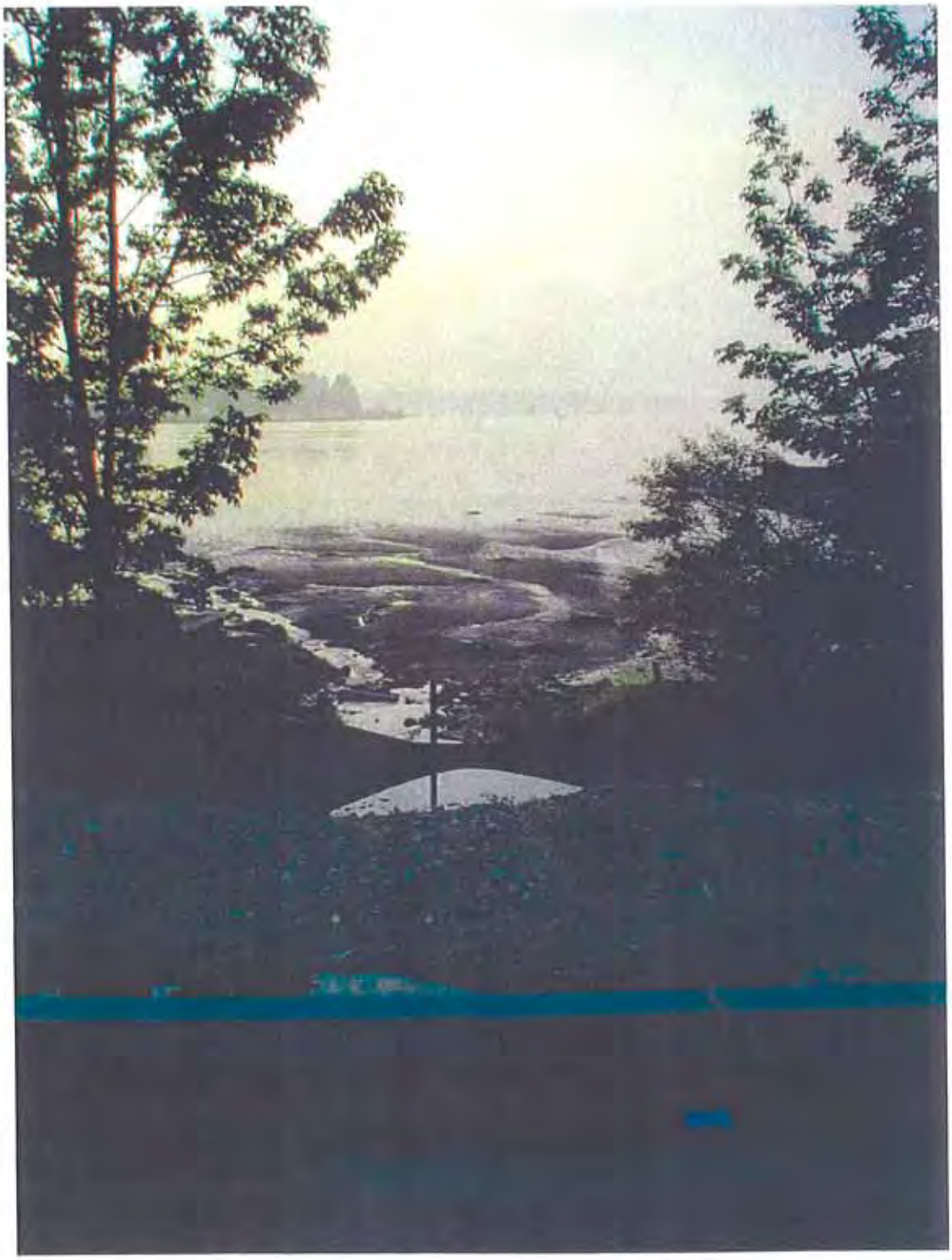


Photo F. Above Photo A, showing the sediments discharging into Great Bay.

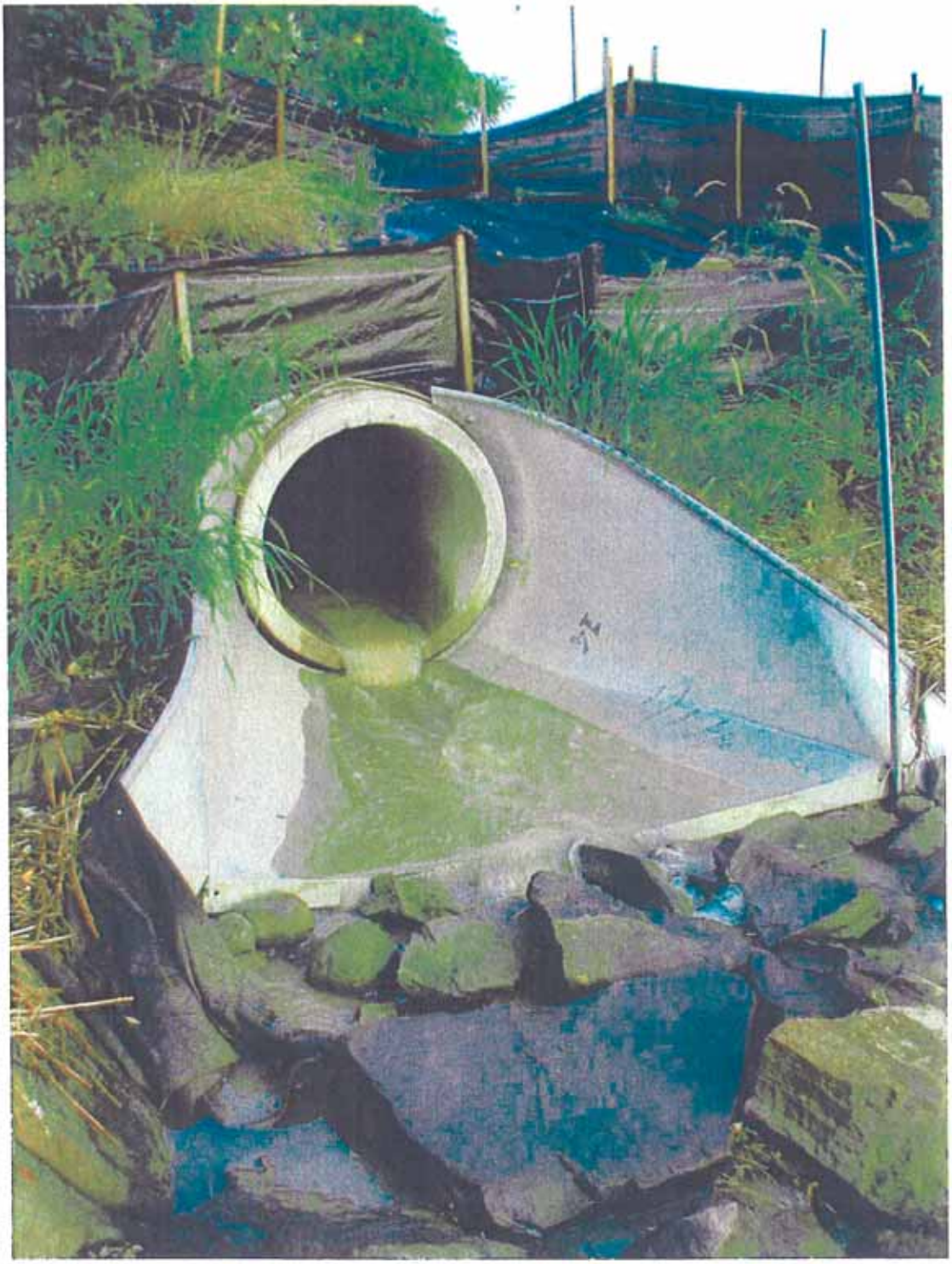


Photo G. Same location as A, below F.

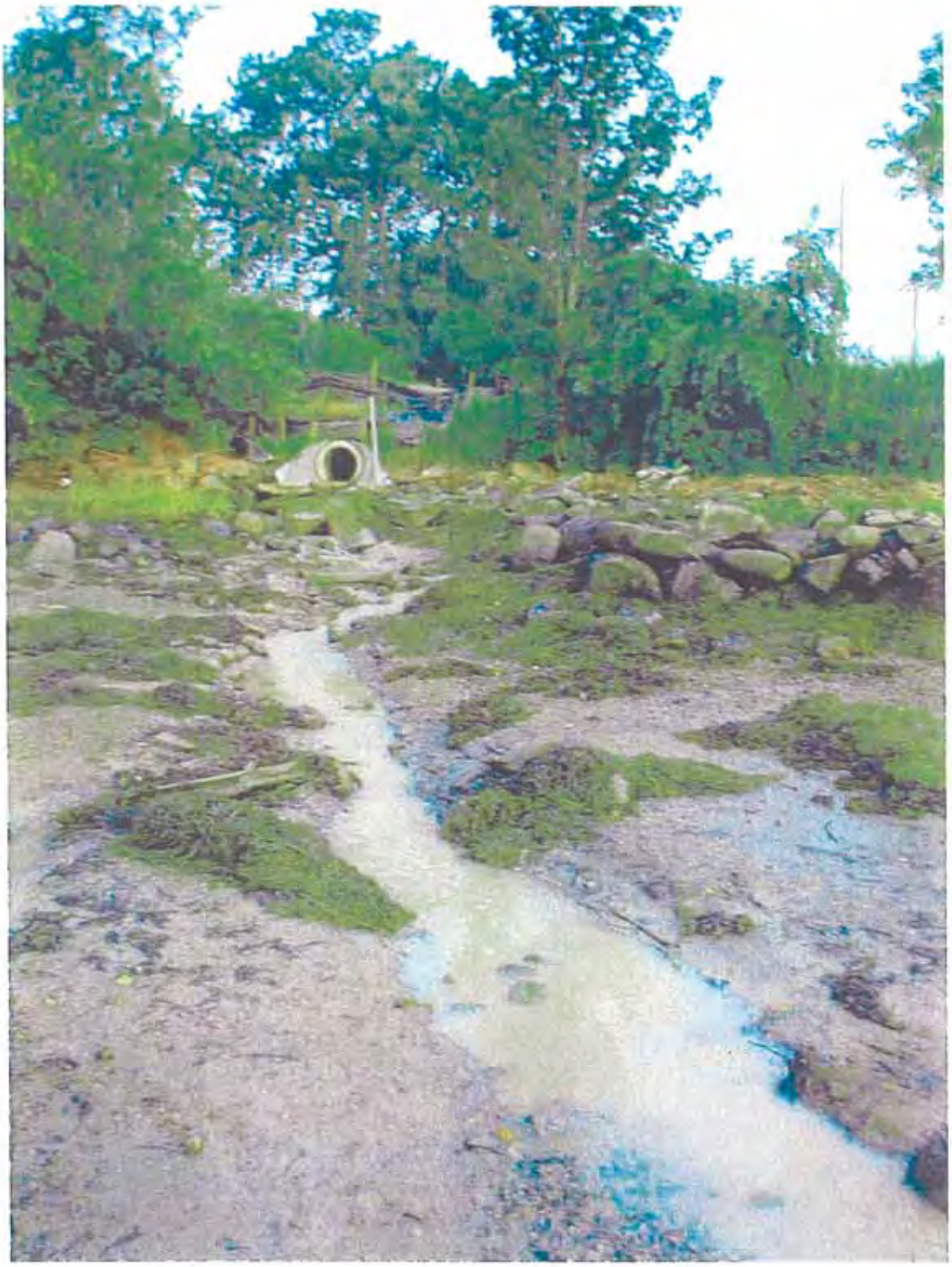


Photo H. Shows sediments discharging into Great Bay at low tide (approx 7:30 PM on July 11, 2006). Stormwater discharge volumes have resulted in channel formation in the Bay. Adjacent areas of the Bay appear to be fine clay deposits which have eroded to form a channel containing courser sediments. This channel is below the mean high water and presumably eroded during low tides.

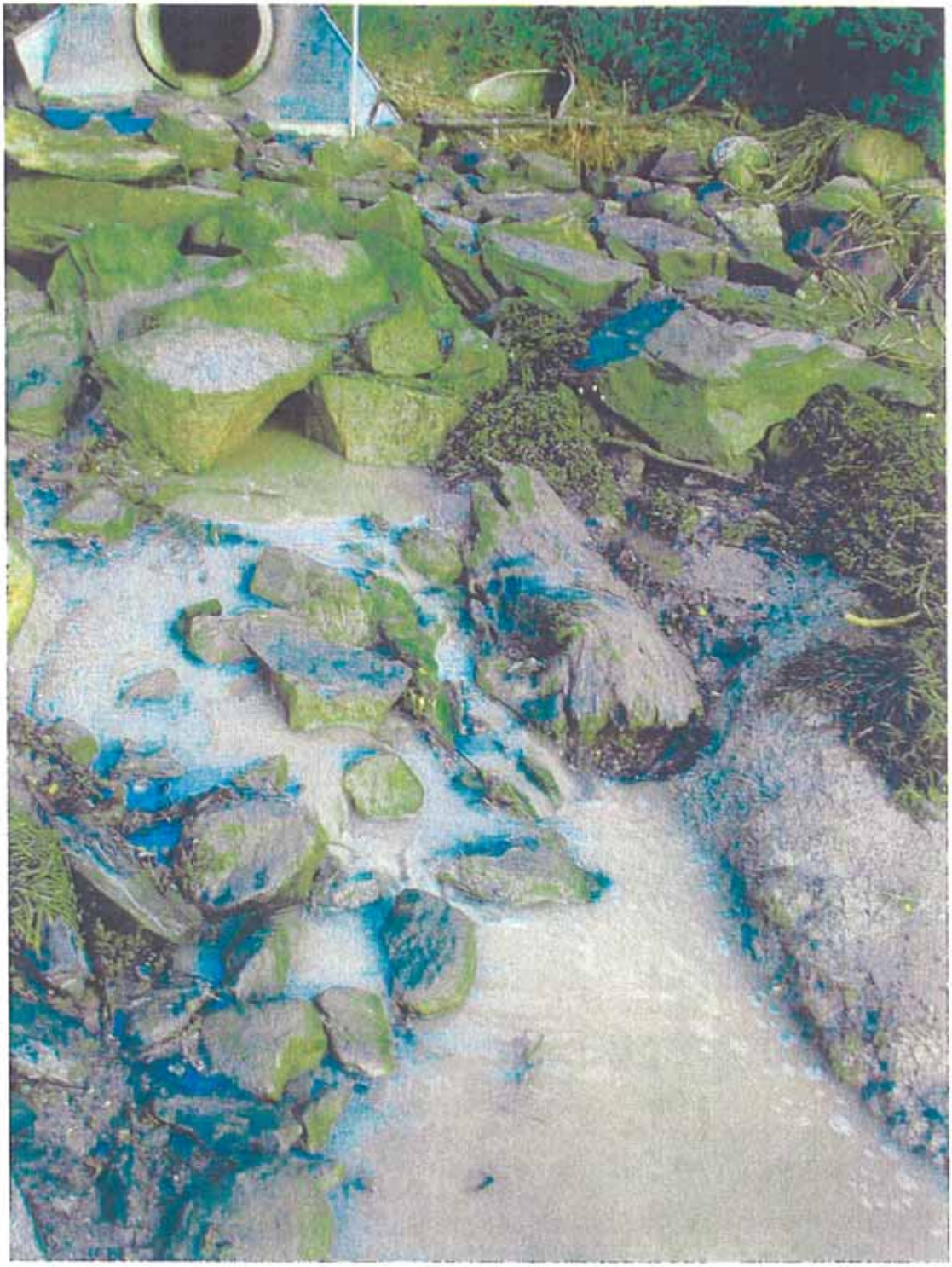


Photo I. Close up of turbidity due to erosion and stormwater from DOT project.

TO: Newington Conservation Commission

FROM: Justin C. Richardson, Esq., Member

RE: NHDOT Shattuck Way – Exit 4 Site Visit

DATE: July 28, 2006

Cc: David Price, NHDES
Stehphen Labonte, Esq., NH AGO
Jonathan Pitre, NHDOT

I. BACKGROUND

On Monday July 24, 2006 I forwarded to Assistant Attorney General Stephen Labonte my report concerning turbidity and erosion into Great Bay that I observed from the NH DOT Exit 4 project on July 11, 2006, as discussed at the Commission's July meeting. See attached email.

On Thursday July 27, 2006, I discussed my concerns with Attorney Labonte who informed me that he had forwarded my report to the NH DOT Engineer in charge of the project on site, and that the NH DES (David Price) intended to complete a site inspection the next day. I obtained permission from the NH DOT and NH DES to attend the field inspection in order to report back to the Commission concerning what steps would be taken to prevent further erosion and turbidity discharges in Great Bay.

I understand that the NHDES will be forwarding its field inspection and a follow-up letter to the Commission.

II. SITE INSPECTION

The following are my observations and conclusions regarding the site visit.

- We confirmed that the source of the sediments and turbidity discharging to Great Bay as shown in my report was likely both the Nimble Hill Road and Shattuck Way staging areas.

- The storm drains contained "silt sacks" to trap sediments. Even with the silt sacks, however, David Price indicated that fine particles present in this area can still result in turbidity problems.

- It appears that the sediments trapped in the silt sacks slow the rate that water infiltrates through the silt sacks into the drains. As a result, water unable to pass

through the silt sacks would overflow down Shattuck Way to its lowest point, which is the drain(s) closest and adjacent to Great Bay at the underpass.

- The NHDOT already appeared to have taken steps to correct the problems observed in my report. For example, silt fencing had been installed around the area West of the Turnpike and the area had been regraded to reduce runoff directed onto Shattuck Way from staging areas.

- Several recommendations for further stabilization and erosion control were made by David Price from NHDES. The NH DOT was responsive and agreed to implement all but one of the measures the same day, consistent with the schedule recommended by NHDES.

- David Price stated that he had received a complaint concerning erosion problems and that he conducted a field inspection and made recommendations to the NH DOT on or about May 3 of this year.[1] I believe that David Price indicated that the NH DOT had implemented all of those recommendations. This is consistent with my personal observations that the site conditions in July, although continuing to result in discharges of turbidity to Great Bay, are dramatically better than what I observed driving through the area in May.

- In my opinion, the NH DOT's implementation of David Price's recommendations (both in May and during the field inspection) shows that the NH DOT acts quickly to environmental concerns. However, it does raise a question as to why, after being alerted to the problem in May, the NH DOT was not more aggressive in preventing erosion at its source prior to my report of the July 11, 2006 turbitidy discharges into Great Bay.

- David Price indicated to me that it is difficult to assess the level of turbidity based on photographs alone. While he seemed to agree that my report concerning the July 11, 2006 events shows that the project likely violated NH DES's standards for the discharge to surface waters, he indicated that the absence water quality samples (taken using the correct procedures) makes the assessment of any violation and its extent difficult. Had such samples been taken and confirmed a significant violation of the turbidity standard (10 NTUs above background), I got the impression that the NH DES would likely have considered an enforcement action.

- David Price indicated that he would be sending letter concerning his findings to the NH DOT and would copy the Newington Conservation Commission. I indicated that I would make a report to the Commission, which I would copy the NH DES and NH DOT.

[1] I saw the field inspection report only briefly and my comments are based on limited review.

CONCLUSIONS AND RECOMMENDATIONS

1. *In my opinion, the NH DOT appears to have responded to my report in a timely and appropriate manner to the issues identified in my report to the Commission.* Jonathan Pitre indicated that if there are any concerns in the future to contact him immediately and he would ensure that they were corrected. I have every reason to believe that NH DOT will act immediately to correct any problems that may be identified in the future.

2. *Never-the-less, the fact that the NH DES had conducted a field inspection in early May on this issue at this location indicates that the NH DOT should improve its efforts to prevent turbidity problems arising, particularly in areas adjacent to Great Bay.* It may be that discharge of stormwater into Great Bay containing turbidity levels greater than allowed by Env-Ws 415.04 was unavoidable due to the location of the project, limited space, the volumes of stormwater, soil conditions, and other factors. However, given the importance of Great Bay as a natural resource, every effort should be taken to ensure that reasonable protection measures are in place prior to storm events such as on July 11, 2006.

3. *The Commission should consider whether it should develop the ability to take water quality samples that could be used by NH DES in the event that a concern arises on a future project.* Sampling equipment could be stored at the Town offices for use by Commission members, the building inspector, or other Town officials, if necessary in the event a problem occurs.

4. In my opinion, Exit 4 is configured such that there is not much room available for the treatment of stormwater using preferred methods such as vegetated swales, infiltration etc. *I recommend that the Commission consider encouraging the NH DOT to develop a stormwater treatment system as part of the turnpike expansion project.*

5. David Price recommended calling the NH DES field office at Pease in the event a concern like this arises. He indicated that he often is able to be on site the same day to observe the field conditions and take any samples, as warranted.

Justin Richardson

From: Justin Richardson
Sent: Monday, July 24, 2006 10:47 AM
To: 'stephen.labonte@doj.nh.gov'
Cc: 'planning@newington.nh.us'; Vincent Frank (E-mail); Justin Richardson
Subject: Newington Exit 4 Turbitidy into Great Bay

Steve:

The Newington Conservation Commission is concerned about discharges into Great Bay from the Exit 4 site. As shown on the attached PDF file/report, during both recent thunderstorms and the rain we had earlier this year, massive quantities of sediments have been discharging unchecked into Great Bay, which appears to violate State water quality laws. See e.g., Env-Ws 415.04.

At its July meeting, the Commission voted to forward its concerns to DES regarding its impact on water quality. That has not happened (I don't believe a letter has been written yet), but it occured to me that it might be more productive if DOT could resolve the issue in the first instance, without the need to go any further. I can't speak for the whole Commission, but I think it would be helpful if DOT came up with a proposal to address stormwater and erosion into Great Bay from the Exit 4 project.

The August Cons. Comm. meeting will likely be the first Thurday in August. If you want to get on the Agenda, I would recommend contacting Tom Morgan who could put you in touch with Vincent Frank, the Chairman. Tom can be reached at 436-7640. I don't have Vincent Frank's number.

Also, just from my personal observation, there appears to be little space available for stormwater management due to the configuration of Exit 4 and Great Bay. I would be curious how DOT plans to address stormwater during the Rout 16 expansion. That is a more long-term consideration, but i think the attached photos confirm that there is a problem. Based on my initial research, it also appears to me that this part of Little Bay does not meet state water quality standards, so we are dealing with a environmental resource that is already under significant stress.

If you have any questions, feel free to call me.

-Justin

20060711 NH DOT
Route 16 EXIT ...

Justin C. Richardson, Esq.
Upton & Hatfield, LLP
159 Middle Street
Portsmouth, NH 03801
Tel: 603-436-7046
Fax: 603-431-7304
jrichardson@upton-hatfield.com
www.upton-hatfield.com <http://www.upton-hatfield.com>

Response to Comments Made by
Justin C. Richardson, Commission Member
Newington Conservation Commission
205 Nimble Hill Road, Newington, NH 30801
Letter dated September 21, 2006

1. So noted.

2. So noted.

3. Additional details regarding the stormwater management system and treatment devices will be provided as they become more fully developed as the project design progresses through the FEIS and final design stages. At the DEIS phase, only general drainage information is developed such as existing drainage patterns, discharge locations and approximate detention basin location and sizing. More detailed information with regard to specific detention basin locations, their potential size and the estimated treatment requirements are determined as part of the FEIS process.

   Final design will incorporate stormwater treatment areas to provide, to the extent practicable, no net increase in pollutant loadings and to limit peak runoff flows to the pre-existing conditions.

4. With regard to the comments pertaining to erosion control measures and the potential for increased turbidity in runoff, erosion control planning, review and monitoring procedures, the NHDOT and FHWA will require construction contractors to provide detailed erosion control plans including contingency measures and periodic turbidity monitoring of the site discharge during wet weather events. The NHDOT and FHWA will also require the contractors provide frequent inspections of construction sites to maintain compliance with permit conditions. Stringent requirements in final design plans will be incorporated by contractors to minimize any movement of eroded sediment beyond the work area. These requirements are typically conditions of the USACOE and NHDES Wetlands Bureau permits, as well as part of the Section 401 Water Quality Certificate that will be required for the project.

5 See Response #3.

6. It is recognized that the Little Bay is an extremely valuable resource for the region and the state. NHDOT and FHWA have been working with NHDES to develop a better understanding of the stormwater treatment needs and the available methods to assess the potential water quality impacts associated with roadway runoff. NHDOT has also collaborated with the UNH Stormwater Center to explore the latest in innovative treatment measures that can provide a high level of treatment for the various pollutants associated with highway runoff. As a result, NHDOT has most recently incorporated UNH's design guidance in constructing gravel wetlands as water quality treatment measures where appropriate on the Salem-Manchester I-93 project. One of the main advantages of gravel wetlands is that they have been found to have relatively high removal efficiencies for a number of pollutants, particularly for nitrogen, which is a principal parameter of concern in coastal waters. Nitrogen is typically the limiting nutrient in coastal and estuarine waters such that any significant increases in loading could stimulate undesirable algae growth. The use of gravel

wetlands for stormwater treatment on this project will be evaluated as part of the final design process.

7. The NHDOT has the personnel and plans to provide more frequent inspections of construction sites and erosion control measures. In addition, the contractor is required to hire a qualified individual or firm to perform inspections of the erosion control measures on a weekly basis or following a major rain event as part of the USEPA General Permit requirements for Construction Activities. Details of the erosion control measures and inspection requirements will be included in the Stormwater Pollution Prevention Plan that is completed prior to construction.

   Also, see Response #4.

The Town of Newington
New Hampshire

Incorporated 1764

PLANNING BOARD

September 26, 2006

JAM 10/2/06

James A. Moore, Director of Project Development
NH Department of Transportation
P.O. Box 483
Concord, NH 03302-0483

RE: Draft EIS on Newington-Dover, NHS-027-1(37), 11238

Dear Mr. Moore:

1 Turnpike Alternatives 10A, 12A & 13 were examined by the Newington Board of Selectmen, the Planning Board, and the Conservation Commission. We are writing to inform you that Alternative 13 best meets our criteria for turnpike design. We endorse Alternative 13 with the understanding that some design elements are to be further refined.

2 The elevation of the future turnpike is the issue of greatest concern to us. A depressed turnpike such as that exemplified by Alternative 13 would have a moderate acoustical impact on our residential district. An elevated turnpike as proposed in Alternatives 10A & 12A would have a severe impact on our residents. We reiterate our request of July 26, 2005 and October 18, 2005 that you reject plans that call for an elevated turnpike.

We have several other comments on your draft Environmental Impact Statement (EIS) dated July 2006:

3 **Noise:** We noted that the plans suggest that extensive acoustical mitigation measures are warranted in Dover, but not in Newington. We disagree with that assessment, and request that you take measures to mitigate the noise impact on Newington residents. We further recommend the utilization of pavement that would reduce the acoustical impact to turnpike neighbors.

4 **Cross-Connectivity:** In some respects, the proposed turnpike expansion could become a massive barrier that bisects our community. It is essential that every option to breach the barrier is implemented so that motorists, bicyclists, and pedestrians may freely pass over or under the turnpike. Such connectivity has been achieved at Exit 1 and at Exit 4, but nowhere in between. We request that you revise the design for Exit 3 so as to offer safe and convenient passage for bicyclists and pedestrians.

205 Nimble Hill Road • Newington, NH 03801 • (603) 436-1252 • Fax (603) 436-7188 • Email: newington@ttlc.net

4 **Woodbury Avenue Sidewalks:** We noted that Alternative 13 would upgrade and expand Woodbury Avenue as far south as Fox Run Road. Sidewalks on both sides of Woodbury should be incorporated into the plans due to the volume of pedestrians and the unsafe conditions that characterize this corridor.

5 **Arboretum Drive** is a lightly-traveled rural road. It serves as a key link in the only bicycle/pedestrian route that connects Portsmouth with Strafford County. The redevelopment of Arboretum Drive should have dedicated bike lanes and sidewalks in order to provide a high level of safety.

6 **Alternatives:** One alternative that the EIS fails to mention is the construction of housing at the Pease Tradeport. Housing situated close to the workplace would alleviate traffic congestion at the Little Bay Bridge. In fact, it can be argued that much of the present congestion was caused by a reduction in housing stock in eastern Rockingham County.

7 **Wetland Mitigation:** We oppose utilizing the drive-in theater property for wetland mitigation. These 16 acres would be better utilized for job-creating office or industrial development. There are other more worthy candidates for wetland mitigation in Newington. We concur with wetlands scientist Mark West's comments submitted to NH DOT in regards to wetland mitigation.

8 **Railway Brook:** Please refer to this waterway as Flagstone's Ditch or Flagstone's Brook. We are unsure as to where NH DOT acquired the term "Railway Brook", but it is not a term that is recognized in Newington.

9 **Stormwater Drainge:** We concur with the comments submitted by Justin Richardson and urge you to adopt a design that solves that stormwater discharge problems he has identified.

We would be pleased to elaborate further on these comments. Thank you for your consideration.

Yours truly,

John O'Reilly, Chair
Board of Selectmen

James J. Hebert
Denis Hebert, Vice Chair
Planning Board

Response to Comments Made by
John O'Reilly, Chair
Newington Board of Selectmen
205 Nimble Hill Road, Newington, NH 03801
Letter dated September 26, 2006

1. & 2. The NHDOT and FHWA acknowledge and appreciate the Town's support for Alternative 13. The NHDOT, in coordination with FHWA, plan to progress the Selected Alternative (Alternative 13 in Newington), as shown in the FEIS, subject to minor refinements during the project's final design development.

3. The noise analysis was conducted by NHDOT's consultant in accordance with NHDOT and FHWA policies. The analysis found that noise barriers are not warranted in Newington. Also see added explanation in Response #4 to P-4 concerning why barriers are not warranted in Newington. However, as part of the project's final design effort, the NHDOT and FHWA will investigate the merits and feasibility of utilizing "quiet pavement" or "porous pavement" to reduce the effect of tire noise in Newington.

4. & 5. The NHDOT and FHWA acknowledge that the Newington Master Plan recommends that sidewalks be provided along several roadways within Newington's Commercial District, including Woodbury Avenue. The Master Plan also provides for funding of such sidewalk construction via negotiations with commercial developers and enterprises located within the Commercial District whose employees, customers and clients could benefit from and utilize such sidewalks.

As part of the Selected Alternative, the reconstruction of Woodbury Avenue proposes a seven (7) foot wide panel, adjacent to the roadway, be provided to accommodate both a future sidewalk and utilities. Should the Town of Newington agree to accept maintenance responsibilities (both summer and winter maintenance) for the new sidewalks in accordance with its accepted policies and practices as mandated in RSA 231:92-a, the NHDOT and FHWA will construct new sidewalks on both sides of Woodbury Avenue within the limits of the reconstruction project. Also, this new sidewalk would be provided along the north side of the bridge crossing over the Turnpike and extending through the new Woodbury Avenue/Arboretum Drive/Exit 3 southbound ramps intersection. The sidewalk would then continue along the west side of Arboretum Drive to the first driveway, which is located at approximately Station 4055 of Arboretum Drive.

Roadside shoulder areas (4 to 5 feet wide) to accommodate bicyclists are proposed within the limits of the project along Woodbury Avenue, on the bridge over the Turnpike within the Exit 3 interchange area, and along the reconstructed sections of Arboretum Drive.

6. With respect to the suggestion that housing be constructed at Pease as a means to help reduce travel across the bridges, the NHDOT and FHWA acknowledge that mixed use developments offer opportunities to reduce daily vehicular traffic by combining trips and/or by substituting walking, bicycling and transit/trolley service for commuting and other travel purposes (*e.g.*,

shopping, social, recreational). At the Tradeport, the generation of daily vehicular traffic has been reduced as a result of the implementation of transit service, tenant support of employer-based strategies to reduce SOVs, the development of ancillary commercial activities (such as banking, convenience stores and restaurants) and the provision of pedestrian (sidewalk) and bicycle system connectivity. Since transit service within the study area and at the Tradeport will be expanded as part of the Selected Alternative, additional reductions in vehicular traffic generated at the Tradeport can be expected. However, since current zoning at the Tradeport does not allow residential use, further reductions in daily vehicular traffic resulting from some Tradeport tenant employees residing at the Tradeport is infeasible.

7. Due to public comment and recommendations by the Newington Conservation Commission, the Drive-In Theater property has been removed from the list of potential mitigation alternatives.

8. The name "Railway Brook" derives from maps of the area developed by the US Air Force. Prior to the development of the Pease Air Force Base (AFB) in Newington in the 1950s, the watercourse identified as "Railway Brook" was a branch of Pickering Brook which flowed north to join the main stem of Pickering Brook, then east to discharge into the Piscataqua River. Topographic maps from that era show that Flagstone Brook was a relatively short stream located entirely north of Nimble Hill Road and was located in an entirely different watershed which discharged to Trickys Cove. With development of the AFB, the former branch of Pickering Brook was diverted to Flagstone Brook. The informal name "Railway Brook" is used in the EIS and related documents to help distinguish the impacted stream reach located between Arboretum Drive and Nimble Hill Road from the true Flagstone Brook north of Nimble Hill Road.

9. In summary, detailed description of the proposed stormwater management plan will be developed during the final design phase, following the FEIS and FHWA's Record of Decision. The NHDOT and FHWA have provided a response to each of the comments raised by Mr. Richardson (see responses to L-3).

David Scott
220 Back Road - Dover, NH 03820
Phone 603 750 5007, Fax 603 750 5081
E Mail: Inter6@comcast.net

September 28, 2006

Mr. James A Moore JAM 10/2/06
Director of Project Development
State of New Hampshire Department of Transportation
PO Box 483
Concord, NH 03302

CC: Executive Councilor Chairperson Ruth Griffin
Executive Councilor Raymond Wieczorek
Executive Councilor Peter J. Spaulding

Subject: The necessity of the $200 million project
Expansion of the bridge and highway at Hilton Point

Dear Mr. Moore and members of the Executive Council:

Before impacting negatively the quality of life and value of real estate of the over 100 residents living in the Dover Point, Boston Harbor, and Spur road area of Dover, by expanding a major highway from 4 lanes to 8 lanes, I suggest we have a study and test of the traffic flow by removing the Dover toll for a number of months to see what happens to the traffic flow.

When I drive to Boston during the morning rush hour the traffic from Dover getting onto the bridge is bad. I had always thought the bottleneck was the 4 lane highway of the bridge that should be expanded.

But now I realize that the problem is caused by heavy merging traffic coming from route 4 and Dover Point Road. Once over the bridge and past the gas station the traffic goes smoothly. It looks like the Newington section of the new design solves that problem.

I believe the problem of the bottleneck on the Dover side of the bridge comes largely because people from Barrington, Madbury, Somerworth, Dover, Rochester and Berwick Maine are not taking the Spaulding turnpike to avoid paying the Dover toll.
1 Consequently there is a stream of traffic that could get on the Spaulding upstream. Rather than all funneling through a narrow neck at exit 6 this traffic could be spread out entering in exits 7, 8 and 9. By eliminating the Dover toll the traffic now piling up in exit 6 would be spread over 4 rather than one entrance. If the tolls were removed drivers coming from

a) South Rochester, North Dover, Somersworth and Berwick Maine would enter the Spaulding at exit 9

b) Barrington, Madbury and northwest Dover would get on the Spaulding Turnpike at exit 8,

c) those living in Dover Center and half way between exits 6 and 7 would get on the turnpike at exit 7,

d) those in south Dover would get on the Spaulding as I do at Exit 6.

It seems that without the tolls there would be approximately 75% of the traffic trying to avoid tolls would be spread out on 4 exits and would reduce the bottleneck at exit 6 by a substantial percentage.

I suggest we have a three month test to let drivers go through the Dover tolls without paying to see to what extent the Dover Toll Booth effects the bottleneck entering the Spaulding turnpike at exit 6 and how much congestion this change alleviates.

With a well publicized three month study we could verify how much of the bottleneck is removed and what the impact on the loss of toll revenue might be.

If the revenue change is major the Rochester toll amount could be increased. It is my opinion that much of the toll traffic is paid by tourists going to the mountain and lakes area in both summer and winter.

1 If this 3 month test provides positive results it may be that the expansion of the bridge could be put off for 10 years, bearing in mind that the New Hampshire population is expected to increase by about 1.2% per year and the traffic would be expected to follow the population increase.

A five year delay in starting this $200 million project would have an interest savings at 5% interest $10 million per year or $50 million over the five year period.

But apart from the tangible savings the main benefit would be for all of the people living along Spur Road, Boston Harbor Road and Dover Point road who are concerned about the degradation of their property and quality of life with an eight lane highway going through their immediate neighborhood.

Without cars stopping at the Dover toll booth the stopping and startup of traffic would generate less noise.

Many of my constituents in ward 3 living upon or near the Spaulding turnpike have called me since the hearing indicating they are very concerned about the quality of life
2 issue. They were either unable to come to the hearing or did come and were intimidated and discouraged by the "request to speak" to speak up.

I hope you will consider this suggestion to have at least a three month test to verify if removal of the Dover tolls would cause a major part of the traffic bottleneck to evaporate.

Sincerely Yours,

David Scott

David Scott - Dover Ward three City Councilor

Response to Comments Made by
David Scott, City Councilor
Dover Ward Three
220 Back Road, Dover, NH 03820
Letter dated September 28, 2006

1. It has been consistently stated and acknowledged from the project's initiation, as well as repeated throughout the study at numerous Public Informational and Advisory Task Force meetings, that the Dover toll facility and toll-related issues fall outside the project study area and scope of study. First, the project's study area was identified and established following the 1998 Route 16 Corridor Protection Study and the 2000 Newington-Dover Feasibility Study by determining that the current and future Turnpike traffic operating conditions north of the toll plaza were satisfactory. In contrast, the section of the Turnpike between Exit 1 and the Dover Toll Plaza operates at a poor level of service, both in the current and future design year. Secondly, changes to the Turnpike tolling system require State Legislative and Executive Council approval, and may have revenue impacts. These are considered state-level issues potentially affecting the entire Turnpike system, not project level matters. The Newington-Dover project was never envisioned to include an assessment of potential traffic impacts resulting from changes in toll facility locations or tolling pricing policies.

   Relative to the suggestion that congestion on Dover Point is largely the result of motorists using US 4 and Dover Point Road, and not taking the Turnpike to avoid paying the toll at the Dover toll plaza, the following historic traffic data is presented to the contrary. From 1993-2003, traffic volumes (AADT) have increased from 25,223 to 39,109 (55%) at the Dover toll facility, while traffic volumes along Dover Point Road (White Mountain Road) have decreased from 13,547 to 12,901 (-4.7%). During the same 1993-2003 period, NB traffic exiting the Turnpike at Exit 6 to travel east on Dover Point Road has increased slightly (1%) on a daily basis, but has actually decreased by approximately 7.6% during the weekday PM peak hour. With respect to US 4, daily and weekday PM peak hour NB exiting traffic from the Turnpike at Exit 6 to westbound US 4 have decreased during the 1996-2003, 7-year period, by approximately 1.5% and 11%, respectively. Therefore, the assumption that congestion on Dover Point at Exit 6 is related to toll diversion is misconceived. This, coupled with the growing percentage of E-ZPass users (56% of all transactions at Dover Toll utilize E-ZPass), substantiate the assertion that more vehicles are using E-ZPass and the Turnpike, with fewer vehicles diverting to secondary roads. Removal or relocation of the toll plaza will have little effect on traffic congestion experienced at Exit 6.

   Historic traffic volume data and regional travel demand projections demonstrate a greater regional transportation dependency on the Turnpike (or allowing more traffic to stay on the Turnpike) as opposed to a larger diversion of traffic to the secondary routes in the region and indicate that the design year volume of traffic between Exits 3 and 6 requires the nature and scale of the Turnpike improvements as reflected in the Selected Alternative. The diamond-type signalized interchange configuration proposed for Exit 6 as reflected in the Selected Alternative addresses the current and future (2025) levels of travel demand at this location and provides a high level of traffic safety and operations efficiency within the project area.

Sound walls are proposed on both sides of the Turnpike from the Exit 6 area through the toll plaza area to a location approximately 2,000 feet north of the plaza for noise mitigation. This will alleviate concerns regarding noise generated at the toll plaza from vehicles slowing and accelerating.

2. The Public Hearing offered several forums for people to discuss the project informally (one-on-one) with NHDOT and FHWA staff or their consultants during the open house forum from 3:30 pm to 6:30 pm, or formally offer testimony during the Public Hearing, which began at 7:00 pm and ended at 9:22 pm. In addition, anyone not interested or unable to speak at the Public Hearing was offered the opportunity to submit comments and/or offer exhibits in writing during the ten-day comment period following the Hearing for inclusion in the official Hearing record. Including the 24 people that offered testimony at the Public Hearing, 46 pieces of correspondence were received during the comment period and included in the official Hearing record. In addition to the Public Hearing, the public participation process for the project involved 16 Advisory Task Force meetings, and 10 Local Public Officials and Informational meetings. All the meetings were open to the public and fairly well attended; thus, the process offered an extraordinary level for public participation.

Newington Fire & Rescue

80 Fox Point Road
Newington, NH 03801

Chief
Roy L. Greenleaf III

Asst. Chief
Dennis P. Cote

Office 603-436-9441

Fax 603-430-2007

September 28, 2006

James A. Moore, Director of Project Development JAM 10/2/06
NH Department of Transportation
PO Box 483
Concord, NH 03302-0483

RE: Draft EIS on Newington-Dover, NHS-027-1(37), 11238

Dear Mr. Moore:

After reviewing the plans for the favorable Turnpike Alternative 13, we have some concerns regarding the impact of the services to the current businesses and potential businesses as frequently brought to light in EIS Volumes 1, 2 and 3. more specifically the 16 acre former Drive-in Theatre parcel.

1 With the goal to alleviate the traffic flow and promote future development, it is imperative to reestablish the services that were utilized when the Drive-in was in operation. Determining the location and upgrading the previous utilities in that location needs to be accomplished to support the goals of the project.

We have several other comments that need to be addressed that did not appear in the EIS Volumes 1, 2 and 3. They were not in any part of the ATF discussions:

2 **Woodbury Ave Widening:** The widening of road just north of the intersection would require the movement of utilities such as hydrants, telephone, electricity and municipal fire alarm system.

3 **Exit 3 Intersection**: Although it appears to be a favorable design, the Maritime Pipeline operating at 1600psi is below this project. The design plan does not show pipeline which originates on the shore line parallel to Patterson Lane and then continues under the current Spaulding Turnpike. It turns slightly southeast towards Arboretum Drive then continues parallel to Arboretum Drive.

Arboretum Drive: With increased traffic for the Tradeport and the future business an increase in the hydrants down Arboretum Dr. needs to be addressed. Currently there is a 24" water main feeding the City of Portsmouth pumping station which is already established.

4

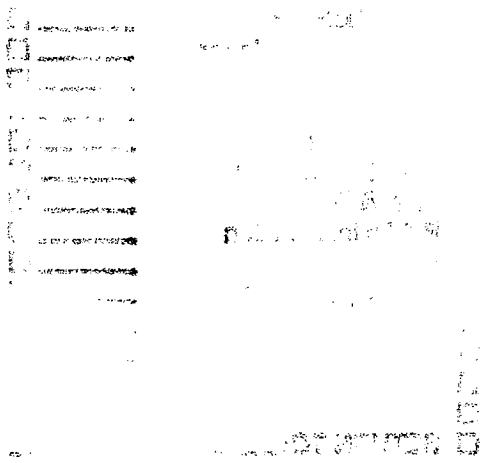
Exit 4 & Bridge: The hydrants and water main in the area of the bridge and exit 4 need to be evaluated to provide adequate fire protection for the residential homes in the area and also provide a backup water supply to the established business district along Shattuck Way.

5 We look forward to future discussions regarding the Alternative 13 plans. I am also requesting a copy of Alternative 13 printed in large scale for continued review. Thank you for your time and consideration.

Respectfully Submitted,

Roy Greenleaf
Fire Chief
Roy Greenleaf

Dennis P. Cote
Asst Chief
Dennis P. Cote



Response to Comments Made by
Roy Greenleaf, III, Chief and Dennis P. Cote, Assistance Chief
Newington Fire Department
80 Fox Point Road, Newington, NH 03801
Letter dated September 28, 2006

1. The purpose of the project is to increase safety and improve transportation efficiency, not to promote the future development of the former Drive-In Theatre property. The NHDOT and FHWA do not envision upgrading the utilities to the former drive-in theater property as part of the project. Utility upgrades can be accomplished by a prospective developer interested in acquiring and developing the property. However, during the project's final design, the NHDOT and FHWA will coordinate with the Town to include municipally-supported utility work, at the Town's expense, in the construction contract. Any property rights or additional right-of-way required for the utility work would be the responsibility of the Town.

2. – 4. The NHDOT and FHWA acknowledge Chief Greenleaf's notation of several utility facilities in the project area. During the project's final design, the NHDOT and FHWA will closely coordinate the project with Town Officials concerning municipal utilities and with the private utility companies concerning their facilities in the project area. Efforts will be initiated to verify the location of existing facilities, to identify potential areas of conflict and the utility relocations necessary to accomplish the proposed construction, and to accommodate requests for concurrent municipal or private utility improvements.

5. During the project's final design, a large scale copy of the Selected Alternative will be forwarded for continued coordination.

The Town of Newington

New Hampshire

Incorporated 1764

HISTORIC DISTRICT
COMMISSION

RECEIVED
COMMISSIONERS OFFICE
OCT 02 2006
THE STATE OF NEW HAMPSHIRE
DEPT. OF TRANSPORTATION

Re: NEWINGTON-DOVER NHS-027-1(037), 11238
PUBLIC HEARING
St Thomas Aquinas High School, 197 Dover Pt Rd

Attention: Chairman of the Special Committee
% James A. Moore
Director of Project Development
New Hampshire Department of Transportation
P.O. Box 483, Hazen Drive
Concord, New Hampshire 03302-0483

JAM 10/2/06

September 29, 2006

Dear Sir:

Due to information received during the Public Hearing process for the above-referenced project we hereby make the following request of the Special Committee:

1 The Newington Historic District Commission requests information about the status of the railroad station located in the Newington Historic District on the east side of the Little Bay Bridges. The area has been used as field headquarters for construction work on the Exit 4 interim improvement project.

The railroad station itself was mothballed to protect it from deterioration as the Exit 4 interim improvement project was started. Our question is what is planned for this historic resource as the Newington-Dover highway project proceeds?

2 A larger field headquarters for the bridge/highway project could have adverse impact on the station. We are requesting that the DOT remain careful of this sensitive historic building.

We understand that we will be notified in writing of the Special Committee's decision regarding this request. We also understand that this request will be included as part of the official record.

Signed: Gail Pare

Gail Pare, Chairman

Address: 205 Nimble Hill Road
Newington, NH 03801
Phone: 603-436-6415

Response to Comments Made by
Gail Pare, Chair
Newington Historic District Commission
205 Nimble Hill Road, Newington, NH 03801
Letter dated September 29, 2006

1. The NHDOT is presently working with the Town of Newington to develop an agreement and transfer the historic former railroad station building and immediate land surrounding the building on Bloody Point to the Town.

2. The NHDOT and FHWA do not anticipate locating a field office for the future Turnpike expansion in vicinity of the station. The NHDOT and FHWA have acquired the former drive-in theater property and plan to use the parcel for the project's staging, field offices, and material and equipment storage during the project's construction.

Regional Planning Commissions (R)

Seacoast MPO

www.seacoastmpo.org

Strafford Regional Planning Commission
2 Ridge Street, Suite 4
Dover, New Hampshire 03820
tel: (603) 742-2523 fax: (603) 742-7986
e-mail: srpc@strafford.org
web: www.strafford.org

Rockingham Planning Commission
156 Water Street
Exeter, New Hampshire 03833
tel: (603) 778-0885 fax: (603) 778-9183
e-mail@rpc-nh.org
web: www.rpc-nh.org

October 2, 2006

Hon. Ruth Griffin, Chair, Special Committee 10/4/06
c/o Mr. James Moore
Director of Project Development
NH Department of Transportation
P.O. Box 483
Concord, NH 03302-0483

RE: Comments on Newington-Dover Spaulding Turnpike Widening Draft Environmental Impact Statement

Dear Councilor Griffin:

On behalf of the Seacoast Metropolitan Planning Association (MPO), we are providing the following comments relative to the Newington-Dover Spaulding Turnpike Widening Project. These comments were delivered verbally in summary form at the public hearing for the project conducted at St. Thomas Aquinas High School on September 21st, 2006. They consist of some overall comments about the project, followed by more detailed comments summarizing the MPO positions on various issues raised in the Draft Environmental Impact Statement.

General Comments

1 The Seacoast MPO continues to support this project as the region's top priority highway improvement. The bridge expansion is a critically needed improvement to our transportation system. It has been recognized as the single most important highway infrastructure project in the region by the MPO for nearly 10 years.

2 We also want to express our appreciation to the NH Department of Transportation for the expeditious manner in which it has moved in completing the project's Draft EIS, and for the their extensive work with the communities, the Advisory Task Force, and the MPO in the development of the alternatives included in the DEIS. The consistent feedback from our communities has been that the DOT has been very responsive to the input received throughout the process, and has incorporated that input into the project design wherever feasible. The best evidence of this is the support from both Newington and Dover for the project's preferred alternatives.

3 We recognize that the turnpike is deficient relative to capacity and safety and concur that the expansion project is necessary to address these long-standing deficiencies. At the same time we advocate that the project include aggressive transit alternatives and a firm commitment to fund and implement those alternatives. We believe that they are necessary to move us toward a more balanced transportation system and allow the region to maintain conformity with the State's mobile source emissions budget established in the State Implementation Plan for air quality attainment. The latter is a strict legal requirement under the Clean Air Act, with which we must comply or risk losing access to Federal transportation funds. We also fully support the implementation of the full range of interim traffic mitigation measures described in the DEIS, including the Incident Management System. We urge early implementation of all proposed TDM and TSM measures included in the preferred alternative to help mitigate existing traffic congestion on the bridges.

We have a number of questions, concerns and comments about the DEIS, which are detailed on the following pages.

MPO Positions On Key Issues

Highway and Bridge Alternatives

Perhaps to state the obvious, the MPO believes that the improvements to the corridor will vastly improve the safety and efficiency of travel within the corridor. Analysis in the Draft EIS indicates that 8 lanes are necessary across and adjacent to the Little Bay Bridges. We understand and acknowledge the rationale for 8 lanes (to accommodate with the maneuvering of traffic between exits 4 and 6). Yet we remain concerned about the size of the new bridges. When constructed, each four lane barrel will be 40+ feet wider than currently, including 44-48 feet of shoulder for the two barrels taken together. 4

The MPO would like DOT to make assurances that this configuration, and specifically the need for the auxiliary lane (given the elimination of Exit 5 and final configurations of Exits 4 and 6), is necessary to meet the need of the project. Similarly, we would like assurances that the shoulder widths and other features contributing to the overall width of the bridge are necessary to accomplish the goals of the project.

Scenic Resources

As you are aware, this portion of the Spaulding Turnpike/Route 16 Corridor functions as the scenic gateway into our coastal and upland communities and beyond to the Lakes and White Mountain regions of the state. It provides travelers truly signature views of our National Estuary, including the Great and Little Bays, and the Piscataqua River. Great care should be taken to minimize the visual impact of the bridge replacement. 5

South of the bridge, the increased width and realignment of the roadway of the facility will eliminate much of the existing forested median area in Newington. We ask that efforts be made to minimize or restore the loss of this visual and sound absorbing buffer wherever possible.

While the benefits of sound walls to the adjacent neighborhoods are significant, important and supported by the MPO, we are concerned about their visual impact for the 4200+ feet along the corridor where they are proposed. We urge that the NHDOT utilize the lowest wall possible to achieve the necessary noise reductions and incorporate architectural design treatments, artwork, extensive landscaping or a combination to mitigate the visual impact that the walls will bring. 6

Renderings/Visualizations of Project Scale

Given the setting of the bridge and the size of the expansion, it is important that the public be aware of the scale of the changes that are proposed. As you know, federal law now requires States and MPOs to provide appropriate "visualizations" of the projects contained in our MPO Transportation Improvement Program (TIP). The visualizations included on the project website (and included as graphics at the hearing) probably satisfy this requirement. However, the somewhat distant and elevated perspectives of the main visualizations, and their small format, (as available on the project website) do not provide a good sense of the scale of the change. We suggest that additional visualizations of the project be developed to supplement those already done that will provide residents of Dover, Newington, and the larger region with additional understanding about the visual impact of this project and the relationship to the surrounding area and scenery. 7

General Sullivan Bridge

The MPO has in the past supported the rehabilitation of the General Sullivan Bridge for bike/pedestrian and recreational use and continues to do so. We also support this option because it preserves an alternate crossing of 8

the river should that be necessary in an emergency. However, the current plan to remove the northern approach ramp to the bridge and replace it with a bike/pedestrian ramp, and to weight-limit the rehabilitated bridge to vehicles of less than 6 tons, would appear to preclude this "emergency contingency" use of the bridge. Details are lacking on this aspect of the project. The MPO would like a more thorough explanation of the proposed design for the northern approach to the General Sullivan Bridge, as well as information on what efforts would be necessary to restore the bridge to enable it to carry traffic in an extended emergency (i.e. extended closure of the main bridges). We understand the sensitivity of this issue to the surrounding neighborhood, and we are not advocating restoring the bridge and approaches to use as a secondary road. However, lacking other information, it appears we will be rehabilitating the bridge in a way that precludes its use as a vehicular crossing useable it in an emergency.

8

Transit & TDM Components

We believe that the transit and TDM components of the preferred alternative are essential parts of the project, whether or not they alone play a significant role in meeting the immediate purpose and need. It is essential to provide alternatives to the single occupant automobile in order to manage the future growth of traffic on highways in our region. These alternatives must be in place, convenient and of high quality if they are to succeed.

9

We are pleased to see the inclusion in the preferred alternative of Bus Alternative One (intercity Rochester-Boston), Bus Alternative Two (service improvements to the already planned COAST Express Service), and Bus Alternative Three (service improvements on COAST and Wildcat Transit local routes); together with the Downeaster capacity expansion and an aggressive Transportation Demand Management (TDM) component designed in collaboration with Seacoast Commuter Options, the TMA serving the region. We also note the inclusion the Downeaster expansion, though it was conceived of independently and will be implemented well in advance of this project. To supplement the Downeaster component, we would suggest working with NEEPRA to identify other potential small-scale track improvements that might be the subject of further NH/Maine cooperative efforts, to further increase capacity on the Main Line for future service expansion.

Methodology & Assumptions

The MPO has a number of concerns about the methodology and assumptions used to develop ridership and ridesharing projections. Taken together, these assumptions have the effect of minimizing transit ridership projections. We believe that these projections should be reexamined and redone where necessary. We don't expect that higher projections would alter traffic projections in the corridor to change the preferred alternative, and they certainly won't change the need to expand the bridge. However, well supported projections will be needed to justify funding to implement the transit and TDM projects through CMAQ program or other sources.

Problems with Assumptions:

10

- Fuel Prices - The ridership numbers for the bus, rail and TDM alternatives shown in Tables 2.4 1-4 are based on a gasoline price of $2.00/gallon. This is unrealistic for 2006, let alone 2025. We recognize that these calculations were originally done in 2004-2005 when prices were closer to $2.00, but those conditions are no longer relevant. Transit use in the region has increased substantially in the past year in response to higher fuel prices. Ridership on COAST is up 17% over last year; Downeaster ridership is up over 31% in the past year – indicating considerable sensitivity to fuel costs. The Wildcat and C&J systems have also seen increases. Current and realistic future fuel price conditions must be accounted for in ridership projections.

- Parking Costs – The parking costs of $14.00/day for Boston, and $2.00/day for Portsmouth, assumed in the calculations do not reflect current downtown parking rates. Daily cost for parking with a monthly pass at the High-Hanover garage in Portsmouth is currently $3.63 ($80/month/22 weekdays). 2006 data from Colliers identifies average monthly cost for an unreserved space in Boston at $375, or $17.05/day. Cost

for a reserved space is $450/month or $20.45/day. Lower than observed parking rates are explained by the averaging of rates for those who pay for parking and those who don't. However, the averaging of parking costs leads to underestimating potential mode choice change by that segment of the population that pays full price for parking. Ridership for these groups should be estimated separately.

- Value of Travel Time – The calculations of impedance for different travel modes appear to use 100% of average hourly wage for Portsmouth and Boston. 1997 USDOT guidance indicates that only 50% of hourly wage should be used for these calculations except for time actually spent waiting at a bus stop. Use of 100% of wage tends to overstate commuter aversion to somewhat longer travel times with transit. 10

- Avoided Automobile Ownership Costs – One of the two sensitivity analyses performed assumed that for 10% of transit commuters the full costs of automobile ownership could be avoided rather than just marginal travel costs ($0.60/mile rather than $0.16/mile). However, rather than calculating the impact of this full $0.60/mile savings for this 10% of the population, that savings was averaged out over the whole population at $0.06/mile, at which point it becomes negligible as an influencing factor. As with parking costs, taking a large potential savings (or cost) to a subset of the population and instead averaging it across the entire population distorts the picture of how that pricing will influence mode choice.

Problems with the Sensitivity Analyses

As described in Section 2.4.6.6, two Sensitivity Analyses were performed:

1) Testing the impact of gas prices at $2.00, $3.00, and $4.00/gallon; and
2) Testing the combined impact of gas at $3.00/gallon and an assumption that 10% of transit users would be able to avoid full auto ownership costs. 11

Two problems with these analyses are immediately visible. These analyses were performed only on Rail Alternative 2B, and only in the no-build condition – no analysis was performed for the bus or TDM alternatives, or for any of the build configurations. Gasoline prices higher than $3.00/gallon were not tested in combination with any other factors. Secondly, these analyses showed ridership increases of approximately 60%. However, the section concluded that this increase was inadequate to avoid lane expansion, so the results of the analyses were not included in Tables 2.4. These sensitivity analyses should be rerun, applied to all modal alternatives and lane configuration alternatives, with appropriate assumptions applied.

Use of the USEPA COMMUTER Model for TDM Impacts

12 Were the same assumptions for fuel cost, parking cost, and value of time applied to the COMMUTER model? If so, these TDM usage forecasts should be rerun.

Mode-Choice Methodology & Underlying Data

Pages 2-38 and 2-39 note that the equations used for mode choice and ridership projections were taken from National Highway Cooperative Research Program (NCHRP) Report 187. This report, and the mode choice data on which its equations are based, date to 1978. NCHRP 187 was updated in 1998 by NCHRP Report 365, which included data from the 1990 Census and the 1983 and 1990 National Personal Transportation Surveys. 13 The Transportation Research Board currently views even the newer data underlying NCHRP 365 as out of date, as the NPTS has been updated twice (1995 and 2001) since 365 was written, and is currently funding yet another update.

Why was a model based on 30 year old data used when NCHRP 365 is available with newer data that more accurate reflect current personal travel choices? What are the implications of using these data in terms of mode choice?

Funding for Transit & TDM Alternatives

Page 2-100 notes that NHDOT supports implementation of Bus Alternatives 1, 2, and 3 using CMAQ funds. While CMAQ funds may be available and appropriate for the startup of these services, they cannot be used for more than 3 years. Since these bus alternatives are being considered part of the mitigation for the preferred alternative for this project, we assume they will need to be in place not just for the years when CMAQ funds would be available, but until the design year of 2025.

In the case of the I-93 widening project and Bus Alternative 1 proposed here, CMAQ funds have been allocated for capital equipment and operating startup period for intercity bus service. Subsequently, the bus
14 service operates out of farebox revenues. It is not realistic to expect that local fixed route transit services, such as COAST Route 2 and the COAST Trolley, can operate out of the farebox. No public transportation system of this type fully covers costs from just farebox revenues.

At present, COAST projects that its annual allocation of FTA 5307 funding will be fully programmed on existing services once current CMAQ funding runs out for the Pease-Portsmouth Trolley, Dover Community Routes, and the original Spaulding Express Service. These routes would be shifted to FTA funding. In light of this, it is not clear how some of the supplemental services proposed in the DEIS will be sustained without state funding. We believe that it is important for the FEIS to address this question in such a way that provides some assurance that the transit and TDM alternatives proposed as part of the project can be sustained.

Mitigation

In section 4.6 on Freshwater Wetland Resources, mitigation is outlined for the preferred alternative. The guiding principles of having roughly proportional mitigation to impacted areas in each community and a mix of restoration and preservation are supported by the choice of projects.

In section 4.9 on Surface Water Resources, the MPO notes that no infiltration has been proposed as part of the
15 treatment. We question whether there are any negative impacts from diverting water and runoff away from nearby wetland systems. We would like to know where the detentions basins will outfall to, and whether the impact of temperature of outfall were considered.

The MPO strongly supports the Tuttle Farm Preservation of 120 acres of upland and wetland habitats. The
16 Strafford Regional Planning Commission also individually has expressed strong support for this mitigation project. With the change in our regional viewshed along the Spaulding Corridor, it becomes even more critical to preserve the views of our agricultural heritage in the region.

Indirect and Secondary Impact Analysis

We have several questions relating to the regional economic modeling used to estimate indirect and secondary impacts. We concur generally that the growth induced by this project will be much smaller in magnitude than
17 compared to that of the I-93 expansion, yet we are somewhat surprised by the negligible amount the economic modeling indicates. We have observed anecdotally that the chronic congestion on the bridges has influenced location decisions in both the residential and commercial/industrial sectors for a number of years.

We understand the logic of the method used which appears reasonable. We do note, however, that the REMI
18 model, on which the analysis is based, operates only at the (whole) county level. The inclusion of all of the data for Rockingham County, in which 60% of the population and even more of the economic activity takes place outside the project study area, may have had the effect of diluting and understating the growth impacts of the project. We suggest that this question be reviewed.

19 The effect of the secondary growth on land resources is calculated from the average impact of new development on key resources. In calculating the likely impact of this additional growth on wetlands, the assumption used is that 5% of the study area, on average, is wetland, based on the National Wetland Inventory (NWI). Our analysis of the same source data for our region is that 21% of the area is wetland (though this includes portions of the Great Bay). Using hydric soils as the basis, up to 28% of our region is "wetland." The number used in the analysis should be verified. Also, in our opinion, the basis for calculating acreage for resource impact should not be all the land in the study area as it was, but rather undeveloped land (assuming most future development will continue to occur there). Remaining undeveloped land, on average, has a higher incidence of wetlands, steep slope and other development constraints than all land.

20 While the economic model does not point to significant growth in the region due to the expansion of capacity from this project, there certainly will be growth from other causes. As part of the the I-93 expansion project the DOT included the innovative "Community Technical Assistance Program" (CTAP to help communities plan for anticipated growth to better protect remaining resources. We believe that a similar program would be extremely beneficial in this corridor as well. Such a program could be significantly more limited in scope than the I-93 corridor. We would recommend that it focus on assisting communities in two specific ways: local implementation of the Land Conservation Plan for New Hampshire's Coastal Watersheds (August, 2006), and local assistance to improve the opportunity for workforce housing in the region.

Other

21 As you may be aware, last March the NH Tidal Energy Corporation filed a preliminary permit application with the Federal Energy Regulatory Commission (Proj. # 12664-000) for development of tidal power electric generation in the Piscataqua River. A second company has recently expressed similar interest and may file a competing application. Either or both proposals could employ generating arrays anchored to existing structures in the river, including the Little Bay Bridges. We would urge the NHDOT to work proactively with tidal power companies to study and potentially facilitate in the design of the structure the placement of tidal arrays on the new bridge. If proven to be environmentally benign and not a hindrance to navigation, the deployment of such arrays on the bridges could potentially be the source of both revenue and renewable energy for the State.

22 The New Hampshire Estuaries Project (UNH) presently sponsors extensive water quality monitoring in the Great Bay Estuary, including a permanent monitoring site at the Little Bay Bridges. We strongly encourage the NHDOT to coordinate closely with and augment this existing effort when initiating the monitoring that will be required as part of the Newington-Dover project.

Conclusion

23 Again we wish to reiterate that the Seacoast MPO continues to support this project as the region's top priority highway improvement and is eager to work with the Department to resolve any of the issues we have raised. We thank and compliment the NHDOT staff, and specifically Mr. Chris Waszczuk, for their effective work with the communities, the Advisory Task Force, and the MPO and your responsiveness in the development of the alternatives included in the DEIS. We wish also thank the Advisory Task Force members, including MPO representative Chris Cross of Newington and Tom Fargo of Dover, for their commitment to creating solutions that benefit the region while protecting the quality of life in our two most directly affected communities.

Sincerely,

Cynthia Copeland/cms

Cynthia Copeland, Executive Director
Strafford Regional Planning Commission

Cliff Sinnott, Executive Director
Rockingham Planning Commission

cc: MPO Policy Committee and TAC Members
Carol Murray, Commissioner, NHDOT
Christopher Waszczuk, Project Manager, NHDOT
Newington Board of Selectmen,
Dover City Council

Response to Comments Made by
Cynthia Copeland, Strafford Regional Planning Commission
Cliff Sinnott, Rockingham Planning Commission
Seacoast MPO
156 Water Street, Exeter, NH 03833
Letter dated October 2, 2006

1. The NHDOT and FHWA acknowledge and appreciate the MPO's support, and will progress the project, as proposed, as expeditiously as possible.

2. So noted.

3. The NHDOT and FHWA acknowledge the support for the early implementation of the TDM and TSM elements of the Selected Alternative and will strive to implement these elements prior to or in the early stages of construction. These TDM elements, which are intended to provide a more balanced transportation system in the seacoast region and provide travel opportunities other than single occupant vehicles (SOV), include new park and ride facilities in Rochester, Dover and Lee, expansion of bus and rail service, and support for employer-based measures. The NHDOT and FHWA also propose, as part of the Selected Alternative, to help fund the seacoast area Transportation Management Association (TMA), known as Seacoast Commuter Options, for a maximum five-year period to work with and encourage employers to promote employee travel by means other than SOV's. In addition to area-wide ride-sharing and guaranteed ride-home programs, Seacoast Commuter Options is educating area employers and employees about the availability of employee-paid, pre-tax transportation benefits and employer-paid transportation benefits programs as incentives to not driving alone.

4. The NHDOT and FHWA concur that proposed improvements in Newington and Dover are warranted as shown in the Selected Alternative. Travel demand projections for the project's design year of 2025 and traffic capacity analyses that focused on safety and traffic operations along the Turnpike and across the Little Bay Bridges between Exit 3 (Woodbury Avenue) in Newington and Exit 6 (US 4/Dover Point Road) in Dover indicate that 6-lane options (three basic travel lanes in each direction), in conjunction with a combination of transportation system management (TSM) and travel demand management (TDM) alternatives which included improved bus service, would not be sufficient to accommodate future travel demands (this is more fully documented in Chapter 2 of the Environmental Impact Statement (EIS)). A sensitivity analysis of traffic volume growth on the Little Bay Bridges indicates that a 6-lane bridge (three travel lanes in each direction) would reach capacity and result in unacceptable traffic operations by 2017 (eight years short of the design year). Furthermore, beyond the limits of the bridge, construction of six lanes would also result in congestion and system failure in 2017 between Exits 3 and 6 at the entrance and exit ramp junctions and also eventually adversely affect the local street system.

   The Selected Alternative proposes three basic travel lanes and one auxiliary lane between Exits 3 and 6. The auxiliary lanes enable traffic to safely and efficiently enter, exit and

switch lanes between Exits 3 and 6. Shoulder areas are proposed to be 10 feet to 12 feet wide. Experience and safety studies of limited access facilities have demonstrated the safety benefit associated with providing adequate space for disabled vehicles. Narrow shoulder areas are deemed to be safety hazards and are not recommended as they give the appearance of being safe areas for stopping, but are not particularly with respect to the high operating speeds along the Turnpike.

The cross-sectional width for a 6-lane highway is nearly as wide as the 8-lane highway. Specifically, the typical cross-section for a 6-lane highway would be 122 feet in width, whereas the 8-lane highway would be 146 feet (see Figure 2.3-1). Additionally, the interchange configurations at Exits 3 and 6 are relatively the same under both 6- and 8-lane alternatives, with the exception that the length of acceleration and deceleration lanes would need to be longer under a 6-lane alternative in order to attempt to accommodate traffic entering and exiting the Turnpike.

5. The NHDOT and FHWA have held numerous meetings with the communities, Advisory Task Force, and resource agencies to build consensus on a preferred design. The Advisory Task Force, the Newington Selectboard, Newington Planning Board, and Newington Conservation Commission have endorsed Alternative 13 in Newington (*i.e.*, the Selected Alternative), which proposes to construct the Turnpike within the wooded median. This approach has a number of advantages, particularly with regard to constructability and maintenance of traffic during construction. Also by constructing the Turnpike within the wooded median, the facility is further removed from the residential area in Newington.

   As part of the project's final design, the NHDOT and FHWA propose to develop a comprehensive landscaping plan and will plant new trees in select locations to mitigate for mature trees that will be lost due to construction and to supplement other locations with new plantings along the corridor, as deemed appropriate. Attention to aesthetic considerations, particularly concerning landscaping, the Little Bay Bridge structure, and proposed soundwalls, will be made during the project's final design.

6. The NHDOT and FHWA will design the noise barriers to be as low as possible while still achieving the necessary noise reductions, and will consider various architectural treatments and landscaping during the final design phase to mitigate the visual impact of the barriers.

7. A number of visualizations were developed and presented at the Public Hearing and are posted on the project's website. During the project's final design, additional coordination and meetings with the Advisory Task Force, as well as communities and neighborhoods directly affected by the project will be held to further discuss the project and better explain the project details as they are more fully developed. Additional visualizations to help illustrate the proposed improvements will be developed if necessary and presented at that time.

8. The NHDOT and FHWA propose to progress the rehabilitation of the General Sullivan Bridge as an element of the Selected Alternative identified for the project. The General Sullivan Bridge is a landmark structure, the second highest rated historic bridge in the state, and eligible for the National Register of Historic Places. The bridge offers a unique and

important bicycle / pedestrian connection across Little Bay, as well as other recreational activities, and is deemed a Section 4(f) resource with protection under Federal (USDOT) law. The NHDOT and FHWA have estimated the cost to rehabilitate the General Sullivan Bridge to a six-ton capacity, which will be able to accommodate pedestrians, bicycles, recreational activity, and emergency vehicles, at approximately $26 million dollars. This represents a net cost to the project of approximately $10 million dollars taking into account the cost that would be required to dismantle and remove the structure, as well as the cost required to provide a replacement recreational connection across the Bay.

As a result of the need to minimize the negative effect of the Turnpike on Dover Point, a previously considered proposal to elevate the Turnpike in the area just south of the present day Exit 5 and construct a two-way local underpass connecting the Wentworth Terrace neighborhood with Dover Point Road, was dismissed in favor of the Selected Alternative in Dover. The Selected Alternative proposes to reconstruct the existing one-way Hilton Park connector beneath the Little Bay Bridges to a two-way local roadway connecting the east and west sides of Hilton Park and the residential neighborhoods. This underpass location provides the benefit of utilizing the existing grade–separated crossing and reconstructing the Turnpike on the same general grades as currently exist. The Selected Alternative also requires the existing approach embankment leading to the General Sullivan Bridge to be removed to accommodate the two-way connector and proposes to retrofit the end of the General Sullivan Bridge with a new pedestrian / bicycle structure, which will be fully designed during the final design stage of the project.

The Selected Alternative widens the Little Bay Bridges to provide four full travel lanes (12 feet wide) with two full shoulders (10 to 12 feet wide) in each direction. Therefore, incident management and emergency response will be fully accommodated on the Little Bay Bridges once they are reconstructed and widened, and will be greatly improved over the current situation, negating the need to consider the General Sullivan Bridge for incident response or contingent emergency use.

9. The NHDOT and FHWA acknowledge support for the transit and TDM components of the Selected Alternative, and will strive to implement said components prior to, or in the early stages of, construction. Regarding the suggestion that the NHDOT work with NNEPRA to identify other track improvements to supplement the Downeaster component, considerable resources have been devoted towards the TDM aspect of the Selected Alternative. Since the Downeaster provides more of a regional benefit, as opposed to meeting the project's purpose and need, additional project related expenditures are difficult to justify and will not be proposed. The NHDOT is open to working with NNEPRA on a regional basis.

10. See Letter S-8, response #1.

11. See Letter S-8, response #1.

12. See Letter S-8, response #1.

13. See Letter S-8, response #1.

14. See Letter S-8, response #2.

15. The use of infiltration for stormwater treatment will be evaluated as part of final design process following the Final EIS and the FHWA Record of Decision. In general, infiltration is an effective form of stormwater treatment which helps to minimize impacts. However, the opportunities for infiltration may be limited along the project corridor due to the likely prevalence of marine clay soil below the ground surface and the potential shallow depth to groundwater in the low-lying area. NHDOT has recently begun investigating the use of gravel wetlands as a stormwater treatment alternative in watersheds with critical surface waterbodies. The gravel wetlands can be built on marine clays and shallow groundwater areas and have been shown to have relatively high pollutant removal efficiencies based on data from the UNH Stormwater Center. Since gravel wetlands also rely on subsurface gravel beds, these systems also help to mitigate any temperature effects from stormwater discharges. The location and types of stormwater treatment BMPs will become more defined as part of the final design process.

16. The NHDOT and FHWA acknowledge and appreciate the support for the Tuttle Farm preservation component of the mitigation package presented for the project.

17. Information and data about the residential and commercial/industrial sectors in the study area are discussed in the "Revised Draft Socio-Economic Baseline Conditions Technical Report for the Newington-Dover, Spaulding Turnpike Widening Project" prepared by RKG Associates, Inc. (August 1, 2004). (Note: Several relevant portions of the Socio-Economic Baseline Conditions Technical Report were not included in the DEIS).

    For example, the section on housing market trends (not included in the DEIS) noted that the Strafford portion of the study area consistently had the lowest average housing price between 1992 and 2002, in comparison to the Rockingham portion of the study area. However, the rate of housing appreciation (value) was higher in Strafford than Rockingham County. These factors, as well as total sales data, indicate that more affordable housing is available in Strafford than the Rockingham portion of the study area. An evaluation of rental data prepared by the New Hampshire Housing Finance Authority also indicates that rental rates generally tend to decrease from south to north within the study area.

    An examination of property values in the study area (not included in the DEIS) noted that changes in property values between 1992 and 2002 indicated that the rate of increase was substantially higher in the Rockingham portion of the study area than the Strafford portion. Given the fact that both areas added a generally equivalent number of housing units over the last decade, this is a further indication that new housing constructed in the Rockingham area is more expensive than housing constructed in the Strafford portion of the study area. This disparity in property values also indicates that more commercial and industrial buildings were constructed in the Rockingham portion of the study area during this time period as evidenced by the approximate $1.6 billion increase in Portsmouth's equalized property value. A substantial portion of this increase is attributable to the over two million square feet of

non-residential building space added at the Pease International Tradeport over the last decade.

A review of journey-to-work information compiled by the U.S. Census Bureau (not included in the DEIS) reveals some key trends regarding commuting patterns within the study area. The data shows that approximately 74% (85,220) of all workers living in the study area are also employed at businesses located within the study area, while 26% of all workers are employed (29,900) outside the study area. This indicates that there is a strong internal movement of study area residents to employment activities located within the study area. The patterns of commuting within the study area are more prevalent among residents of Strafford County where approximately 82% of workers commuted to jobs within the study area. However, only 66% of workers in the Rockingham portion of the study area commuted to jobs within the study area. In Strafford County, the number of residents working outside the county increased by approximately 20% between 1990 and 2000. The largest portion of this increase represented workers going to Rockingham County, which received approximately 65% of all outbound commuters from Strafford County as of 2000. There was a decrease in the number of Strafford County residents commuting to Maine during the decade, which is probably attributable to the workforce reduction at the Portsmouth Naval Shipyard in Kittery, Maine.

Rockingham County had a larger percentage of residents (47.1%) commuting outside the county in 2000 than did Strafford County (39.8%). Of the total Rockingham study area residents commuting outbound the largest percentages traveled to Hillsborough County (24%) and the State of Massachusetts (59.5%). Only 6% (4,254) of Rockingham County residents commuting outside the County for work had Strafford County as a destination. Although this data represents the whole of Rockingham County, and not just the portion in the study area, it still provides a level of magnitude of the directional flow of commuters residing in Rockingham County.

Carroll County had the largest percentage of residents (65%) who both lived and worked within the county as of 2000. Although only 24% of residents commuted outside the county for work, this figure had increased by almost 58% (1,816) between 1990 and 2000. Of the total outbound commuters from Carroll County in 2000, Belknap County received the largest percentage (24.9%) followed closely by Strafford County (22.6%).

Based on the data analyzed, it is obvious that the Portsmouth-Rochester metropolitan area has become much more integrated from an economic perspective, particularly within the last ten years. This finding is supported by commuting patterns that show that almost three-quarters of all people living in the metropolitan study area also work within the area. This transportation linkage is especially prevalent among residents of Strafford County, many of whom commute to jobs located in Rockingham County. While this trend is also true for residents of the Rockingham County portion of the metropolitan area, there is a somewhat higher percentage of people living in Rockingham County that commute outside the study area to employment locations in Massachusetts and elsewhere in New Hampshire.

Two major factors have helped to shape the commuting patterns mentioned above. The first is that a substantial portion of the business and job growth in the metropolitan study area has occurred within Rockingham County. This observation is illustrated by the closure of Pease Air Force Base and its redevelopment as the Pease International Tradeport in Portsmouth/Newington, where the number of jobs created since 1990 account for approximately 20% of the net job growth over the last decade within the study area. Combined with this higher job growth in the southern tier is a commensurate increase in the cost of housing. Housing costs in Rockingham County have remained consistently higher than those in Strafford and Carroll Counties over the last decade. This change has fostered sustained residential growth in the northern portion of the study area, which has supported an expanding workforce of commuters who require access to the regional transportation system within the study area, thus the chronic congestion on the Little Bay Bridges. In essence, changes within the housing market and the location of employment opportunities have contributed to congestion on the Little Bay Bridges, rather than congestion on the Bridges influencing residential and commercial/industrial location decisions.

18. This question relates to Table 4.3-4 in the DEIS. A comparison of projected population difference for the year 2025 between the 6- and 8-lane alternatives was larger for Rockingham County (262) than Strafford County (246). Data in the table also noted that the difference in employment was larger in Rockingham County (397) than Strafford County (150).[1]

It should be noted that the projected population difference between the two counties for both alternatives indicates that the increase in Strafford County is greater than Rockingham County. The employment numbers under the 6-Lane Alternative are also larger for Strafford County and the rate of change in Rockingham County is declining (after 2015) in comparison to Strafford County (8-Lane Alternative). (See Exhibits 4.3-1 and 4.3-2 in the FEIS.)

It needs to be emphasized that the population and employment base is substantially higher in Rockingham County than Strafford County. The data indicates that in 2005, the population of Strafford County was about 39.5% of Rockingham County and employment in Strafford County was about 31% of Rockingham County. It is estimated that a similar relationship will occur in 2025. Consequently, the growth of Rockingham County in terms of population and economic activity, with or without the bridge alternatives, will continue to expand.

Based on an estimate of 2.4 persons per household in 2025 (See Section 3.3.2.2 in the FEIS for a discussion of household size) the following increase in the number of households related to the build alternatives are projected (See Table 1).

τ

1 These numbers are not included in Table 4.3-4 as printed in the text. The number was calculated by comparing the 2025 population projection under the 8-lane alternative with the 2025 population projection under the 6-lane alternative (Strafford: 1,151 – 905 = 246; Rockingham: 714-452=262). The same type of calculation related to employment projections was also prepared (Strafford: 887-737=150; Rockingham 1,101-613=397).

Table 1
Projected Number of Additional Households from No-Build Alternative for 2025

	2025	2025 with 40% for Rockingham	Difference	Total Percent Difference
Six-Lane Alternative				
Strafford	377	377	0	-
Rockingham	188	75	113	-
Total	**565**	**452**	**113**	**20%**
Eight-Lane Alternative				
Strafford	480	480	0	-
Rockingham	298	120	178	-
Total	**778**	**600**	**178**	**23%**

Source: DEIS: Based on Table 4-3-4

As noted in the FEIS, the projected number of households due to the build alternatives was reduced because only 40 percent of the households in Rockingham County are located in the study area. This is an acceptable statistical approach for this type of evaluation. It should be noted, however, this represents a difference of 178 households for the 8-Lane Alternative (as compared to the 6-Lane Alternative) over a 20-year (2005 to 2025) period, or less than one half household per year per municipality in the Rockingham County portion of the study area.

It is important to understand that the projected build alternative growth rates are fairly small when compared to the No-Build Alternative (See Table 2 and Table 4.3-3 in the FEIS). For example, the number of additional households for the Strafford portion of the study area represents a projected increase of about 462 on an average annual basis. For the Rockingham County portion of the study, the increase is about 590 on an average annual basis. This equates to about 1,052 households for the entire study area on an annual average basis over the twenty-year period under the No-Build Alternative. It should be noted that between 1990 and 2000 the total number of households in the study area increased by 10,521 or about 1,052 on an average annual basis.

Table 2
Projected Average Annual Household Growth, Build Alternatives

	2005-2025 Projected Population Increase	2025 Projected Number of Households Based on 2.4 Residents per Household	Projected Number of Households With 40% Rockingham	Projected Number of Households (Avg. Annual with 40% Rockingham)
Strafford	22,188	9,245	9,245	462
Rockingham	70,653	29,439	11,771	590
Total	92,841	38,684	21,016	1,052

Finally, it is important to note that the REMI model was used to estimate population growth on a county basis. Due to how model input data is collected by various Federal and State agencies, the county level is the smallest unit for measuring possible social and economic impacts. The model does not allow for analysis of population, employment and housing below the county level. A simple proportional approach was therefore used to compare and analyze potential economic impacts for the Rockingham County portion of the Socio-economic Study Area – which is a standard and accepted statistical practice for this type of analysis. However, given the concerns expressed by the Seacoast MPO and others, the sections of the Final EIS that discuss secondary growth issues has been updated to consider the effects of allocating 100% of the secondary growth to the Rockingham County communities within the Socio-economic Study Area. Also, the methodology used to allocate the projected future growth and corresponding potential wetland impacts has been re-assessed and data updated in the Final EIS.

19. The Seacoast MPO suggests that only undeveloped land be considered in the analysis of secondary impacts to natural resources, reasoning that most future development will occur in undeveloped land and that undeveloped land has a higher incidence of wetlands, steep slopes and other development constraints than developed areas. Upon additional review, the analysis did find that wetlands are more common in undeveloped land than developed land. However, it is important to understand that the definition of "developed land" used in the analysis includes numerous undeveloped parcels and many areas where substantial wetlands also occur. With a renewed emphasis on smart growth and in-fill development in New Hampshire, clearly some portion of the future growth would occur in areas that fall within the definition of "developed land." So, an approach that allocates 100% of the future growth to undeveloped land would represent an extremely conservative estimate. Also, as more fully described in the EIS, the estimated impacts to wetlands were completed using the basic assumption that future land development would occur in a "spatially random" pattern without regard for the occurrence of environmental resources. This assumption is also highly conservative since it does not take into account the fact that wetlands in New Hampshire are protected under state and federal statutes and local ordinances.

However, in order to develop an absolute worst-case analysis of the potential land use impacts, the Final EIS has been updated to consider the effect of allocating the majority of the future growth to undeveloped land. Consistent with this approach, the proportion of wetlands within the study area has been re-assessed and data updated to reflect the amount of wetland in the undeveloped portions of the Socio-economic Study Area.

20. See Letter S-8, response #10.

21. The NHDOT and FHWA are amenable to consider studies and design of tidal arrays and/or tidal turbines that are developed by the tidal power companies. The NHDOT and FHWA's concerns reside primarily with any potential degradation and/or deterioration of the Little Bay Bridges and General Sullivan Bridge should turbines or arrays be proposed directly attached to or located in close proximity to the bridges.

22. The NHDOT and FHWA will coordinate with the NH Estuaries Project to locate and avoid impacts to the existing monitoring station located between Pier 8 of the Little Bay Bridges and the Dover shoreline during construction.

23. The NHDOT and FHWA appreciate the support of the Seacoast MPO for this project and will progress the Selected Alternative as expeditiously as possible.

BARRINGTON
BROOKFIELD
DOVER
DURHAM
FARMINGTON
LEE
MADBURY
MIDDLETON
MILTON

Strafford
REGIONAL PLANNING
COMMISSION

NEW DURHAM
NEWMARKET
NORTHWOOD
NOTTINGHAM
ROCHESTER
ROLLINSFORD
SOMERSWORTH
STRAFFORD
WAKEFIELD

October 4, 2006

Mr. Christopher M. Waszczuk, P.E.
Chief Project Manager
New Hampshire Dept. of Transportation
P.O. Box 483
Concord, New Hampshire 03302-0483

Re: Comments on Newington-Dover Spaulding Turnpike Widening
Draft Environmental Impact Statement

Dear Mr. Waszczuk:

As an addendum to the October 2, 2006 comment letter from Seacoast MPA, the Strafford Regional Planning Commission respectfully submits additional comments on the Newington-Dover Spaulding Turnpike Widening Draft Environmental Impact Statement.

The following comments, that were outlined at the public hearing, relate to the Mitigation section on page 5 of the comment letter and Section 4.9 on Surface Water Resources of the draft EIS and the project plans.

Plan: Preferred Alternative 13 - Stormwater Facilities

1 1) Detention basins #561 SB, #567 SB are located within wetlands or drainage/stream systems. Have alternative locations been considered to reduce impacts?

2 2) The outfall location for proposed detention basin #587 SB is not shown.

3 3) The outfall locations for all swales proposed are not shown.

2 RIDGE STREET · SUITE 4 · DOVER, NEW HAMPSHIRE 03820-2505
TEL: 603.742.2523 FAX: 603.742.7986 E-MAIL: SRPC@STRAFFORD.ORG
WWW.STRAFFORD.ORG

Plan: Preferred Alternative 3 - Stormwater Facilities

4 1) Proposed detention basin #630 SB is located partially within wetlands. Have alternative locations been considered to reduce impacts?

5 2) Swale #652 SB is located within wetlands. Have alternative locations been considered to reduce impacts?

6 3) The outfall locations for all swales proposed are not shown.

7 4) The outfall locations for proposed detention basins #667 NB and #620 NB are not shown.

Impacts to Stream, Wetland and Tidal Habitats

8 1) We question whether temperature of stormwater discharge from proposed detention basins and swales will impact stream, wetland, tidal and inter-tidal habitats in the project vicinity. It is noted in the draft EIS that the existing streams on the project site already have diminished water quality and do not support a diversity of aquatic species. Will the proposed discharge further impair or degrade water quality and habitat conditions?

9 2) We question whether there will be any shading affects on wetland systems or inter-tidal and shallow water habitats resulting from proposed structures, including expanded bridge decking, overpasses and sound walls.

SRPC would like to thank the Department for their consideration of the questions and comments that we have raised.

Sincerely,

Cynthia Copeland, AICP
Executive Director

cc: Cliff Sinnott (Executive Director, Rockingham Planning Commission)
MPO Policy Committee and TAC Members
Carol Murray, Commissioner, NHDOT
Newington Board of Selectmen
Dover City Council

061001_LBB Draft EIS_water

Response to Comments made by
Cynthia Copeland, Executive Director
Strafford Regional Planning Commission
2 Ridge Street, Suite 4, Dover, NH 03820
Letter dated October 4, 2006

1.-7. Additional details regarding the stormwater management system and treatment devices will be provided when they become more fully developed as the project progresses through the final design stages. At the EIS phase, the general drainage patterns and approximate locations for detention basins were identified. These locations and the estimated size of the area needed are rough approximations and generally do not account for site-specific constraints. The presence of wetlands and other site constraints will be factored into the sizing and final layout of the treatment devices as the areas become more refined during the final design process, after the issuance of the Final EIS and the FHWA Record of Decision.

8. See Letter S-4, response #3.

With regard to potential temperature impacts, we note that there are no cold water fishery resources within the study area (*i.e.*, the aquatic resource typically considered sensitive to such impacts).

9. The NHDOT and FHWA have reviewed the potential impacts to wetlands and surface waters that may result from shading effects. The most substantial potential effect is associated with the expanded bridge deck over Little Bay. Generally, shading effects result from structures that are in close proximity to the surface of the wetland or surface water, which is not true in this case. However, it is well understood that the availability of light is one of the main factors controlling the distribution of marine flora and fauna in this area (together with tidal velocities). A three dimensional model that allows an examination of this effect has been developed and is discussed in the Final EIS (Section 4.10.11) to better understand the potential impact. Overall, the analysis found that the potential effect is minor.

Private Organizations/ Individuals (P)

William Penn Tuttle, III
151 Dover Point Road
Dover, NH 03820

August 23, 2006

Christopher Waszczuk, P.E.
Chief Project Manager
NH Department of Transportation
P.O. Box 483, Hazen Drive
Concord, NH 03302

Dear Mr. Waszczuk,

1 It is my understanding that the preservation of my property (120-acres) has been identified as a recommended component of the wetland mitigation package for the Newington-Dover project. I am pleased to know that this is finally moving to the public hearing stage and would ask that this letter be included as part of the Public Hearing record. This conservation project is a cooperative effort between the City of Dover, The Strafford Rivers Conservancy (SRC), and the NHDOT, and I appreciate everyone's efforts to make the dream of preserving my family's historic farm a reality.

2 I have been in negotiations with folks at The SRC and the City of Dover for over two years now and I am ready to finalize this transaction! Due to the exceptionally rainy weather conditions that my crops endured over the last two growing seasons (2005 and 2006), I have run into some financial hardship and would request that the closing occur as soon as possible. I have yet to see any relief as my costs on this conservation project continue to mount (i.e. attorney fees, survey costs, appraisal costs, etc.) all while my regular daily operating costs of working the farm and running my store continue to increase.

I look forward to the public hearing on September 21, 2006. Anything you can do to see that the closing occurs as quickly after the public hearing date as is reasonably possible would be greatly appreciated. Thank you for your continued efforts.

Sincerely,

William P. Tuttle, III

cc: A. Boudreau, The SRC
S. Bird, City of Dover

Response to Comments Made by
William Penn Tuttle, III
151 Dover Point Road, Dover, NH 03820
Letter dated August 23, 2006

1. & 2. The Tuttle Farm has been identified as one of four preferred components of the recommended mitigation package for the project. In response to the property owner's request, the NHDOT and FHWA, in partnership with the City of Dover, has expedited the acquisition of a conservation easement on the Tuttle Farmstead to permanently preserve the 120-acre farm. The preservation was consummated on January 29th, 2007 with the conservation easements executed and property rights on 109.1 acres transferred to the City, the NHDOT, and Strafford Rivers Conservancy (SRC). A second conservation easement on 11.0 acres was secured on September 14, 2006 through the Farm and Ranch Land Protection Program with easement rights held by the City, SRC and US Department of Agriculture.

James Moore JM 8/29/06
Special Committee Chairman
State of New Hampshire Department of Transportation
PO Box 483
Concord NH 03302-0483

August 21, 2006

RECEIVED
COMMISSIONERS OFFICE
AUG 29 2006
THE STATE OF NEW HAMPSHIRE
DEPT. OF TRANSPORTATION

Mr. Moore:

In light of the upcoming public hearings, I thought I would, for the record, inform you of the worries the residents of our area have about noise impacts directly resulting from the proposed Spaulding Turnpike highway expansion. In addition to the obvious taking of properties and land, we are all very concerned with noise mitigation—many of us love where we live and have invested much into our homes—emotionally and monetarily.

My husband and I have followed these meetings over the years; spent time with Chris Waszczuk discussing the proposed alternatives, focusing on the preferred alternative #3; and spoke at several ATF meetings.

Our property directly abuts the expansions. We are very troubled by the impending sprawl into our backyard with the proposed set backs and project perimeters, and equally concerned about the proposed land clearing and the direct effect on our quality of life. I've been watching the construction in Newington, and the corresponding exposure to the highway traffic homes are now subject to.

For the record, we are in favor of

1
1) Minimized project set backs
2) Restricted tree clearing TO A BARE MINIMUM
3) Mitigation for the trees removed—TO INCLUDE a sound wall, privacy fence, and additional evergreen tree plantings

In summary, we feel strongly that our quality of life will be severely infringed upon if the above requests are not acted upon.

If you would like to discuss our concerns further; we can be reached at 742-1012.

Angela and Matthew Carter
335 Dover Point Road
Dover, NH 03820

Response to Comments Made by
Matthew and Angela Carter
335 Dover Point Road, Dover, NH 03820
Letter dated August 27, 2006

1. – 3. The NHDOT and FHWA are cognizant of the sensitive and scenic nature of the area and will strive to minimize tree clearing and setback areas to the extent practicable. As presented at the Public Hearing, the NHDOT and FHWA also propose four segments of soundwalls in Dover totaling approximately 15,600 linear feet to mitigate for the elevated noise levels from the Turnpike. In addition, the NHDOT and FHWA propose to develop a comprehensive landscaping plan, as part of the project's final design, and will plant new trees in select locations to mitigate for mature trees that will be lost due to construction and to landscape other locations along the corridor, as deemed appropriate.

A soundwall is currently proposed along the east side of the Turnpike from the Wentworth Terrace neighborhood area, past Pomeroy Cove, up the Exit 6 NB off-ramp, and along US 4 terminating at Dover Point Road, which will shield Mr. and Mrs. Carter's property.

RECEIVED
COMMISSIONERS OFFICE
SEP 13 2006
THE STATE OF NEW HAMPSHIRE
DEPT. OF TRANSPORTATION

GREAT BAY RESOURCE PROTECTION PARTNERSHIP

September 11, 2006

Mr. James Moore JAM 9/13/06
Director of Project Development
P.O. Box 483
Concord, NH 03302

RE: Tuttle Farm Protection Project: To be included as part of the Public Hearing record for the Newington-Dover 11238 project.

Dear Mr. Moore:

1 The Great Bay Resource Protection Partnership supports the permanent protection of the Tuttle Farm in Dover, NH. The protection of the 120 acre Tuttle Farm is critical for several reasons. The property contains a diversity of habitat including tidal and non-tidal wetlands, streams, and prime agricultural soils. The farm's location, between the tidal waters of the Bellamy and Piscataqua Rivers, provides critical habitat for migrating waterfowl including Canada geese. The permanent protection of the property from further development will be a positive contribution to the overall water quality of the adjacent streams and rivers, and Great Bay. The protection of the farm will be an important addition to the conservation land in the region, including the New Hampshire Department of Fish and Game's Bellamy River Wildlife Management Area which once was part of the Tuttle family farm. The conservation of the farm will also protect an important regional historic resource and scenic resource.

The Partnership is a group of organizations committed to protecting the important habitats of the Great Bay region. The Partnership consists of state and regional private non-profit conservation organizations and land trusts, federal and state public agencies and municipalities. The Principal Partners include the Audubon Society of New Hampshire; Ducks Unlimited, Inc.; Great Bay National Estuarine Research Reserve; New Hampshire Department of Fish and Game; The Nature Conservancy, NH Chapter; Society for the Protection of NH Forests; US Environmental Protection Agency; US Fish and Wildlife Service; and the US Natural Resources Conservation Service. The Partnership is pleased to lend its support to this significant conservation project.

Sincerely,

Dea Brickner-Wood

Dea Brickner-Wood
Great Bay Coordinator

Response to Comments Made by
Dea Bricker-Wood, Great Bay Coordinator
Great Bay Resource Protection Partnership
1 Colony Cove Road, Durham, NH 03824
Letter dated September 11, 2006

1. See Letter P-1, response #1 and #2.

9-21-06 5

My name is Richard Stern. I live at 516 Shattuck Way in Newington N.H. This letter is in reference to the expansion of the Spaulding Turnpike. I feel that this expansion will have a profound negative impact on my home. I have included a map with my home marked on it. Thanks to the building of Shattuck Way around my home I have not only lost a large buffer area of trees but the property around me has been opened up to be developed. The result will mean a loss of all my buffer zones around my house.I have no control on the trees that now give me a buffer because I do not own the property they are on. No predictions have been projected for the sound around my home other than the state doing readings two mornings. I had asked for the projected increase but have not received them. The traffic noise inside my house at 5:00am is very loud. I know the state or FHWA does not measure the sound inside but this is where my family lives and sleeps. I think my property value will be decreased by the building of four more lanes within view of my house.

1

2

3

Nothing is being done in Newington for any noise abatement, that I am aware of. I would like to see more attention payed to the town for sound mitigation. We are not as close as the people in Dover , but as you know sound travels and a lot of people hear the roar of the highway in Town, not only are you adding lanes but the speeds of the vehicles will increase due to more travel lanes. Perhaps a buffer zone or more research into silent highway technology.

4

I also feel it is a undue burden on the taxpayers of N.H. to restore and maintain the old steel General Sullivan Bridge

5

I have already sacrificed a lot with the building of Shattuck Way. This will be the final blow for me and my family.

Thank You

Richard C. Stern
516 Shattuck Way
Newington N.H. 03801
603-431-9741

FHWA noise monitoring guidelines[59]. Traffic data (except for the June 2005 measurement) were obtained at the same time as the sound level data. This traffic data included traffic volumes, vehicle mix (automobiles, medium trucks, and heavy trucks), and operating speeds. Noise sources in the study area included vehicles on the Spaulding Turnpike and vehicles on local roadways. **Figure 3.14-1** presents the location of the noise monitoring sites.

Table 3.14-3
Areas and Receptor Locations

Area Number	Areas	Number of Receptor Locations Represented
Area 1	Fox Run Road – Newington	2
Area 2	Old Dover Road – Newington	5
Area 3	Patterson Lane – Newington	10
Area 4	Nimble Hill Road – Newington	25
Area 5	Shattuck Way – Newington	5
Area 6	Bloody Point – Newington	5
Area 7	Hilton Park – Dover	1
Area 8	Wentworth Terrace – Dover	20
Area 9	Dover Point Road – Dover	60
Area 10	Boston Harbor Road – Dover	25
Area 11	Cote Drive – Dover	60
Area 12	Bayview Park – Dover	1
Area 13	Clearwater Drive – Dover	55
Area 14	Homestead Lane – Dover	25
	Totals	299

3.14.2.3 Existing Conditions

Sound Level Measurements

Table 3.14-4 presents the results of the noise monitoring program and the predicted results from the Traffic Noise Model (TNM). Little to no difference between the monitored results and the predicted results confirms that the Traffic Noise Model has been calibrated properly.

The existing sound levels for the study area were calculated using the TNM that was calibrated based upon the noise monitoring data. The results presented in Table 3.14-5 represent the range of sound levels in the study area that have been calculated using the existing peak hour traffic data. The highest sound levels will occur at receptor locations adjacent to the Spaulding Turnpike. The sound levels at the lower end of the range will occur at receptor locations further away. The study area includes a diversity

59 *Measurement of Highway-Related Noise*, US Department of Transportation, Federal Highway Administration, FHWA-PD-96-046, May 1996.

of building types, such as, residential, commercial, and public buildings. The results of the noise analysis demonstrate that a majority of the non-commercial receptor locations currently experience sound levels that approach, are at, or exceed the NAC.

Table 3.14-4
Noise Model Calibration Data

Monitoring Location Number	Monitoring Site[1]	Monitored	Predicted	Difference[3]
M1	Nimble Hill Road – Newington	64	65	+1
M2	Old Dover Road – Newington	62	64	+2
M3	Wentworth Terrace – Dover	68[2]	69[2]	+1
M4	Dover Point Road – Dover	72[2]	71[2]	-1
M5	Homestead Lane – Dover	55	57	+2
M6	Spur Road – Dover	63	64	+1
M7	Boston Harbor Road – Dover	76[2]	75[2]	-1
M8	Trickys Cove – Newington	54	—[4]	—

Notes:
1 The monitoring sites are depicted in **Figure 3.14-1**.
2 The sound level approaches, is at, or exceeds the FHWA noise abatement criterion.
3 Predicted minus Monitored.
4 Measurement site only, no predicted values calculated.

Table 3.14-5
Existing Sound Levels (dBA)

Area Number[1]	Receptor Type	Areas	Range of Existing Sound Levels
Area 1	Commercial/Church	Fox Run Road – Newington	58-67[2]
Area 2	Residential/Commercial	Old Dover Road – Newington	51-59
Area 3	Residential/Commercial	Patterson Lane – Newington	39-47
Area 4	Residential	Nimble Hill Road – Newington	52-54
Area 5	Residential/Commercial	Shattuck Way – Newington	50-68[2]
Area 6	Residential	Bloody Point – Newington	53-57
Area 7	Park	Hilton Park – Dover	57-67[2]
Area 8	Residential	Wentworth Terrace – Dover	59-71[2]
Area 9	Residential	Dover Point Road – Dover	55-70[2]
Area 10	Residential	Boston Harbor Road – Dover	54-63
Area 11	Residential	Cote Drive – Dover	49-71[2]
Area 12	Park	Bayview Park – Dover	40-56
Area 13	Residential	Clearwater Drive – Dover	44-66[2]
Area 14	Residential	Homestead Lane – Dover	54-68[2]

Notes:
1 Areas Presented in **Figure 3.14-1**
2 The sound level approaches, is at, or exceeds the FHWA noise abatement criterion.

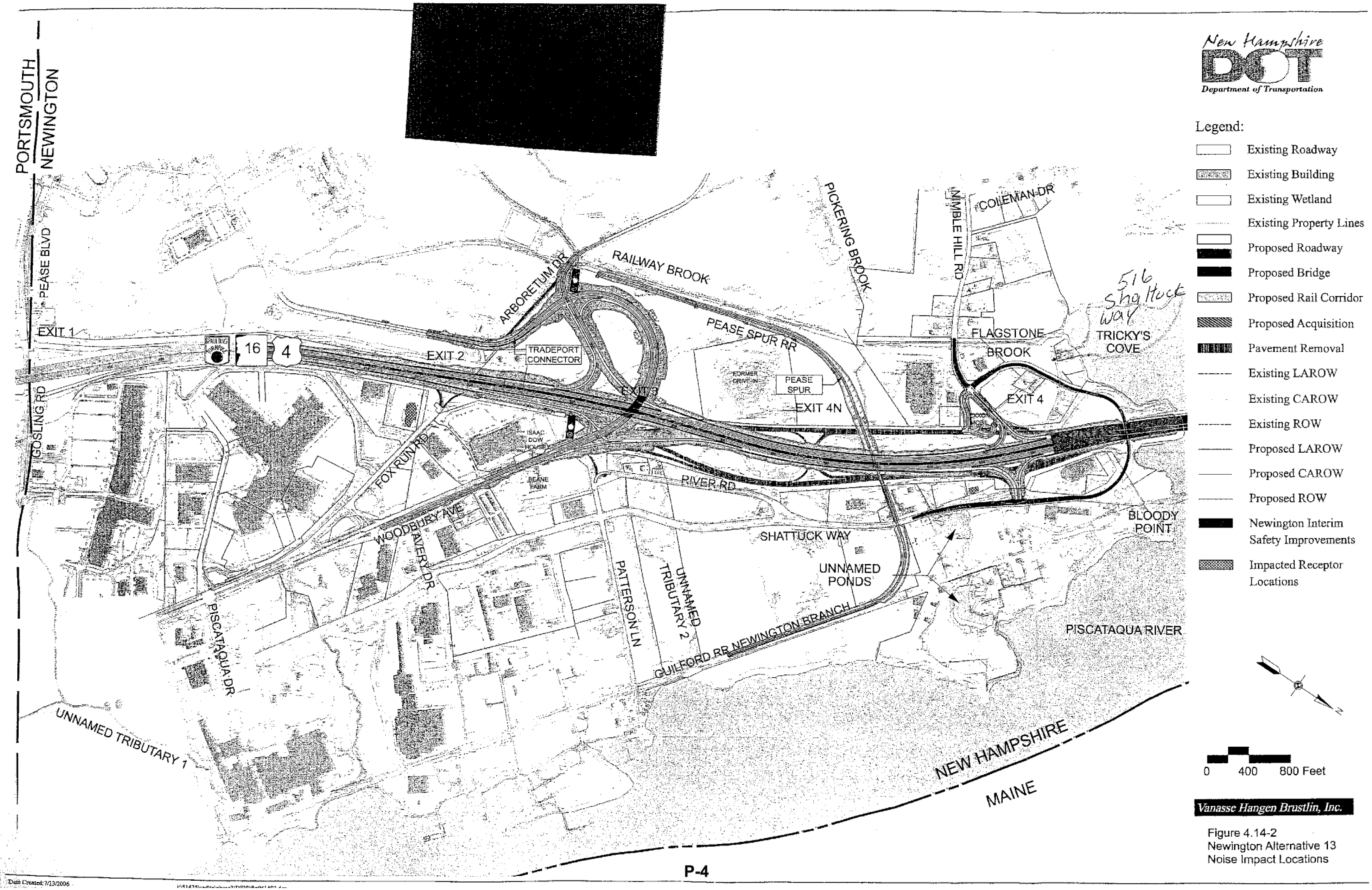


Figure 4.14-2
Newington Alternative 13
Noise Impact Locations

Date Created: 7/13/2006

Response to Comments Made by
Richard C. Stern
516 Shattuck Way, Newington, NH 03801
Letter dated September 21, 2006

1. The NHDOT and FHWA are sympathetic to Mr. Stern's concerns. However, Mr. Stern's property is situated approximately 700 feet from the edge of the proposed Turnpike with no physical impacts to the property. The interim project, which constructed Shattuck Way, was closely coordinated with the Town of Newington and constructed an alternative that provided needed highway improvements to enhance safety at Exit 4. The layout for Shattuck Way did not physically impact the Stern's property or require the acquisition of any property rights from Mr. Stern. The NHDOT and FHWA have no control over zoning or development in the vicinity of Shattuck Way. Those elements fall under the purview of the Town of Newington.

2. Two field noise measurements have been made, one on June 23, 2005 at 6:37 am and the second on September 8, 2006 at 5:54 am in the vicinity of the Stern's residence. These measurements were taken in the morning, as requested, to represent the typical elevated noise levels. The average sound levels (Le_q) ranged from 53.4 to 55.6, which fall below the FHWA Noise Abatement Criteria (NAC) of 67 for residential properties. The predicted sound levels for the Build 2025 in the vicinity of the Stern's residence range from 56 to 60 dBA, which are below the NAC.

3. Since there is no physical impact to the property, no monetary damages are due.

4. A detailed noise analysis was conducted for this project in accordance with the NHDOT's Policy and Procedural Guidelines for the Assessment and Abatement of Highway Traffic Noise for Type I Highway Projects and Title 23 Part 772 of the US Code of Federal Regulations. Approximately 300 properties in the project area (Newington-Dover) were included in the analysis. As a result of this analysis, the NHDOT and FHWA propose to construct four noise barriers totaling approximately 15,600 feet in length in Dover. Barriers are not warranted in Newington because the existing and predicted (2025) noise levels do not approach or exceed the FHWA noise abatement criterion. Two properties (located in Receptor Areas 1 and 5, see Table 4.14-1) do meet the criterion, but soundwalls are not proposed because these properties do not meet the cost-effective criterion, as established by policy.

5. The NHDOT and FHWA propose to rehabilitate the General Sullivan Bridge as an element of the Selected Alternative identified for the project. The General Sullivan Bridge, regardless of its present day condition, is a landmark structure, the second highest rated historic bridge in the state, and eligible for the National Register of Historic Places. The bridge offers a unique and important bicycle/pedestrian connection across Little Bay, as well as other recreational activities, and is deemed a historic resource with protection under Federal (USDOT) law. The NHDOT and FHWA have estimated the cost to rehabilitate the General Sullivan Bridge to a six-ton capacity, which will be able to accommodate pedestrians, bicycles, recreational activity, and emergency vehicles, at approximately $26

million dollars. This represents a net cost to the project of approximately $10 million dollars taking into account the cost that would be required to dismantle and remove the structure, along with the cost required to provide a replacement recreational connection across the Bay.

10

Date: Sept. 21, 2006

Re: NEWINGTON-DOVER NHS-027-1(037), 11238
PUBLIC HEARING
St. Thomas Aquinas High School, 197 Dover Pt. Rd,

Attention: Chairman of the Special Committee
% James A Moore
Director of Project Development
New Hampshire Department of Transportation
P.O. Box 483, Hazen Drive
Concord, New Hampshire 03302-0483

Dear Sir:

Due to information received during the Public Hearing process for the above-referenced project I(we) hereby make the following request of the Special Committee:

1 There is a very large section of fence down (~60' or more) right after the Toll Booth on the Spur Rd side. If there is an accident with a vechile going off the road (like happened to the ~~Newton~~ political candidate down the other end of the Spaulding TK/Spur Rd - there is No way it would be able to stop! It would plow right into 193 Spur Rd + maybe even into the river!

I (we) understand that I (we) will be notified in writing of the Special Committee's decision regarding this request. I(we) also understand that this request will be included as part of the official record.

Signed: Rosalie Veinott

Name: Rosalie Veinott
(Please Print)

Address: 23 Roberts Rd
Dover, NH

Phone: # 749-2957

NH DOT Project Parcel # _____

Response to Comments Made by
Rosalie Veinott
23 Roberts Road, Dover, NH 03820
Letter dated September 21, 2006

1. The section of fence has been repaired. The NHDOT and FHWA appreciate being made aware of the fallen section of fence.

Date: 9-21-06

Re: NEWINGTON-DOVER NHS-027-1(037), 11238
PUBLIC HEARING
St. Thomas Aquinas High School, 197 Dover Pt. Rd,

Attention: Chairman of the Special Committee
% James A Moore
Director of Project Development
New Hampshire Department of Transportation
P.O. Box 483, Hazen Drive
Concord, New Hampshire 03302-0483

Dear Sir:

Due to information received during the Public Hearing process for the above-referenced project I(we) hereby make the following request of the Special Committee:

1

A great job has been done on the final design and on the presentations made to the public. I've attended four of your public presentations and every meeting was very informative and conducted in a very professional manner.

I (we) understand that I (we) will be notified in writing of the Special Committee's decision regarding this request. I(we) also understand that this request will be included as part of the official record.

Signed: Thelma Briggs

Name: Thelma Briggs
(Please Print)

Address: 10 Cote Drive
Dover NH

Phone: # _____

NH DOT Project Parcel # _____

Response to Comments Made by
Thelma Briggs
10 Cote Drive, Dover, NH 03820
Letter dated September 21, 2006

1. The NHDOT and FHWA appreciate the efforts and input from the large number of people that attended the numerous public meetings and followed the project's development and progression. The NHDOT and FHWA will continue to progress the project in an expeditious manner and will continue to solicit input from the communities, the Advisory Task Force, and Planning Commissions on various aspects of the project during the project's final design.

Date: 9-21-06

Re: NEWINGTON-DOVER NHS-027-1(037), 11238
PUBLIC HEARING
St. Thomas Aquinas High School, 197 Dover Pt. Rd,

Attention: Chairman of the Special Committee
% James A Moore
Director of Project Development
New Hampshire Department of Transportation
P.O. Box 483, Hazen Drive
Concord, New Hampshire 03302-0483

Dear Sir:

Due to information received during the Public Hearing process for the above-referenced project I(we) hereby make the following request of the Special Committee:

1 Where ever possible, trees be planted/replaced in between the new roadways & existing houses to help with noise reduction

I (we) understand that I (we) will be notified in writing of the Special Committee's decision regarding this request. I(we) also understand that this request will be included as part of the official record.

Signed: Dean Trefethen

Name: Dean Trefethen
(Please Print)

Address: 9 Danielle Ln
Dover NH 03820

Phone: # 603-742-4740

NH DOT Project Parcel # _____

Response to Comments Made by
Dean Trefethen
9 Danielle Lane, Dover, NH 03820
Letter dated September 21, 2006

1. The NHDOT and FHWA are cognizant of the sensitive and scenic nature of the area and will strive to minimize tree clearing and setback areas to the extent practicable. As presented at the Public Hearing, the NHDOT and FHWA also propose four segments of soundwalls in Dover totaling approximately 15,600 linear feet to mitigate for the elevated noise levels from the Turnpike. In addition, the NHDOT and FHWA propose to develop a comprehensive landscaping plan, as part of the project's final design, and will plant new trees in select locations to mitigate for mature trees that will be lost due to construction and to landscape other locations along the corridor, as deemed appropriate.

Date: 9/21/06

Re: NEWINGTON-DOVER NHS-027-1(037), 11238
PUBLIC HEARING
St. Thomas Aquinas High School, 197 Dover Pt. Rd,

Attention: Chairman of the Special Committee
% James A Moore
Director of Project Development
New Hampshire Department of Transportation
P.O. Box 483, Hazen Drive
Concord, New Hampshire 03302-0483

Dear Sir:

Due to information received during the Public Hearing process for the above-referenced project I(we) hereby make the following request of the Special Committee:

1 I Am concerned About the backup that will occur at the revised exit 6 — It appears that the backup will back up onto the North bound highway it self

I (we) understand that I (we) will be notified in writing of the Special Committee's decision regarding this request. I(we) also understand that this request will be included as part of the official record.

Signed: Douglas DeDe

Name: Douglas T DeDe
(Please Print)

Address: 143 Locust St
Dover NH 03820

Phone: # 603 749 1578

NH DOT Project Parcel # _____

Response to Comments Made by
Douglas J. DeDe
143 Locust Street, Dover, NH 03820
Letter dated September 21, 2006

1. The signalized intersection of US 4 with the Exit 6 northbound ramps under the Selected Alternative has been designed to efficiently process the 2025 future traffic volume demands. The overall intersection is projected to operate at Level of Service (LOS) B during the 2025 weekday morning peak hour and LOS C during the 2025 weekday evening peak hour (this is more fully documented in Chapter 4 of the EIS), which meets the NHDOT's LOS C desirable standard for the design of new roadway facilities.

   As shown on the Hearing Plan for the Preferred Alternative (now the Selected Alternative), the 2-lane northbound off-ramp will be approximately 1,200 feet long extending from the nose of the ramp median on the Turnpike to the signalized intersection at US 4. At the signalized intersection, two left-turn lanes and two right-turn lanes are proposed with approximately 550 feet of storage in each lane. The proposed storage lengths on the northbound off-ramp will sufficiently accommodate the anticipated queues without causing vehicles to back up onto the Turnpike. This is more fully documented in Section 4.2 of the EIS.

Date: 9/21/06

Re: NEWINGTON-DOVER NHS-027-1(037), 11238
PUBLIC HEARING
St. Thomas Aquinas High School, 197 Dover Pt. Rd,

Attention: Chairman of the Special Committee
% James A Moore
Director of Project Development
New Hampshire Department of Transportation
P.O. Box 483, Hazen Drive
Concord, New Hampshire 03302-0483

Dear Sir:

Due to information received during the Public Hearing process for the above-referenced project I(we) hereby make the following request of the Special Committee:

I am a property owner of #15 Wentworth Terrace, Dover.

1 There exists an ancient drain that traverses my lot west to east draining highway overflow into the Piscataqua at my shorefront. I am concerned that the 4 additional lane will seriously erode my beachfront and being ancient possible erode my lot.

I (we) understand that I (we) will be notified in writing of the Special Committee's decision regarding this request. I(we) also understand that this request will be included as part of the official record.

Signed: John P Duffy

Name: JOHN P DUFFY
(Please Print)

Address: 14 Prospect St
Dover, NH 03820

Phone: # 603 828-7876

NH DOT Project Parcel # D023

Response to Comments Made by
John P. Duffy
16 Prospect Street, Dover, NH 03820
Letter dated September 21, 2006

1. The NHDOT and FHWA acknowledge the concerns regarding stormwater runoff and water quality on Dover Point. As part of the project's final design, the NHDOT and FHWA will closely review and evaluate the existing drainage conditions. Careful attention will be exercised to identify drainage related issues along the Turnpike on Dover Point and not exacerbate the deficient conditions. Detention basins and stormwater treatment areas will be considered as part of the project's final design to provide no net increase in pollutant loadings and to limit the peak runoff discharges to the pre-existing conditions.

Date: 9/21/06

Re: NEWINGTON-DOVER NHS-027-1(037), 11238
PUBLIC HEARING
St. Thomas Aquinas High School, 197 Dover Pt. Rd,

Attention: Chairman of the Special Committee
% James A Moore
Director of Project Development
New Hampshire Department of Transportation
P.O. Box 483, Hazen Drive
Concord, New Hampshire 03302-0483

Dear Sir:

Due to information received during the Public Hearing process for the above-referenced project I(we) hereby make the following request of the Special Committee:

1 ① THAT THE SIDEWALK FROM HILTON PARK (WEST SIDE) BE CONTINUED TO THE DMV EXISTING SIDEWALK DUE TO GREAT INCREASE IN TRAFFIC

2 ② THAT THE NOISE ABATEMENT BE INSTALLED AT THE BEGINNING OF THE PROJECT

I (we) understand that I (we) will be notified in writing of the Special Committee's decision regarding this request. I(we) also understand that this request will be included as part of the official record.

Signed: [signature]

Name: EDWARD CARTWICK
(Please Print)

Address: 53 BOSTON HARBOR RD
DOVER, NH 03820

Phone: # 603-742-8689

NH DOT Project Parcel # _____

Response to Comments Made by
Edward Cartnick
53 Boston Harbor Road, Dover, NH 03820
Letter dated September 21, 2006

1. The NHDOT and FHWA acknowledge that the section of Dover Point Road west of the Turnpike will see a moderate increase in traffic once the project is constructed and Exit 5 discontinued. The NHDOT has reviewed the area and proposes to incorporate a sidewalk (approximately 2700 feet) along the west side of Dover Point Road to improve pedestrian safety and provide pedestrian connectivity between the proposed sidewalk at Hilton Park and the existing sidewalk opposite the Division of Motor Vehicles (DMV) property with the following stipulations: the additional easements and/or property rights can be secured from the property owners in an amicable manner without the use of eminent domain; the additional impacts to wetlands (which are anticipated to be minor) will be permitted; and the City of Dover agrees to accept maintenance responsibilities (both winter and summer maintenance) for the sidewalk in accordance with its accepted policies and practices as mandated in RSA 231:92-a. A municipal agreement between the City and the NHDOT documenting maintenance responsibilities will need to be executed prior to this sidewalk (and the other sidewalks) being incorporated into the project.

2. The NHDOT and FHWA propose to install four sections of noise barriers totaling approximately 15,600 feet in Dover to mitigate for the elevated noise levels emanating from the Turnpike. A detailed noise analysis and evaluation were performed for the project and are documented in the EIS.

   Additional meetings with the impacted property owners will be held to discuss the noise barriers and ascertain whether the barriers are desired or not. In accordance with the NHDOT's *Policy and Procedural Guidelines for the Assessment and Abatement of Highway Traffic Noise for Type I Highway Projects*, a minimum of 75% of the first row property owners, and predicted to benefit from the installation of the noise barrier, will need to support the installation of the barrier prior to its construction. During these meetings with the neighborhoods, more detailed information on the type, height, special features, and length of the noise barriers will be discussed and input gathered.

   The NHDOT and FHWA will design the barriers to be as low as possible while still achieving the necessary noise reductions, and will consider various architectural treatments and landscaping during the final design phase to mitigate the visual impact of the barriers.

   The NHDOT and FHWA will review the project's constructibility and advance the construction of the proposed noise barriers, where deemed appropriate and practicable.

Date: 9/21/06

Re: NEWINGTON-DOVER NHS-027-1(037), 11238
PUBLIC HEARING
St. Thomas Aquinas High School, 197 Dover Pt. Rd,

Attention: Chairman of the Special Committee
% James A Moore
Director of Project Development
New Hampshire Department of Transportation
P.O. Box 483, Hazen Drive
Concord, New Hampshire 03302-0483

Dear Sir:

Due to information received during the Public Hearing process for the above-referenced project I(we) hereby make the following request of the Special Committee:

1 I support the efforts on
2 expanding the sidewalks &
adding noise barriers

I (we) understand that I (we) will be notified in writing of the Special Committee's decision regarding this request. I(we) also understand that this request will be included as part of the official record.

Signed: [signature]

Name: LINDA PONTBRIAND
(Please Print)

Address: 40 Belanger Dr.
Dover NH 03820

Phone # 603-742-4439

NH DOT Project Parcel # _____

Response to Comments Made by
Linda Pontbriand
40 Belanger Drive, Dover, NH 03820
Letter dated September 21, 2006

1. The NHDOT and FHWA acknowledge and appreciate the support and will progress the project, as proposed, as expeditiously as possible.

2. The NHDOT and FHWA acknowledge and appreciate support for the soundwalls, as proposed.

Date: 9/21/06

Re: NEWINGTON-DOVER NHS-027-1(037), 11238
PUBLIC HEARING
St. Thomas Aquinas High School, 197 Dover Pt. Rd,

Attention: Chairman of the Special Committee
% James A Moore
Director of Project Development
New Hampshire Department of Transportation
P.O. Box 483, Hazen Drive
Concord, New Hampshire 03302-0483

Dear Sir:

Due to information received during the Public Hearing process for the above-referenced project I(we) hereby make the following request of the Special Committee:

1 I support the plan as presented on 9/21/06. I would like to see the sound barriers installed. I am on the water on Pomeroy Cove and I would like the barriers solid on the bottom with the clear top

2

I (we) understand that I (we) will be notified in writing of the Special Committee's decision regarding this request. I(we) also understand that this request will be included as part of the official record.

Signed: _____

Name: Patricia Rove
(Please Print)

Address: 17 Cote Dr
Dover, NH 03820

Phone #: 749-2335

NH DOT Project Parcel # _____

Response to Comments Made by
Patricia Rose
17 Cote Road, Dover, NH 03820
Letter dated September 21, 2006

1. The NHDOT and FHWA acknowledge and appreciate the support and will progress the project, as proposed, as expeditiously as possible.

2. The NHDOT and FHWA will design the barriers to be as low as possible while still achieving the necessary noise reductions, and will consider various architectural treatments and landscaping during the final design phase to mitigate the visual impact of the barriers.

   Additional meetings with the impacted property owners will be held to discuss the noise barriers and ascertain whether the barriers are desired or not. In accordance with the NHDOT's *Policy and Procedural Guidelines for the Assessment and Abatement of Highway Traffic Noise for Type I Highway Projects*, a minimum of 75% of the first row property owners will need to support the installation of the barrier in order for it to be constructed. During these meetings with the neighborhoods, more detailed information on the type, height, special features, and length of the noise barriers will be discussed and input gathered.

September 19, 2006

Mr. James Moore 9/20/06
Director of Project Development
P.O. Box 483
Concord, NH 03302

Dear Mr. Moore,

1 I am writing in support of funding the preservation of the Tuttle Farm on Dover Point Road in Dover, NH. Farmland like Tuttle's, once a common sight in southern New Hampshire, is quickly becoming a memory from days gone by. This farm in particular is very special not only to Dover residents, but to many throughout the region who buy their produce there or simply drive by.

Preserving this farm will be a historic moment. I hope you do all you can do to insure that this beautiful farm is preserved for future generations. Thank you in advance for your efforts.

Sincerely,

Christopher Snow

10 Mast Road Ext.
Dover, NH 03801
603-742-4400

Response to Comments Made by
Christopher Snow
10 Mast Road, Dover, NH 03820
Letter dated September 19, 2006

1. See Letter P-1, response #1 and #2.

19

YAHOO! MAIL

JAM 9/26/06

Print - Close Window

Date: Sat, 23 Sep 2006 11:57:16 -0700 (PDT)

From: "Scott Davidson" <jscottdav2002@yahoo.com>

Subject: 2nd draft--rt 16 widening hearing record

To: "jscottdav2002@yahoo.com" <jscottdav2002@yahoo.com>

Re: Newington-Dover NHS-027-1(037), 11238 Please include in hearing record.

1 The Dover Transportation Center (DTC) in central Dover is currently the most connected public transit hub in the NH Seacoast Region, served locally by four bus routes (COAST 1 and 2, UNH Wildcat 3A and 3B), and regionally by the Amtrak Downeaster train and C&J Trailways bus. It is also within walking distance for thousands of Dover residents.

2 It has come to my attention that the proposed new Park and Ride facilities at Exit 9 (two miles north) will include a new C&J station, and that service to DTC will be discontinued. While BUS travel times to Boston will shorten, Dover residents who can now leave their cars at home and take a local bus or walk will require private vehicles to access the C&J bus--a big step backwards in terms of the environmental and affordable travel challenges of the 21st century. Total costs will increase--including the fuel consumption and time costs of adding more cars to rush hour traffic. Air pollution and greenhouse gas emissions will also increase. Those without cars will be forced to take cabs both ways, easily doubling the cost of a round-trip to Boston for many.

It is therefore recommended that coordinated shuttle service between the Dover Transportation Center and new C&J station, for both leaving and returning passengers, be required as part of any plan to discontinue C&J service from central Dover.

Thank you for your attention.

Scott Davidson

Scott Davidson
Executive Committee, NH Sierra Club, Seacoast Group
158 Cricket Brook
Dover, NH 03820
(603) 749-4472
jscottdav2002@yahoo.com

Response to Comments Made by
Scott Davidson, Executive Committee
NH Sierra Club, Seacoast Group
158 Cricket Brook Road, Dover, NH 03820
Letter dated September 23, 2006

1. The NHDOT and FHWA acknowledge the importance of the Dover Transportation Center as a public transit hub serving the Seacoast region.

2. The NHDOT and FHWA note that the City of Dover has initiated a Congestion Mitigation Air Quality (CMAQ) improvement project, entitled "Dover 13509" to connect the downtown area, Dover Transportation Center, and other prominent places of employment with the proposed Exit 9 Park and Ride facility. The NHDOT and FHWA acknowledge that this connection is an important link in the regional transit system and that the project may be underfunded. The NHDOT will continue to advocate for this project and will support the City in pursuit of additional CMAQ funding for the project.

Date: September 24, 2006

Re: NEWINGTON-DOVER NHS-027-1(037), 11238
PUBLIC HEARING
St. Thomas Aquinas High School, 197 Dover Pt. Rd,

Attention: Chairman of the Special Committee 9/26/06
% James A Moore
Director of Project Development
New Hampshire Department of Transportation
P.O. Box 483, Hazen Drive
Concord, New Hampshire 03302-0483

Dear Sir:

Due to information received during the Public Hearing process for the above-referenced project I(we) hereby make the following request of the Special Committee:

1 At the meeting I briefly expressed my approval of wetlands mitigation going towards the remaining lands in the Tuttle Farm Conservation project. I totally

2 approve the sound barriers along the Dover toll booths and vote their construction before the bridge and highway constructions begin. Additionally,

3 I join the concern of the destruction of the trees and natural plants. Please make every effort to save natural growth especially mature trees from being destroyed!

I (we) understand that I (we) will be notified in writing of the Special Committee's decision regarding this request. I(we) also understand that this request will be included as part of the official record.

Signed: Barbara J. Rushmore

Name: Barbara J. Rushmore
(Please Print)

4 Address: 191 Spur Road
Dover, NH 03820

Phone #: 749-1151

NH DOT Project Parcel # _____

D.O.T.
P.S. What more can be done to reduce motorcycle exhaust and truck jake brake noise?

Response to Comments Made by
Barbara Rushmore
191 Spur Road, Dover, NH 03820
Letter dated September 24, 2006

1. See Letter P-1, response #1 and #2.

2. The NHDOT and FHWA acknowledge and appreciate support for the soundwalls, as proposed. The NHDOT and FHWA will review the project's constructability and advance the construction of the proposed noise barriers, where deemed appropriate and practicable.

3. The NHDOT and FHWA are cognizant of the sensitive and scenic nature of the area and will strive to minimize the clearing and setback areas to the extent practicable.

4. See Letter P-16, response #2 and #3.

Raymond H. Bardwell, P.E.
199 Spur Road
Dover, NH 03820
(603) 749-6422

September 23, 2006

STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION
P.O. BOX 483
CONCORD, NH 03302-0483

C/O James A. Moore, Director of Project Development

Subject: Improvements to Spaulding Turnpike & Little Bay Bridges

Dear Mr. Moore:

1 As an abbuttor since 1984 and daily user of the roads in the scope of work, I have followed this project for years. I stated at the Sept. 21st meeting that the design staff has been very thorough, courteous, and professional in their work and should be commended for this.

2 3 One of the problems that people have in this area is the noise level that has increased over the years and mainly from the motorcycles and trucks with no mufflers. Living on Spur Road, we spend time on the Bellamy River side of our home and there are many times that all conversation is stopped until these vehicles have stopped and proceeded from the area. That side of our home is 300 feet plus away and at a lower elevation with many trees. The residents appreciate the fact that sound fences will be constructed and would request that they be done at the front end of this project rather than at the end. This may not be practical. We also wonder if some sample of its type and design would be available for our information. I have observed various types, such as H columns driven in the ground and then pre-cast concrete sections with a design on them slid into the H columns; PT poles with PT planking and just concrete walls. The other thing that it brings to mind is that all vehicles must be inspected somewhere and have mufflers to pass this inspection. Why can some of the motorcycles and trucks operate without proper equipment? I have noticed that the State Police and some local police are setting up check- points to curb this outrageous noise. Why can't this be accomplished at the Dover Toll area now? My chief of police says it's a state road and problem.

4 5 The design team and I have had many discussions on the Dover Point layout and my concerns have been answered. I am a strong believer in free flow at off ramps and not traffic lights. My desire was to have 6W remain, as all of the traffic is already channeled into one lane and must be there by the time you arrive at the Spur Road intersection and only have the traffic light at Spur Road. With the present design, all traffic coming from Portsmouth and going to Hilton Park, Newick's and DMV must turn onto the end of Spur Road. This will include tractor- trailers going for testing. The design team has stated that there will be an adequate de-celeration lane and proper turning radius for this intersection. With the proposed design and the tunnel from Spur Road to Boston Harbor Road, will there be a sidewalk between these roads and will the tunnel be lighted?

6

I know the following is additional work for the DOT, but can the Hilton Park area and boat ramp be improved while the equipment is near this site? If this is under Fish & Game, can this improvement be coordinated to make the boat ramp a safe area for launching? The Park is a gem and could offer much more with some improvements. In my opinion, we need:

- To have a boat ramp that is steeper and into deeper water.
- To construct a jetty parallel to the existing ramp.
- Construct a dock along this jetty so boaters can secure their boats after launching and receive people and gear safely.
- If a committee is needed, I would be happy to serve.

Much of the above has been addressed by the design team, but this is the last time to offer comments and the above suggestions are from a different point of view and I want them in the record. I tell my clients, "It is less costly to change lines on paper than a project once constructed".

Thank you for your review of the above and contact me with any questions.

Sincerely,

Raymond H. Bardwell, P.E.

Response to Comments Made by
Raymond H. Bardwell
199 Spur Road, Dover, NH 03820
Letter dated September 23, 2006

1. The NHDOT and FHWA acknowledge and appreciate the support and will progress the project, as proposed, as expeditiously as possible.

2. Enforcement of non-conforming equipment (*i.e*. non-conforming mufflers) on trucks and motorcycles falls under the purview of the Department of Safety. The NHDOT has no jurisdiction over non-conforming equipment.

3. The NHDOT and FHWA propose to install four sections of noise barriers totaling approximately 15,600 feet in Dover to mitigate for the elevated noise levels emanating from the Turnpike. A detailed noise analysis and evaluation were performed for the project and are documented in the DEIS. This analysis modeled, calibrated, and predicted noise levels for the peak period of traffic in 2025 for over 300 properties in the project area. The barriers were evaluated as to their feasibility and cost-effectiveness, and will be of sufficient height and length to reduce noise levels (at least 5 decibels) at exterior, ground levels for approximately 170 residential properties.

   Additional meetings with the benefited property owners will be held to discuss the noise barriers and ascertain whether the barriers are desired or not. In accordance with the NHDOT's *Policy and Procedural Guidelines for the Assessment and Abatement of Highway Traffic Noise for Type I Highway Projects*, a minimum of 75% of the first row property owners will need to support the installation of the barrier in order for it to be constructed. During these meetings with the neighborhoods, more detailed information on the type, height, special features, and length of the noise barriers will be discussed and input gathered.

   The NHDOT and FHWA will design the barriers to be as low as possible while still achieving the necessary noise reductions, and will consider various architectural treatments and landscaping during the final design phase to mitigate the visual impact of the barriers.

   The NHDOT and FHWA will review the project's constructibility and advance the early construction of the proposed noise barriers, where deemed appropriate and practicable.

4. The signalized diamond interchange configuration proposed for Exit 6, as part of the Selected Alternative, provides a safer and more efficient traffic operation in comparison to a free-flowing 2-lane loop ramp alternative for northbound traffic desiring to travel west on US 4. Two-lane loop ramp configurations are uncommon and not recommended due to safety concerns associated with vehicles, including heavy commercial trucks, traveling at high speeds exiting the Turnpike, traveling side by side in a circular manner, and then merging with local traffic from Dover Point Road. Improving the geometry of the proposed 2-lane loop ramp would increase wetland impacts without addressing the traffic operational and safety concerns inherent in the 2-lane loop ramp configuration. This combined with the

addition of the northbound ramp that is required under this alternative would severely impact a number of residential properties along Homestead Lane and on Dover Point Road. Not only is the 2-lane loop ramp alternative a safety concern, it would cost approximately $2 million more to construct (primarily due to the increased span and width of the new bridge carrying US 4 over the Turnpike) than the signalized diamond interchange configuration (exclusive of right-of-way and mitigation costs).

The Exit 6 proposed improvements at the US 4/Spur Road, Spur Road/local connector, and local connector/Boston Harbor Road intersections will be designed to safely and efficiently accommodate heavy commercial vehicles including tractor-trailer trucks.

5. A sidewalk is proposed to be constructed alongside the proposed connector road connecting Spur Road with Boston Harbor Road. Lighting is proposed to be installed on the proposed underpass structure beneath US 4.

6. The NHDOT and FHWA will continue to coordinate with the NHF&GD and DRED to determine whether improvements to the boating infrastructure at Hilton Park could be accomplished concurrently with this Turnpike project.

Jan K. MacMillan
Gordon S. Smith
14 Boston Harbor Road
Dover, New Hampshire 03820
603 / 742-5508

September 25, 2006

Peter J. Spaulding, Executive Councilor
c/o: James A. Moore, Director of Project Development
The State of NH Dept. of Transportation
PO Box 483
Concord, NH 03302-0483

Dear Councilor Spaulding:

Re: Spaulding Turnpike
Newington-Dover
NHS-027-1(37), 11238

1 *With keeping in mind that progress must move forward, we all applaud the upgrades to be implemented with the Spaulding Turnpike Newington/Dover Project. Although, after attending the September 21st project meeting at St. Thomas Aquinas High School in Dover, I realized it is imperative for all of us involved to express our concerns, anxieties, and fears on how this project personally impacts us, our homes, and our standard of living.*

I have resided at 14 Boston Harbor Rd, Dover, since 1978, well before the first major project for Rt. 4, Scammell & Little Bay bridges was implemented. We put a major addition onto the house in the late 80's, believing at the time that Rt. 4 was proposed to move North towards Exit 9, Dover. Of course this ended up not being the case. When the plans were finalized to move Rt. 4 directly behind us and to be widened, we had to do quite a bit of talking and pleading just to keep our 10' wood fence, as well as keeping a few of the trees behind the fence for minimal sound barrier and privacy purposes. (My belief is that the only reason that we were graced with keeping the fence and trees was because we asked that the property be purchased by the State) Our request for a sound barrier wall was denied. That project resulted in Rt. 4 moving approximately 25' closer to our property line and approximately 5' closer to the front property line on Boston Harbor Rd.

Also at this time the drainage issues for run-off on Boston Harbor Rd were also addressed, where a culvert was installed just behind the pumping station to allow the run-off to drain under Rt. 4 and into the Bellamy River (East end of the Scammell Bridge). What was not accounted for was the grading of land to the culvert, which is more elevated than the bed of the run-off water. Someone forgot to account for the fact that water cannot run uphill... Our house sits in somewhat of a basin, and for many years it has been mandatory for us to run 2 sump pumps and a dehumidifier 24/7 down in our basement to help keep the water out. This is not to say that we still don't have occasional flooding problems.

With some of our previous DOT project issues summarized, I'll move forward to the present Spaulding Turnpike Newington/Dover project issues. Not surprisingly, they remain the same with a few new twists added.

I will, at this point, for easier reference, categorize each of our major concerns and give more detail for each.

VIEW / PRIVACY

2

Currently, our major concern is the Rt. 4 overpass going across the neighborhood connector. Through our own investigation (Bill Jannell, Administrator, Concord, NH), we've learned that the road will rise 4-6' over the connector road. This will put the traffic at the top of our already 10' fence. Our house is at the West end of Boston Harbor Rd, the corner location, and a large amount of the property line runs along Rt. 4, making this connector proposal a larger impact for us than for any of our neighbors. The road is currently 57' from our fence and 23' from the fence to the corner our house. Our property is set at approximately 4' below the present highway grade. We already have a view of the passing traffic at first floor level, and much more so from all of our 2nd story bedroom windows, which all face Rt. 4, and are closer to the highway. As you can see in the enclosed photos, we can see the tops of pickup trucks and all tractor-trailer cab windows from over our 10' fence taken from the first floor level of the house. The trees in these pictures are mostly deciduous, and they do add a slight bit of privacy in the summer months. They do nothing to cut down on the noise. When the leaves fall from the trees, we have half a year of even more visibility and noise. Our fear is that with the 4-6' rise, we'll have no privacy at all and the noise will only worsen. The increased elevation will also have headlights shining in our windows from westbound traffic coming over the neighborhood connector.

NOISE

We recently had Charlie Hood from NH DOT come out (August 2006) to monitor the noise levels. This was done at 1st floor level. The method used by the DOT for measuring the sound takes an average of sound levels over a period of time, never actually taking into account the individual peaks. This obviously won't have any bearing on the noise levels after the project is completed, as the increased elevation of the highway will make the sounds more pronounced.

3

It is our understanding that: 1) due to the low number of properties impacted by the increased noise, the State DOT plans for no sound barrier on our road, and no guarantee that they will do anything about it; 2) there is a set amount of funds for sound barriers based on the number of properties impacted; and 3) there are no funds built into the project for future noise problems.

DRAINAGE

The present situation created by the Rt. 4 Scammel Bridge project, as I mentioned before, is an improperly pitched drainage ditch beside the highway, behind the fence, where a culvert was built at the rear of the sewer pumping station, to carry off a large portion of the runoff. We have, in the past, made calls to request a remedy for this, but no action was ever taken. There is standing water in the ditch from early spring till mid summer. The enclosed photos of the culvert show how the bushes, brush

4

and weeds over run the culvert area. The only maintenance work performed in the drainage ditch and culvert are performed by us, nothing at all by the DOT or City of Dover. We clean it out every spring to try to reduce the standing water and the mosquito problems that accompany it.

The area our house is located in is in the shape of a basin, with a layer of clay 3' below the surface, the perfect swimming pool. As I stated previously, we have 2 sump pumps and a dehumidifier running 24/7 in our basement as an attempt to keep it as dry as possible.

MAINTENANCE

This seems a good time to mention the maintenance, or lack of, taken on the previous project (Rt. 4 Scammell & Little Bay bridges). As addressed above, the drainage ditches and culverts are not maintained at all. The

5

Scammell bridge sidewalks are so overgrown with weeds, that at times we have had to walk single file on the sidewalk pushing aside weeds to pass. The litter on the bridge and in the parking lots is disgusting. Would it be

5 *possible for the City of Dover or Madbury put in garbage cans to help eliminate the litter issue? It works well up the road at Hilton Park.*

REQUESTS FOR PROBLEMS

6 1) *Build a sound barrier fence of sufficient height as to obscure view of highway and help diffuse the sound of traffic. This option was also supported by Frank O'Callahan when our situation was discussed with him at the meeting 9/21/06.*

7 2) *Properly pitch the drainage ditch, ¼" per foot minimum.*

8 3) *If for any reason the trees behind existing fence are removed, replace with mature evergreen arborvitaes at least 12' in height. Placement of these to be put in same proximity (no more than 10') of trees removed. Or, stagger 2 rows of 12' arborvitaes approximately 8' apart to beautify roadside as well.*

9 4) *DOT can purchase the property at Fair Market Value.*

Thanking you in advance for all your time and consideration, and our apologies for the lengthiness of this letter, but felt it imperative that all our concerns regarding this project go on record at this time. We look forward to hearing from you.

Sincerely,

Jan K MacMillan

Jan K. MacMillan
Gordon S. Smith

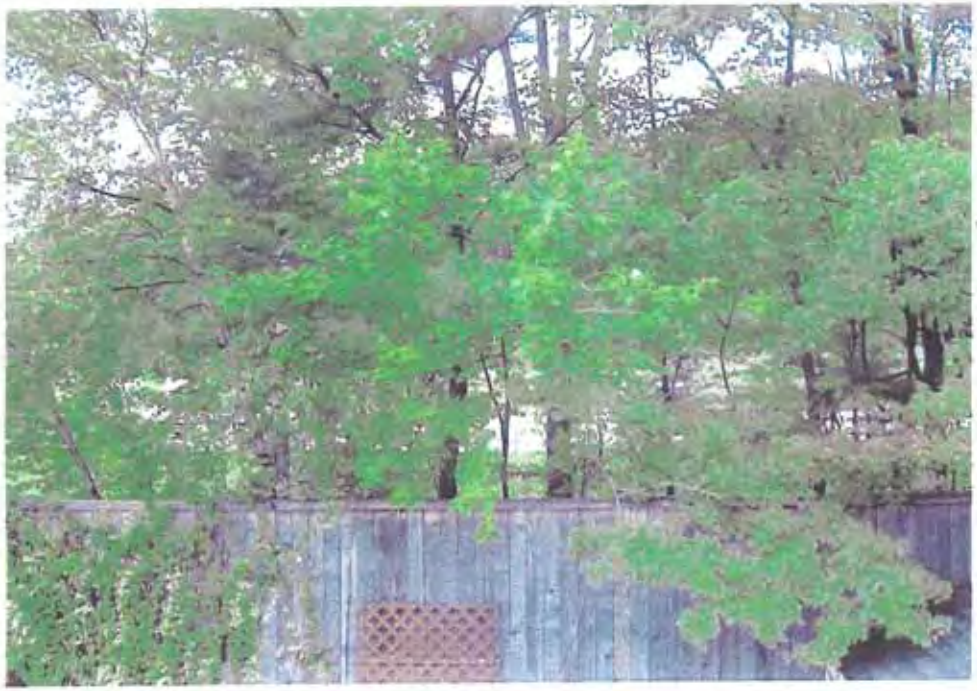
14 Boston Harbor Rd
Dover, NH 03820
603 / 742-5508

Enclosures

MacMillan

14 Boston Harbor Rd

From 2nd Floor Bedroom
Vehicle visability over 10' fence



From 2nd Floor Bedroom
Road visability over 10' fence

Pictures taken Sept, 2006

1st Floor Sunroom
Tractor trailer visability over 10' fence

From 2nd Floor Bedroom
Entire vehicle seen over 10' fence

From 1st Floor
White truck visible over 10' fence

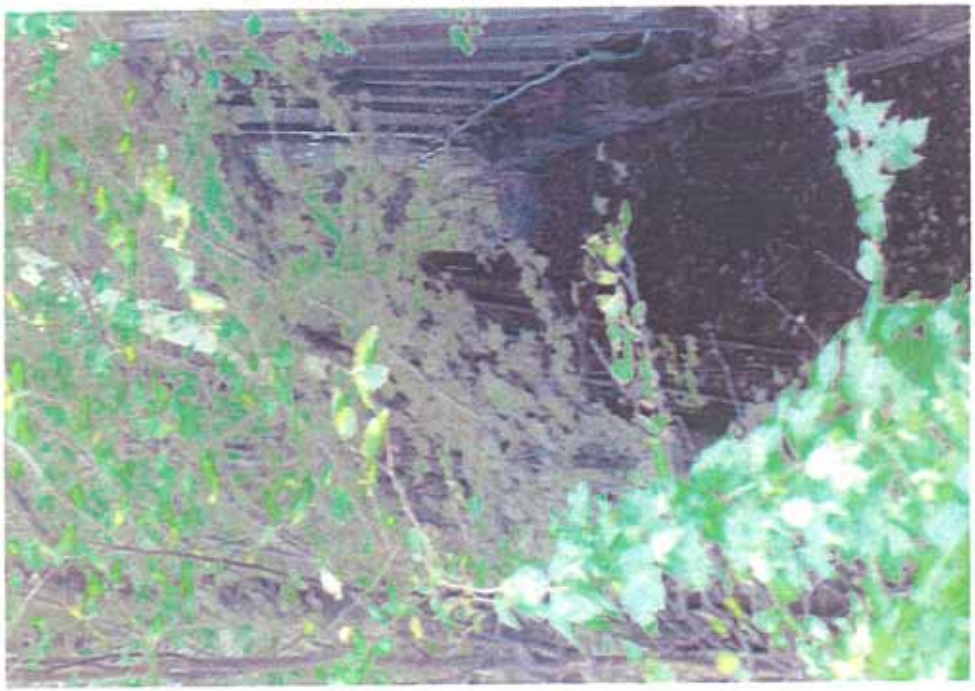
From Kt. 4
Looking at 10' fence & back of house

Pictures Taken Sept., 2006

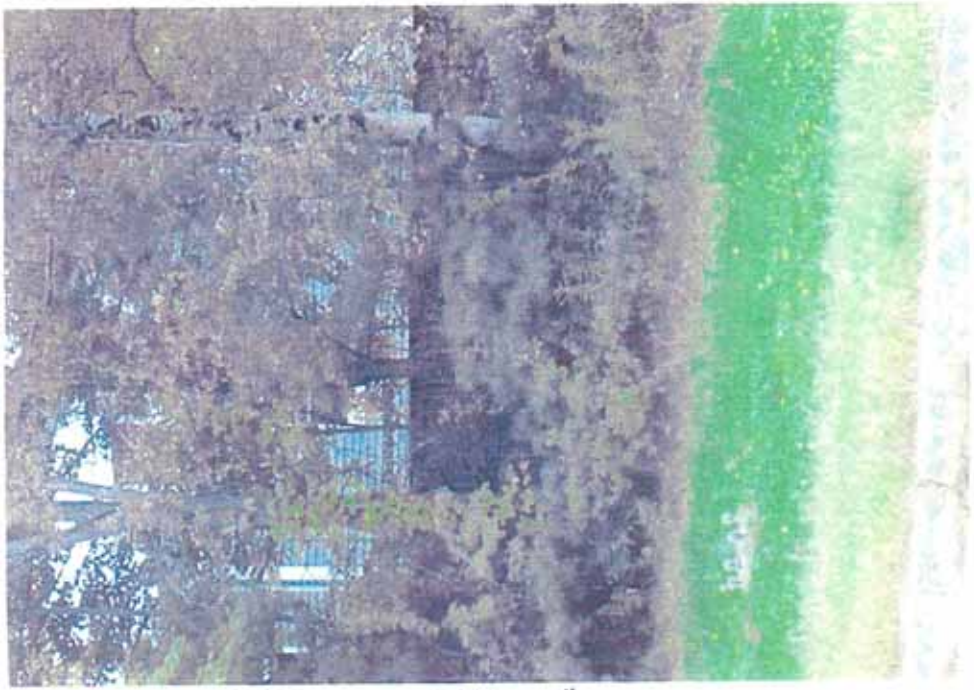
From 1st Floor
Truck visibility over 10' fence.

From 1st Floor
Truck visibility over 10' fence.

Drainage ditch behind 10' fence



From Rt. 4
Overgrown culvert (10' fence, house)



From Rt. 4
View of 10' fence, house

Close up of overgrown culvert

Pictures taken Sept. 2006

Response to Comments Made by
Jan MacMillan and Gordon Smith
14 Boston Harbor Road, Dover, NH 03820
Letter dated September 25, 2006

1. The NHDOT and FHWA acknowledge and appreciate the support and will progress the project, as proposed, as expeditiously as possible.

2. The NHDOT and FHWA propose to plant evergreen trees alongside US 4 to shield Ms. MacMillan's and Mr. Smith's property and the pocket neighborhood on Boston Harbor from headlight glare and the increased elevation of US 4. The evergreen trees will over time help to obscure the highway.

3. The NHDOT and FHWA recognize the owner's concerns. Noise impacts and mitigation measures were evaluated at this location, and documented in the DEIS. The noise analysis for the 2025 Build condition took into account the projected higher traffic volumes, traffic speed, and roadway alignment (both horizontal and vertical). The evaluation determined that the existing sound levels do not, and the predicted future levels will not, approach or exceed the FHWA's noise abatement criterion. Consequently, a sound wall is not proposed in the location along Ms. MacMillan's and Mr. Smith's property.

4. As part of the project's final design, the NHDOT and FHWA will closely evaluate the existing drainage in the vicinity of Ms. MacMillan's and Mr. Smith's property and properly grade or construct ditches and other drainage appurtenances to prevent the ponding of water adjacent to their property.

5. The concern is so noted. The NHDOT, as a matter of policy and limited resources, does not maintain sidewalks. The maintenance of sidewalks on the State system is typically deferred to the community. The NHDOT's District Six Office, which is responsible for the maintenance of drainage and other appurtenances to the State highway system in this area of the State, will address and prioritize the maintenance needs in the Scammell Bridge area with respect to the maintenance needs elsewhere in the District Six region.

6. See responses 2 and 3 above.

7. See response 4 above.

8. There are no physical impacts proposed to Ms. MacMillan's and Mr. Smith's property. Consequently, the existing arborvitae trees on this property are not proposed to be impacted.

9. Since no physical impacts are anticipated to Ms. MacMillan's and Mr. Smith's property, the NHDOT and FHWA do not propose to fully acquire the property.

RECEIVED
COMMISSIONERS OFFICE
SEP 27 2006
THE STATE OF NEW HAMPSHIRE
DEPT. OF TRANSPORTATION

September 25, 2006

NHDOT
POBox 483
Concord, NH 03302-0483 JAM 9/27/06
Attn: James A. Moore

Mr. Moore,

I was apprised of your August 21, 2006 hearing today by a friend on Dover point some 4 days after it took place.

1 Since I too live on Dover point, and on Dover Point Road, and will be most certainly impacted by the traffic and noise during and resulting from the project, I was very interested to discover why I had not received the required certified mail notification.

I spoke with Christopher Waszczuk, Project Manager in which I voiced my concerns regarding both traffic and noise and the lack of notification. I was told that I could provide my comments in writing for inclusion in the transcript and future communications to people impacted by the proposal. That is the purpose of this letter. Pardon me if there is any redundancy since I didn't partake in the meeting!

2 My concern is the increase in both traffic and noise resulting from this project. I understand that the exit to Hilton Park, Exit 5 is to be closed and the traffic rerouted in front of my home on Dover Point Road. This will mean all the partiers, fisherman, and boaters will be entering and exiting the park via Dover Point Road at all times of day and night but especially on summer weekends. If traffic surveys were taken, I would suggest they are invalid unless taken at these peak periods.

3 Traffic noise at present is objectionable. Additional traffic on both Dover Point Road and the Spalding turnpike will be intolerable without noise control. The noise affecting property owners is not simply perpendicular or at a slight angle from perpendicular to vehicle traffic, it is a function of a combination of line of sight and physical barriers to the source. The majority of the highway noise emanates from either tires or vehicle exhausts. Both these sources are relatively low to the ground and easily blocked with barriers. However the noise from traffic on the bridge itself travels in all directions and is annoying from a considerable distance since the sides of the span are open and no sound mitigation is present. Again, traffic at peak times of morning and evening rushes and particularly Friday summer weeknights, Saturdays, and Sundays produces more objectionable noise. If noise surveys were taken, I would suggest they are invalid unless taken at these peak periods.

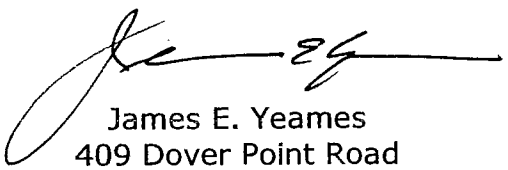
The fact that my notification for these meetings was not delivered is unacceptable. The records show that the package was returned and remailed (to the same address). The delivery address was an apartment on Middle Road. I have never lived there, never lived in an apartment anywhere, nor do I even know where Middle Road is!

4

In a city and state where I have a listed phone number, receive my tax and water bills at the physical property address, have a valid New Hampshire drivers license, and have up to 5 vehicles registered at that same address, I find it unbelievable that you couldn't find me!

I would like to formally request a transcription of the meeting or complete minutes if they are available. Please respond to my comments and include me and my wife in all future correspondence

5



James E. Yeames
409 Dover Point Road
Dover, NH 03820

Cc: Diana Yeames

Response to Comments Made by
James Yeames
409 Dover Point Road, Dover, NH 03820
Letter dated September 25, 2006

1. The NHDOT is required by law (RSA 230:17 & 230:18) to provide notice of the Public Hearing by certified mail to owners of property with the potential to be physically impacted by the proposed project. Although residents on the east side of Dover Point Road are not proposed to physically be impacted by the project, mailings were forwarded to the owners of Dover Point Road properties to advise of the project's Public Hearing. In total, over 600 mailings were sent to property owners and property interest holders, as well as state, local, regional agencies and interested individuals advising of the Hearing. Although notice to Mr. Yeames was inadvertently sent to the wrong address, Mr. Yeames did take advantage of the public comment period and submitted correspondence that is included in the Hearing transcript. In addition, notices of the Public Hearing were published in local and regional newspapers. A copy of the Public Hearing transcript is posted on the project's website titled www.newington-dover.com.

2. The closure of Exit 5 is necessitated from a safety and traffic operations standpoint due to its proximity to Exit 6 and the projected increase in traffic (2025 travel demand) along the Turnpike between Exits 3 and 6. Insufficient distance (approximately 2,000 feet) exists between the on-ramp from Exit 5 and the off-ramp to Exit 6 to safely accommodate the weaving movement of vehicles entering the Turnpike at Exit 5 and vehicles exiting the Turnpike at Exit 6. Traffic safety and efficiency aside, reconstructing Exit 5 to minimum design standards would severely impact Hilton Park and the Wentworth Terrace neighborhood, and would preclude the opportunity to construct soundwalls to reduce the existing and future traffic noise levels in the neighborhood that the Selected Alternative provides.

   The potential traffic diversions to Hilton Drive, Dover Point Road and Boston Harbor Road resulting from the closure of Exit 5 have been analyzed. A portion of the existing eastbound traffic on US 4 that seeks to travel north on the Turnpike, and currently enters and exits Hilton Park and Wentworth Terrace via Exit 5, would be re-routed to Exit 6 (which is proposed to include a new northbound on-ramp to the Turnpike) and removed from Boston Harbor Road and Dover Point Road. For example, approximately 30 vehicles currently utilize the Exit 5 on-ramp during the weekday AM peak hour, and approximately 60 vehicles during the weekday evening peak hour. The overall re-distribution of traffic flow patterns associated with the Selected Alternative is anticipated to result in an increase of approximately 40 vehicles during the weekday morning peak hour (from 125 vehicles to 165 vehicles) and approximately 65 vehicles during the weekday evening peak hour (from 135 vehicles to 200 vehicles) along Dover Point Road in the vicinity of Boston Harbor Road. Both Dover Point Road and Boston Harbor Road have adequate capacity to accommodate the projected traffic volumes. A detailed unsignalized intersection capacity analysis conducted for the intersection of Boston Harbor Road/Dover Point Road and the proposed local connector road shows LOS A operations through the year 2025 (this is more fully documented in the EIS in Chapter 4).

3. A detailed noise analysis was conducted for this project in accordance with the NHDOT's Policy and Procedural Guidelines for the Assessment and Abatement of Highway Traffic Noise for Type I Highway Projects and Title 23 Part 772 of the US Code of Federal Regulations. Approximately 300 properties in the project area were included in the analysis. As a result of this analysis, the NHDOT proposes to construct four noise barriers totaling approximately 15,600 feet in length in Dover. The barriers were evaluated as to their feasibility and cost-effectiveness, and will be of sufficient height and length to reduce noise levels (at least 5 decibels) at ground level locations for approximately 170 residential properties.

   The noise barrier along the west side of the Turnpike in Dover is proposed to end at the Little Bay Bridge, which will provide a feasible and cost-effective termination for the barrier while providing a noise reduction benefit to the Dover Point Road neighborhood. Noise barriers will not be constructed on the bridge.

   Additional meetings with the benefited property owners will be held to discuss the noise barriers and ascertain whether the barriers are desired or not. In accordance with the NHDOT's Policy and Procedural Guidelines, a minimum of 75% of property owners, within the first row adjacent to a particular barrier, will need to support the installation of the barrier in order for it to be constructed. During these meetings with the neighborhoods, more detailed information on the type, height, special features, and length of the noise barriers will be discussed and input gathered.

   The NHDOT will strive to design the barriers to be as low as possible while still achieving the necessary noise reductions, and will consider various architectural treatments and landscaping during the final design phase to mitigate the visual impact of the barriers.

   The NHDOT will review the project's constructability and advance the early construction of the proposed noise barriers, where deemed appropriate and practicable.

   As part of the project's final design effort, the NHDOT will investigate the merits and feasibility of utilizing "quiet pavement" to reduce tire noise throughout the project area.

4. See Response #1.

5. The transcript of the Public Hearing is posted on the project's website titled www.newington-dover.com.

Date: September 26, 2006

Re: NEWINGTON-DOVER NHS-027-1(037), 11238
PUBLIC HEARING
St. Thomas Aquinas High School, 197 Dover Pt. Rd,

Attention: Chairman of the Special Committee
% James A Moore JAM 9/27/06
Director of Project Development
New Hampshire Department of Transportation
P.O. Box 483, Hazen Drive
Concord, New Hampshire 03302-0483

Dear Sir:

Due to information received during the Public Hearing process for the above-referenced project I(we) hereby make the following request of the Special Committee:

See attached.

I (we) understand that I (we) will be notified in writing of the Special Committee's decision regarding this request. I(we) also understand that this request will be included as part of the official record.

Signed: _____

Name: Francis X. Bruton, Esquire
(Please Print)

Address: McNeill, Taylor & Gallo, P.A.
P.O. Box 815, 180 Locust Street
Dover, New Hampshire 03821-0815

Phone: # (603) 749-5535

NH DOT Project Parcel # Newington-Dover NHS-027-1(037), 11238

MALCOLM R. McNEILL, JR.
R. PETER TAYLOR*
ROBERT J. GALLO**
FRANCIS X. BRUTON, III †
STEPHEN H. ROBERTS
WILLIAM L. TANGUAY
SIMONE D. MASSE*
ROBERT L. HERMANN, JR.†

OF COUNSEL
LYNNE M. DENNIS*

*also admitted in Maine
**also admitted in Maine and Mass.
†also admitted in Mass.

McNeill Taylor & Gallo P.A. ATTORNEYS AT LAW

Hale Schoolhouse
180 Locust Street
P.O. Box 815
Dover, NH 03821

TEL (603) 749-5535
FAX (603) 749-1187

September 26, 2006

Chairman of the Special Committee
C/O James A. Moore
Director of Project Development
New Hampshire Department of Transportation
P.O. Box 483, Hazen Drive
Concord, New Hampshire 03302-0483

RE: Newington – Dover NHS-027-1(037), 11238
Public Hearing
St. Thomas Aquinas School
197 Dover Point Road

Dear Members of the Special Committee:

Please be advised that this office represents Cumberland Farms, Inc., the owner of the property that operates the Exxon station, located in Newington, New Hampshire, and located just adjacent to Exit 4 off of the Spaulding Turnpike (NH Route 16). As you may be aware, this gasoline station is directly affected by the project being proposed by the New Hampshire Department of Transportation with respect to the upgrade of the Spaulding Turnpike, within the City of Dover and the Town of Newington.

1 As you know, the Department of Transportation has defined its "Preferred Alternative," which, with respect to this property, is comprised of Newington Alternative 13. As set forth in the Draft Environmental Impact Statement, the Department of Transportation recognizes that Alternative 13 would impact the gasoline station owned by our client. As you may be aware, there currently exists direct access to this gasoline station from Spaulding Turnpike with direct access into the gas station and direct gas station out of the gas station right onto the highway.

2 As set forth within Alternative 13, and as identified on page 4-25 of the "Environmental Consequences" portion of the Draft Environmental Impact Statement, a copy of which is attached hereto, the Department of Transportation has attempted to address the concerns of our clients by providing a newly constructed access road adjacent to and south of the Exxon Mobil facility. While our clients agree that adding the access road is helpful, they cannot completely agree with the statement made within the Draft Environmental Impact Statement which indicates

that with the addition of said access road "therefore, there would be no anticipated negative impacts for this business related to this change in travel patterns..." Rather, it is the belief of our client that, in fact, the business will suffer negative impacts with respect to a lack of direct access onto the highway.

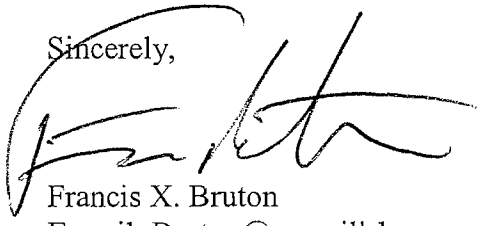
As you may be aware, the current plans involve having Exit 4 empty into an exit ramp that would end with a traffic light at the intersection of the exit ramp and Shattuck Way. At this point, patrons of the gas station would take a left turn at the stoplight and go behind the gas station in order to get into the gas station. Similarly, in order to get back onto the highway, patrons would have to go back on the access road, behind the gas station, and up to the stoplight. Thereafter, the patrons would be able to take a right hand turn onto the entrance ramp of the highway and proceed onto the highway. Although it is understood by our client that direct access into the gas station may be problematic, in light of the creation of a median within the exit ramp, it is believed that direct access onto the entrance ramp, back onto the highway, is possible. As you may be aware, or as you can plainly see, the site lines with respect to those that would be exiting the gas station facility, and entering the entrance ramp to the highway are not compromised at all. In addition, it is presumed that, with the addition of the traffic light, traffic entering onto the highway will be a controlled, in terms of speed and timing. Therefore, it is difficult for our client to understand why a direct access for exiting from the station onto the entrance ramp to the highway could not be provided. Obviously, providing a direct access way onto the entrance ramp of the highway would involve minute design changes to the Preferred Alternative, as presented at the public hearing on September 21, 2006.

2

We ask that the Special Committee and the Department of Transportation take note of our client's concerns, and make an effort to consider creating a direct access way onto the entrance ramp of the highway within this Exit 4 interchange.

Should you require any additional information, our clients are ready and willing to provide any such further input. Thank you kindly for your assistance with respect to the above.

Sincerely,



Francis X. Bruton
E-mail: Bruton@mcneill-law.com

FXB/mac
Enclosure

cc: Cumberland Farms, Inc.
Chris Waszczuk, Project Manager, New Hampshire Department of Transportation

be traffic-dependent. The only exception to this is the gas station/convenience store located at the intersection of Nimble Hill Road and the southbound lanes of the Turnpike. This establishment currently has direct access to and from the Turnpike. The proposed alternative would maintain the southbound Exit from the Turnpike at Exit 4, but require a more circuitous route to return to the Turnpike *via* a new connector road to Exit 3. Since gas stations tend to be more reliant on pass-by traffic for a greater percentage of their revenues, the proposed change in travel patterns could result in reduced revenues for this business. However, maintaining the southbound Exit at Nimble Hill Road will help to minimize potentially greater impacts that might otherwise be expected to occur if this access point was totally eliminated.

Alternative 12A

The potential impacts to businesses associated with this alternative would not be expected to vary in any substantial way from those discussed under Alternative 10A.

Alternative 13

Alternative 13 would be expected to have essentially the same potential impacts to area businesses as those described for Alternative 10A. The only notable difference is related to the gas station/convenience store located at Nimble Hill Road and Exit 4. Alternative 13 eliminates direct access to the Turnpike. However, this alternative maintains access to the southbound on and off ramps *via* a newly constructed access road adjacent to and south of the ExxonMobil facility. Therefore, there would be no anticipated negative impacts for this business related to changes in travel patterns, as discussed under Alternative 10A above.

Alternative 2

The Dover Point portion of the project area contains approximately seven commercial establishments with an estimated 30,000 square feet of building space. Generally, these businesses are not classified as traffic-dependent in that they do not rely on pass-by traffic for a substantial percentage of their sales. Although there is a restaurant located on Dover Point Road, which is typically classified as traffic-dependent, its current visibility or access will not be affected by the proposed alternative. In fact, the proposed alternative's reconfiguration of Exit ramps and other connecting roadways are not expected to have any localized secondary impacts to businesses located in this portion of the project area.

Alternative 3

The differences in configuration between Alternatives 2 and 3 are inconsequential with regard to potential impacts on area businesses. Therefore, as noted in the previous section, no localized secondary impacts are expected to businesses in this portion of the project area.

Response to Comments Made by
Francis X. Bruton
McNeill, Taylor, & Gallo, P.A.
P.O. Box 815, 180 Locust Street, Dover, NH 03821-0815
Letter dated September 26, 2006

1. The NHDOT and FHWA acknowledge that direct site access from the Turnpike to the property will be eliminated under the Selected Alternative. Upon completion of this project, the Turnpike will be a fully Limited Access facility. The limitation of access along the Turnpike provides a major public safety benefit.

2. The NHDOT and FHWA have reviewed the request and are amenable to maintain the existing driveways that service the property. The present driveway on Nimble Hill Road will not have direct access from the Turnpike off-ramp, as a raised median will be constructed as part of the project. The driveway will be restricted to right turns in and out. The second driveway from the Exxon Station that presently has access directly to the Turnpike will be connected to a new local connector roadway that will be constructed south of the gas station and intersect Nimble Hill Road opposite Shattuck Way Extension.

   Although the NHDOT and FHWA agree that accommodating the request for a "right only" driveway on Nimble Hill Road would result in minimal changes to the Selected Alternative and that the driveway would have good visibility for entering and exiting traffic, the intersection of Nimble Hill Road and Shattuck Way is not proposed to be signalized as part of the project. Conduit for future traffic signals has been installed at the intersection, as part of the interim safety improvement project at Exit 4, with the intent that traffic signals would be installed should traffic increase in the area and the appropriate signal warrants met.

Wards 3+4 in Dover

9/27/06

26

Proposed 'Preferred Alternative' Alternative

By
Caren Curti Peloso, Honorable Jeff Hollinger, David Scott

1. **The existing afternoon traffic congestion is on the Newington side of the bridge.** This is evidenced by the smooth flow that resumes upon entering the bridge, barring a bridge breakdown/accident or holiday back-up from the Dover Toll Booth. The problem in Newington is that there are too many merges onto the turnpike and once traffic has queued to the two-lane bridge approach the back-up ceases to exist. The Preferred Alternative plan moves the problem from Newington to Dover Point.

1

2. **There are an excessive number of vehicles traveling Dover Point Road and Rt. 4 in the morning and afternoon that use these routes in order to avoid the Dover Toll.**

2

3. **Placing two traffic signals on Dover Point Road for Route 4 and Dover Point Rd. access will result in traffic back-ups on Dover Point Rd and the Spaulding Turnpike.** During the recent construction of a gas line on Dover Point Road, brief stopping of one lane of traffic resulted in long lines of backed up vehicles.

3

4. **Traffic lights on Dover Point Road will place a burden on Spur Road and Boston Harbor Road.** As people discover that these roads can be used to avoid traffic congestion and backups, they will become more heavily traveled. Spur Road, until it's reconfiguration to allow access to Route 4, was a 1 ½ lane residential back road that many enjoyed for quiet and safe recreational use. Boston Harbor Road has many residences sandwiched between the Route 4 access and the Spaulding turnpike and is the south-bound access to Hilton Park.

4

5. **An 8 lane highway running through historic Hilton Park and some of the highest taxed properties in Dover will ruin the character of one of Dover's significant natural resources.**

5

It is our contention that possible solutions to the traffic problems should include:

6 1. Making the proposed fixes in Newington.

7 2. Widening the bridge to three lanes.

8 **3. Moving the Dover toll booth to the Somersworth exit 9 area, consolidating it with the Rochester toll and increasing the toll. This move allows three additional exits both east and west before encountering the toll booth. More commuter traffic staying on the Spaulding Turnpike would alleviate traffic congestion on Route 4 and Dover Point Road, making much of the proposed Dover Point changes unnecessary, saving the state millions of dollars, and preserving the beauty of Dover Point.**

9 4. We would further recommend that if any of the proposed changes at Route 4 are implemented, Spur Road become a dead-end road at that intersection.

Response to Comments Made by
Caren Curti Peloso, Honorable Jeff Hollinger, David Scott
39 Spur Road, Dover, NH 03820
Letter dated September 27, 2006

1. As part of the project, the NHDOT and FHWA evaluated the existing traffic operations along various freeway segments, weave locations, and ramp junctions in both Newington and Dover. While it is agreed that too many merges exist on the Turnpike in Newington, the same must be stated for the Turnpike in Dover where Exit 5, the Cote Drive on-ramp, and Exit 6 are located within 2,000 feet of each other. The existing conditions (2003 base year traffic) show poor levels of service (LOS E) for the weekday PM peak hour condition for NB travel between the Little Bay Bridge and the Exit 6 NB off-ramp. A poor level of service (LOS E) is also identified for the weekday AM peak hour condition for SB travel between the Exit 6 SB on-ramp and the Little Bay Bridges. Taking into account the projected growth in traffic of approximately 30% in Dover (between 2003 and 2025, the design year for the project), congestion will increase substantially in Dover for the No Build condition. The Selected Alternative proposes to provide enough capacity on the Turnpike to safely and efficiently handle the projected volume of traffic, provides adequate merge and weave areas to safely process the traffic, and adequate lane capacity at the Exit 6 ramps to handle the future travel demand in Dover.

2. The NHDOT has reviewed the historic traffic data on Dover Point Road, US 4 and the Spaulding Turnpike in the area of the Dover toll plaza. Traffic volumes (AADT) from 1993-2003, have increased from 25,223 to 39,109 (55%) at the Dover toll facility, while traffic volumes along Dover Point Road (at traffic counter 125001 which is located south of Middlebrook Road) have decreased from 13,547 to 12,901 (-4.7%). During the same 1993-2003 period, NB traffic exiting the Turnpike at Exit 6 to travel east on Dover Point Road has increased slightly (1%) on a daily basis, but has actually decreased by approximately 7.6% during the weekday PM peak hour. With respect to US 4, daily and weekday PM peak hour NB traffic exiting the Turnpike at Exit 6 to travel westbound on US 4 has decreased during the 1996-2003, 7-year period, by approximately 1.5% and 11%, respectively. Therefore, the statement that an excessive number of vehicles travel Dover Point Road and US 4 to avoid the toll is unfounded. This, coupled with the growing percentage of E-ZPass users (56% of all transactions at Dover Toll are E-ZPass), indicate that more vehicles are using E-ZPass and the Turnpike, with fewer vehicles diverting to secondary roads in the area.

   Historic traffic volume data and regional travel demand projections demonstrate a greater regional transportation dependency on the Turnpike (or indicating that more traffic is using the Turnpike) as opposed to a larger diversion of traffic to the secondary routes in the region. These data indicate that the design year (2025) volume of traffic between Exits 3 and 6 requires the nature and scale of the Turnpike improvements as reflected in the Selected Alternative. The diamond-type signalized interchange configuration proposed for Exit 6 addresses the current and future levels of traffic safety and operations efficiency within the project area.

3. & 4. The signalized intersection of US 4 with the Exit 6 northbound ramps under the Selected Alternative has been designed to efficiently process the 2025 future traffic volume demands. The overall intersection is projected to operate at Level of Service (LOS) B during the 2025 weekday morning peak hour and LOS C during the 2025 weekday evening peak hour, which meet the NHDOT's LOS C desirable standard for the design of new roadway facilities.

The proposed storage lengths on the northbound off-ramp will sufficiently accommodate the anticipated queues without vehicles backing up onto the Turnpike. The 2-lane northbound off-ramp at Exit 6 is proposed to be approximately 1,200 feet long extending from the nose of the ramp median on the Turnpike to the signalized intersection at US 4. At the signalized intersection, two left-turn lanes and two right-turn lanes are proposed with approximately 550 feet of storage in each lane. This is more fully documented in Section 4.2 of the EIS.

Under the Selected Alternative, traffic operations at the signalized Exit 6 northbound off-ramp intersection with US 4 will be coordinated with traffic signal operations to the east at the Dover Point Road intersection, and to the west at the southbound entrance ramp to the Turnpike. The coordinated signal system will process traffic efficiently during the peak hour conditions, which will minimize delays and vehicle queuing. Detailed calculations conducted for all three intersections indicate that backups will not occur along Dover Point Road or on the Turnpike. All three signalized intersections are projected to operate at LOS B or better during the 2025 weekday morning and evening peak hours, with the exception of the northbound ramps which will operate at LOS C. These anticipated levels of operation meet or exceed the NHDOT's desired standard of LOS C for new roadway facilities. With the facility operating at high levels of service with modest delays, motorists will have no reason to seek alternative routes.

5. The Environmental Impact Statement (EIS) evaluated a number of different alternatives including a 6-lane alternative (three basic travel lanes in each direction). The travel demand projections for the project's design year of 2025 and the traffic capacity analyses that focused on safety and traffic operations along the Turnpike and across the Little Bay Bridges between Exit 3 (Woodbury Avenue) in Newington and Exit 6 (US 4/Dover Point Road) in Dover indicate that a 6-lane alternative, in conjunction with a combination of transportation system management (TSM) and travel demand management (TDM) measures (which include improved bus service) would not be sufficient to accommodate the future travel demands for the corridor. A sensitivity analysis of traffic volume growth on the Little Bay Bridges indicates that a 6-lane bridge would reach capacity and result in unacceptable traffic operations by 2017 (eight years prior to the design year). Furthermore, beyond the limits of the bridge, construction of six lanes between Exits 3 and 6 would result in congestion and system failure in 2017.

In addition, widening the Turnpike to provide three lanes in each direction would result in a very similar footprint as widening to provide four lanes in each direction. The typical cross-sectional width for a 6-lane highway (122 feet) is nearly as wide as the 8-lane highway (146 feet). Additionally, the interchange configurations at Exits 3 and 6 are relatively the same under both 6- and 8-lane alternatives, with the exception that the length of acceleration and deceleration lanes would be longer under a 6-lane alternative in order to better accommodate

traffic entering and exiting the Turnpike. With regard to environmental impacts, the difference between a 6-lane and 8-lane footprint is minor (less than 5 percent) when comparing impacts to wetlands, wildlife habitat (unfragmented lands), groundwater (stratified-drift deposits), noise (number of impacted receptors), and right-of-way (number of residential and business acquisitions).

The Selected Alternative would provide eight lanes only between Exits 3 and 6 to handle the heavy volume of traffic associated with the Turnpike, US 4, and Woodbury Avenue. South of Exit 3, six lanes are proposed to match into the existing Turnpike cross-section at Exit 1. North of Exit 6, six lanes are proposed to transition into the Dover toll plaza.

Through Dover Point, the Turnpike expansion has been carefully designed to limit property impacts to the greatest degree practicable. Most of the work is contained within the Turnpike's existing right-of-way (ROW) with the exception of nine properties where thin strip ROW acquisitions are required. No physical permanent impact to Hilton Park is proposed.

6. & 7. The NHDOT and FHWA concur that proposed improvements in Newington are warranted and addressed in the Selected Alternative. However, study area safety and mobility deficiencies transcend Newington and include the Dover Point and Exit 6 areas of Dover. Also, see Response #5 above.

.

8. The NHDOT has completed a rudimentary evaluation to identify possible alternative locations and the merits of potentially relocating the Dover Toll Plaza further north. Based on a review of the Turnpike and dense development along the corridor, the only potentially suitable location is situated north of Exit 9 and south of the Long Hill Road underpass. Although this section of the Turnpike is largely undeveloped along the west side, residential developments do exist on the east side. The construction cost of the toll plaza's relocation is estimated at approximately $10 to $13 million (including the removal of the Exit 6 facility). Toll revenue at this location would be considerably lower since traffic north of Exit 9 is roughly 35% lower than the traffic at the Dover toll plaza. Additionally, this new location would be very close to the Rochester plaza and simply shift the noise and perceived toll effects onto a different neighborhood.

   Also see Responses 1 through 7 above.

9. Elimination of the existing traffic signal at the Spur Road/US 4 intersection, as included in the Selected Alternative, is an integral element of the local area traffic circulation system which includes a new local connector traversing under US 4 and connecting Spur Road with Boston Harbor Road and Dover Point Road. This system will improve local connectivity for both motorized and non-motorized traffic. As noted previously (see response #3 above), concern for motorists on Dover Point Road to seek alternate routes (Spur Road) due to congestion at the Exit 6 interchange associated with future traffic signal operations is unfounded. Dead-ending Spur Road is unnecessary and would adversely affect local traffic circulation.

COAST
Cooperative Alliance for Seacoast Transportation

September 27, 2006

Mr. Christopher Waszczuk, PE
Project Manager
New Hampshire Department of Transportation
John O. Morton Building
P.O. Box 483
Hazen Drive
Concord, NH 03302-0483

Dear Chris:

As the Seacoast's regional public transit system we believe that expanded regional public transit is an essential part of the Spaulding Turnpike improvements between Dover and Newington. An efficient and convenient system for moving people by means other than the single occupant vehicle is fundamental to the continued smart growth of the region.

1 The inclusion of preferred bus alternatives 1, 2 and 3 is encouraging. We are concerned however, that the methodologies and assumptions applied have had the effect of minimizing transit ridership projections, thereby undervaluing public transit as an alternative. We believe realistic and accurate analyses will show the true value of the preferred bus alternatives as mitigation measures and substantiate support for their long-term funding.

2 To expand upon this a little further - could you please provide insight into why NCHRP Report 187 (published by TRB in 1978) was used for the methodology to project bus and rail transit ridership? Were you aware that an update to this 1978 Report was published as Report 365 in 1998? Were you aware that in a recently published NCHRP Proposed Problem Statement (which subsequently resulted in a NCHRP Research Project Statement [Project 8-61, FY07]) Reports 187 & 365 were referred to as *"in dire need of being updated to reflect the planning needs of today and the next 10 years?"* The data sources from which Report 187, let alone 365, were built have been replaced (in some cases many times over). Quantum leaps in terms of the data available for transportation planning have occurred. We do not believe that using these Reports as the methodology for determining bus and rail transit ridership for any current project, or a project with a design year of 2025, is valid. The projections should be reexamined and recalculated where necessary.

42 Sumner Drive • Dover, NH 03820 • 603-743-5777 • Fax 603-743-5786
www.coastbus.org

In addition, we would like to state our strong support for the questions and points made by the Seacoast MPO relative to the methodologies and assumptions used for bus and rail transit ridership projections. The validity of these assumptions and methodologies, particularly given current conditions and the apparent inconsistency in which these were applied to the various alternatives considered, deserve to be re-examined. For example, COAST ridership has skyrocketed (+19.6%) within the last three years. Looking at this trend over longer periods, in the past 5 years ridership has increased 67.3%, 112.6% in the last 10 yrs.

2

Fiscal Year	COAST Ridership	% Increase
FY04	293,917	
FY05	316,867	7.8%
FY06 *	351,569	11.0%

** estimate with one month remaining in the fiscal year.*

Just as important as using appropriate methodologies and assumptions, the consideration of how these alternatives will be funded can not be understated. Given the funding levels authorized in SAFETEA-LU and the projects anticipated to be undertaken at COAST, the assumption can not be that Federal Transit Administration (FTA) Section 5307 funds will be available to support the ongoing operation of bus alternatives 2 & 3. It will not be possible to sustain these alternatives without state funding. If the assumption is to utilize CMAQ funds for the first three to five years of the implementation of these alternatives, the state must identify and be ready to program funds for up to 100% of the ongoing capital and operations beyond CMAQ and to a minimum of the design life of the project (2025). Has any consideration been given to this level of state support for these alternatives?

3

Thank you for your earnest consideration of our public comments. We look forward to receiving answers to the questions and points raised and continuing to work toward a sustainable and smart approach to the preferred bus alternatives for this project.

Sincerely,

Steven F. Wells
Executive Director

Rad C. Nichols
Manager of Operations & Planning

cc: Seacoast MPO

Response to Comments Made by
Steven F. Wells, Executive Director
Cooperative Alliance for Seacoast Transportation
42 Sumner Drive, Dover, NH 03820
Letter dated September 27, 2006

1. Support for the Bus Alternatives included in the Selected Alternative is so noted.

2. See Letter S-8, response #1.

3. See Letter S-8, response #2.

RECEIVED
COMMISSIONERS OFFICE
SEP 29 2006
THE STATE OF NEW HAMPSHIRE
DEPT. OF TRANSPORTATION

September 27, 2006

James A. Moore JAM 9/29/06
Director of Project Development
The State of New Hampshire Department of Transportation
PO Box 483
Concord, NH 03302-0483

Dear Mr. Moore,

Please include this letter as part of the official record pertaining to the public hearing which took place on September 21, 2006 regarding the proposed improvements to the Spaulding Turnpike and the Little Bay Bridge.

I am writing to you today as the owner of K9 Kaos, LLC which is one of the businesses that will be impacted from the upcoming changes to the Spaulding Turnpike. K9 Kaos is the sole tenant of the property just north of the Little Bay Bridge at 430 Dover Point Road, Dover, NH. As suggested in the preferred revision of the plans, my business will be significantly impacted.

It is certain that the barn on the property will be removed and we will also lose the portion of the land just after the barn, all of which is rented by K9 Kaos from the property owner, Fast Dogs Realty LLC. While it may not seem like much to most other businesses, but to a thriving dog daycare, land use and commercial grade stockade fencing is our number one asset. The barn currently provides us storage but its future use was for an indoor facility that would have included training programs and indoor daycare for inclement weather. Our fenced in yards provide 90% of our business income. It is important for you to realize that the amount of land available to us is an extremely important factor for our decision to stay on this property as it determines our dog daycare capacity.

1

Our current location is perfect for a dog daycare because there are not many residential neighbors, the noise of the dogs barking is somewhat drowned out by the existing noise of the traffic and the exposure on the highway has been key for our growth. Now that it has been determined that the sound barrier walls will be part of this project I am concerned because all of the above reasons for being here are eliminated. The sound barriers will create a quieter community which will mean that the dogs barking outside could become a problem for the residents. The sound barrier walls will also eliminate 100% of our current exposure. This will cause K9 Kaos a substantial increase in marketing and advertising expenses that we do not have today. Our signage on the Spaulding Turnpike currently accounts for approximately 95% of our new business. Our signage and our dog yards, which are easily viewable from the turnpike, have been our only advertising. As you know, we reach approximately 60,000 viewers per day with drive-by traffic. It will be financially impossible for K9 Kaos to recoup that exposure in advertising once the sound barrier walls are in place.

2

K9 Kaos 430 Dover Point Road, Dover, NH 03820
Ph. 603-743-DOGS - Fax. 603-743-3648 - info@k9kaos.com - www.k9kaos.com

I am considerably concerned about the timing of the project with regards to K9 Kaos. I am unable to get a clear timetable from the right of way group. While they have been extremely helpful and forthcoming, they are unable to tell me how long I actually have to make the decision to stay or if the decision is made to move, exactly how long I have to find a new location and move. It all seems very unclear at this time.

Since relocation is a strong consideration, I will keep my eyes open for suitable properties to move to and will work with the right of way group should I find something. I would also like to ask the State to review their plans closely as there may be a piece of land that would work perfectly for my type of business. There are so many changes taking place around exit 6 with ramps changing and moving, I can't help but wonder if a parcel of land would emerge as a perfect new location for K9 Kaos. I am very interested in staying in Dover, NH and on the Spaulding Turnpike, however, I would consider moving to the Newington, NH side of the Little Bay Bridge as well. I would be grateful if you would present any State owned land opportunities to me as a potential new home for my business.

3

I realize that K9 Kaos is a very small business in the grand scheme of this project. I do employ five New Hampshire residents and over 500 seacoast residents have been served by our company. K9 Kaos is an important part of this community and I hope that the State of New Hampshire will do everything they can to help us with a smooth transition that will keep the doors of K9 Kaos open for a long time to come.

I can be reached at 603-743-3647 or by email at anne@k9kaos.com to discuss this further. I thank you in advance for your time and your assistance.

Sincerely,

Anne Buckley
Owner, K9 Kaos, LLC.

K9 Kaos 430 Dover Point Road, Dover, NH 03820
Ph. 603-743-DOGS - Fax. 603-743-3648 - info@k9kaos.com - www.k9kaos.com

Response to Comments Made by
Anne Buckley, Owner
K-9 Kaos, LLC
430 Dover Point Road, Dover, NH 03820
Letter dated September 27, 2006

1. So noted.

2. See Letter P-18, response #3.

3. The NHDOT will develop appraisals for a complete and a partial acquisition to reflect the impacts anticipated as a result of the project. The NHDOT will work with the owners to relocate and re-establish their business in accordance with NHDOT policy and Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act. The NHDOT and FHWA will progress the complete acquisition of the property, in addition to the business relocation, should the owners desire. The right-of-way acquisition process will not begin until after a Record of Decision to proceed with the project from FHWA is received.

Granite State
Gas Transmission
A NiSource Company

Steven P. Burnley
Senior Engineer
Engineering Services

325 West Road
Portsmouth, NH 13801
(800) 542.0967
Fax: (603) 427.6839

September 28, 2006

Peter J. Spaulding JAM 10/2/06
C/O James Moore
Director of Project Development
New Hampshire Department of Transportation
P.O. Box 483
Concord NH 03302-0483

Re: Spaulding Turnpike Improvements, NHS-027-1(37), 11238

On September 21, 2006, representatives of Granite States Gas Transmission (Granite) attended a public hearing on the above referenced project. Granite owns and operates a predominantly eight inch high pressure interstate natural gas transmission line within the project limits. This line operates under the jurisdiction of the Federal Energy Regulatory Commission (FERC). As such, Granite's facilities are a public necessity serving local distribution companies (LDC) the energy needs of the region.

The project will have a significant impact on Granite. As an at-a-glance assessment, Granite will need to reroute and replace pipeline in 80 percent of the project's 3.5 mile limits. It appears that much of Granite's easements, rights-of-way, and the facilities contained therein will be displaced. Most notably, the expansion of the General Sullivan Bridge will render our existing 10-inch bridge crossing unserviceable, the retaining wall along Pomeroy Cove appears to be effectively coincident with the pipeline, numerous segments would be under the travel lanes of the turnpike, and a meter station to an LDC and a mainline valve setting will need to be relocated.

1

This will be a major project that potentially could cost between four and seven million dollars, depending on the final scope of work, and will require FERC approvals. It is assumed Granite's costs will be reimbursed through a combination of Federal and State dollars. It is impeditive that that Granite's continued operations and new facilities be integrated into the detailed design process of the turnpike.

1 As a starting point, our staff will attempt to coordinate with VHB to obtain a more accurate alignment of the new turnpike with our facilities overlaid to initiate new route and ROW planning along with development conceptual designs. On a project of this magnitude Granite will need between two to three years to acquire the needed permits.

Please advise what steps Granite must take to acquire funding and assure proper coordination.

Respectfully,

Steven Burnley
Senior Engineer

c: Christopher M. Waszczuk, PE (NH DOT)
Francis S. O'Callaghan, PE (VHB)
Joseph Kopalek (Granite)
Frank Callahan (Granite)
file

c:\...\Granite States\stpk\ltr092806.doc

Response to Comments Made by
Steven Burnley, Senior Engineer
Granite State Gas Transmission
325 West Road, Portsmouth, NH 13801
Letter dated September 28, 2006

1. With regards to the high-pressure gas facilities within the project limits, the NHDOT and FHWA will initiate early coordination of the project with Granite State Gas. Unless the gas facilities are located within a utility easement, costs for the relocation of facilities in conflict with the proposed construction are not eligible for reimbursement. The NHDOT and FHWA will work closely with Granite State Gas to limit the extent of the necessary relocations.

Brian M. Dubreuil
Fastdogs Realty, LLC
38 Drew Rd.
Dover, NH 03820

September 29, 2006

James A. Moore JAM 10/2/06
Director of Project Development
The State of New Hampshire Department of Transportation
PO Box 483
Concord, NH 03302-0483

Dear Mr. Moore,

Please include this letter as part of the official record pertaining to the public hearing which took place on September 21, 2006 regarding the proposed improvements to the Spaulding Turnpike and the Little Bay Bridges.

Fastdogs Realty, LLC is the property owner of 430 Dover Point Road in Dover, NH. Fastdogs Realty, LLC consists of four (4) members, including myself, who serves as manager of the LLC. As such, I speak on behalf of the other three members in the matter contained in this letter. Our property will be impacted by the plans of the State of New Hampshire to widen the Spaulding Turnpike on the Dover side of the Little Bay Bridges.

The primary reason for Fastdogs to own this property is to lease the land and building to other businesses. Since December of 2003, the property has been leased to K9 Kaos, LLC, a business which provides dog daycare as well as other dog-related services. We understand from the current plans that only one of the structures (the barn house) and only part of the land owned by Fastdogs, will be affected in this project. The owner of K9 Kaos has serious concerns about the impact this project will have on her business. Her concerns are not only in regards to losing land and storage space, but also to losing valuable signage and other intangibles that the current property affords her. We believe that any other business owner would also have the same concerns. Therefore, Fastdogs is concerned that the proposed project may make our property less desirable to K9 Kaos or any other prospective businesses.

1

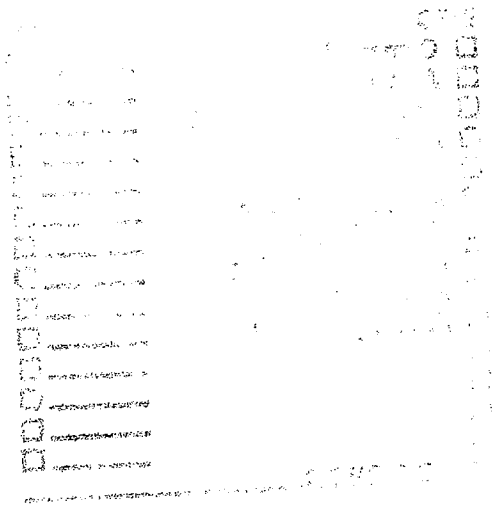
2 The members of Fastdogs Realty would like to request, that when the Right of Way group begins negotiations with us to acquire this property, they consider the option to puchase the entire property as well as the option of acquiring just a portion of the land. Although Fastdogs has not made a decision as to which option is preferable, at this time, we would like the Right of Way group be aware that both are possibilities from our perspective. Taking the entire plot of land may actually be preferable to Fastdogs, as this may make it easier to find an alternate location to purchase and continue its property leasing business.

I can be reached at 603-682-3430 or by email at gksand@comcast.net to discuss this further. I thank you in advance for your time and your assistance.

Sincerely,

Brian M Dubreuil

Brian M Dubreuil
Manager, Fastdogs Realty, LLC.



Response to Comments Made by
Brian Dubreuil, Manager
Fastdogs Realty, LLC
38 Drew Street, Dover, NH 03820
Letter dated September 29, 2006

1. So noted.

2. See Letter P-22, response #3.

To: Mr James Moore Project Development September 29, 2006
NH Dept of Transportation PO Box 483
Concord, NH 03302

From :Jerry Lynch
26 Lincoln Dover, NH 03820

Dear Mr. Moore: JM 10/2/06

Let's try an experiment and let people drive through the Dover tolls without paying. That would make a substantial reduction of backups and allow traffic to move more freely both on the Spaulding and through the center of Dover.

Such a move would reduce the heavy traffic that comes onto Dover Point Road and Central Avenue and through the Center of Dover, caused by a lot of people going to Berwick Maine and Somersworth that want to avoid paying the tolls. If there were no tolls they would get off and on the Spaulding at Exit 9. During the morning and afternoon rush hour Central Avenue and Dover Point Road are packed.

Would it not be a good idea to try an experiment for a few months to see how much reduction there would be in Traffic going through the center of Dover. This experiment may also reduce substantially the bottleneck of cars trying to get on the Spaulding at Hilton Point entrance, with the merging of traffic coming in from route 4 would be substantially reduced. 1

More traffic would already be on the Spaulding coming from the exit 9 spot and would move more rapidly, therefore less tendancy to clog up the Spaulding and the bridge crossing. We would see a large reduction of traffic on Central Avenue as well as eliminate to a large extent the bottleneck that occurs in the morning rush hour going south.

I also understand the aim of the Federal Highway administration is to slowly reduce tolls and get people to use larger federal and state and avoid local roads.

I have friends that live in the Hilton Point area and they are very concerned about a large enlargement of highway in their back yard. To make up for any lost revenue you could increase the Rochester tolls to compensate. I bet most of the toll payments at the Rochester tolls is for people going on vacation to the lakes and mountains.

Sincerely Yours,

Jerry Lynch

Response to Comments Made by
Jerry Lynch
26 Lincoln Street, Dover, NH 03820
Letter dated September 29, 2006

1. It has been consistently stated and acknowledged throughout the study and public participation process that the Dover toll facility and toll-related issues fall outside the project study area and scope of study. First, the project's study area was identified and established following the 1998 Route 16 Corridor Protection Study and the 2000 Newington-Dover Feasibility Study by determining that the current and future Turnpike traffic operating conditions north of the toll plaza were satisfactory. In contrast, the section of the Turnpike between Exit 1 and the Dover Toll Plaza operates at a poor level of service, both in the current and future design year. Secondly, changes to the Turnpike tolling system require State Legislative and Executive Council approval, and may have revenue impacts. These are considered state-level issues potentially affecting the entire Turnpike system, not project level matters. The Newington-Dover project was never envisioned to include an assessment of potential traffic impacts resulting from changes in toll facility locations or tolling pricing policies.

   The NHDOT has reviewed the historic traffic data on Dover Point Road, US 4, and Spaulding Turnpike in the area of Dover Toll. Traffic volumes (AADT), from 1993-2003, has increased from 25,223 to 39,109 (55%) at the Dover toll facility, while traffic volumes along Dover Point Road (at traffic counter 125001 which is located south of Middlebrook Road) have decreased from 13,547 to 12,901 (-4.7%). During the same 1993-2003 period, NB traffic exiting the Turnpike at Exit 6 to travel east on Dover Point Road has increased slightly (1%) on a daily basis, and has actually decreased by approximately 7.6% during the weekday PM peak hour. With respect to US 4, daily and weekday PM peak hour NB exiting traffic from the Turnpike at Exit 6 to travel westbound on US 4 have decreased during the 1996-2003, 7-year period, by approximately 1.5% and 11%, respectively. Therefore, the assumption that recent congestion (since the mid-1990's) in downtown Dover is directly related to toll diversion is inaccurate and unfounded. This, coupled with the growing percentage of E-ZPass users (56% of all transactions at Dover Toll are E-ZPass), substantiate the assertion that more vehicles are using E-ZPass and the Turnpike, with fewer vehicles diverting to secondary roads.

   Historic traffic volume data and regional travel demand projections demonstrate a greater regional transportation dependency on the Turnpike (or allowing more traffic to stay on the Turnpike) as opposed to a larger diversion of traffic to the secondary routes in the region and indicate that the design year volume of traffic between Exits 3 and 6 requires the nature and scale of the Turnpike improvements as reflected in the Selected Alternative.

   The NHDOT has completed a rudimentary evaluation to identify possible alternative locations and the merits of potentially relocating the Dover toll plaza further north. Based on a review of the Turnpike and dense development along the corridor, the only potentially suitable location is situated north of Exit 9 and south of the Long Hill Road underpass.

Although this section of the Turnpike is largely undeveloped along the west side, residential developments do exist on the east side. The construction cost of the toll plaza's relocation is estimated at approximately $10 to $13 million (including the removal of the Exit 6 facility). Toll revenue at this location would be considerably lower since traffic north of Exit 9 is roughly 35% lower than the traffic at the Dover toll plaza. Additionally, this new location would be very close to the Rochester plaza and simply shift the noise and perceived toll effects onto a different neighborhood.

Due to the aforementioned reasons, and since sound walls are proposed from the Exit 6 area through the toll plaza area to a location approximately 2000 feet north of the plaza for noise mitigation, the NHDOT does not propose to relocate or eliminate the Dover Toll Plaza, nor implement a toll test and suspend toll collections.

September 29, 2006 JSM 10/2/06

Mr. James Moore
New Hampshire Department of Transportation
PO Box 483
Concord, NH 03302

Dear Mr. Moore

The department of Transportation should make a study and have a traffic test before we spend $250 million dollars and negatively impact over 100 Dover homeowners living in the Hilton Point area of Dover with an expanded Spaulding turnpike.

Let's remove the toll just north of when drivers get off the bridge. The traffic jams are caused largely by drivers avoiding paying the toll. They take local roads such as route 4 and Dover Point road which get backed up because they are not designed to handle that overload traffic.

In the morning both Dover Point Road and route 4 come together and it is their merging that causes backups on route 4 for almost a mile. People coming off Dover Point road than wait in a long line trying to get on the bridge. Once on the
1 bridge the traffic moves fairly well. The reverse happens in the evening and those getting off at exit 6N cause long lines of traffic on Dover Point Road which continues onto Central avenue and blocks up traffic in the center of Dover. Many of these drivers are going through the center of Dover to go to Somersworth, Berwick, the north end of Dover and the south end of Rochester.

My recommendation is to let people whiz through that Dover Toll without paying for 6 months and I bet you will see the morning bottlenecks largely evaporate.

I know there are many private interests that want us to spend money with accessory and related projects using this bottleneck as an excuse but let's look past those interests and address the real problem.

If revenue from that toll is a problem, let's increase the Rochester toll as other tolls on the Everett Turnpike and Hampton have done.

Yours Truly
John Scruton

John Scruton
99 Sixth Street
Dover, NH

Also to Councilors Ray Wieczorek and Peter Spaulding

Response to Comments Made by
John Scruton
99 Sixth Street, Dover, NH 03820
Letter dated September 29, 2006

1. See Letter P-25, response #1.

JONES LANG LASALLE

Jones Lang LaSalle Management Services, Inc.
Fox Run Mall/ The Crossings at Fox Run
50 Fox Run Road, Ste. 128, Newington, NH 03801
tel +1 603 431 5911 fax +1 603 431 6671

September 29, 2006

Chairman of the Special Committee JM 10/2/06
c/o James Moore, Director of Project Development
State of New Hampshire Department of Transportation
P.O. Box 483
Concord, NH 03302-0483

Re: Spaulding Turnpike Newington to Dover
NHS-027-1(37) 11238

Dear Sirs,

1 My company, Jones Lang LaSalle, represents Fox Run Mall as their managing agent. After personally attending the September 21, 2006 public meeting, I must commend the Committee on the proposed alterations to the Spaulding Turnpike and the thorough presentation.

I presented the proposed alterations to mall ownership and they are equally pleased with the preferred alternative as it will greatly benefit the town, local community, and State of New Hampshire.

Although we fully support the upgrades, there are some areas of concern that we are hopeful can be addressed prior to the commencement of the project.

2 One area of concern is that the elimination of Exit 2 in turn eliminates the need for turnpike signage for Fox Run Road. Although not labeled Fox Run Mall, the Fox Run Road signage is a clear indicator, to northbound traffic, of how and where to access Fox Run Mall.

The mall greatly benefits from the tourism traffic that makes its way north on the turnpike. We believe the loss of such signage will have a negative impact on the visitation from those outside our trade area. We ask, in an effort to minimize this impact, that the Committee consider specific mall directional signage at or near the proposed full-interchange Exit 3.

3 In addition to the potential of turnpike directional signage, we further ask your consideration in allowing the trimming and/or removal of select trees which are overgrowing the tall pylon Fox Run Mall sign on the northbound side of the turnpike. A number of years ago, my predecessor inquired with the state about such trimming but was denied.

The other area of concern is also associated with the closure of Exit 2 but more specifically as an on-ramp. Currently, patrons exiting the mall property heavily use Fox Run Road as a means to travel northbound on the turnpike. With the closure of this ramp, the next available alternative to these patrons is to exit the mall via our more westerly Woodbury Avenue entrance. Not only will this situation apply to mall patrons but those of Wal-Mart and Chuck E. Cheese. Their patrons desiring to travel northbound on the turnpike will have no other alternative but to travel down Fox Run Road and through our entrance to access Woodbury Avenue.

4

Due to this, we potentially will have substantial traffic backed up into our property while awaiting the signal change onto Woodbury Avenue. We ask that the committee consider what enhancements are possible to alleviate this situation. One possible enhancement is to consider allowing (with the addition of a traffic signal) the traffic exiting the backside of Wal-Mart the ability to turn left onto Woodbury Avenue in addition to the current sole option of turning right. This would help in alleviating the need for other Fox Run Road business patrons to utilize our entranceway and cause unnecessary congestion.

Thank you very much, in advance, for your consideration. I'd like to add that I, personally, am greatly pleased with the turnpike enhancements as my work commute consists of traveling over the Little Bay Bridges at peak congestion times.

If you should have any questions, please feel free to call me at (603) 431-5911.

Sincerely,

Scott A. DeCost
General Manager
Fox Run Mall & Crossings at Fox Run

Response to Comments Made by
Scott DeCost, General Manager
Fox Run Mall/The Crossing at Fox Run
50 Fox Run Road, Suite 128, Newington, NH 03801
Letter dated September 29, 2006

1. Support for the Selected Alternative so noted.

2. The NHDOT and FHWA are presently investigating the benefits of the Attraction Logo Program, similar to the Tourist Attraction Sign program enacted in the State of Massachusetts, where signs for specific, high volume attractions are installed on the freeway or Turnpike system to provide directional information to the traveling public. Should the Attraction Logo Program be implemented statewide, signage for the Fox Run Mall could be considered under the program.

3. As an element of the project's construction, the NHDOT and FHWA do not anticipate the need to undertake tree clearing or trimming in the area of the mall's pylon sign. As a matter of practice, the NHDOT and FHWA do not permit the clearing or trimming of trees that are located within the State right-of-way for the benefit of exposing signs located on private property.

4. The Seacoast Regional Travel Demand Model was used to model the existing and future traffic changes and assist in evaluating the improvement alternatives for the project. The changes in traffic patterns at Exits 1, 2 and 3 are expected to be more complex under the Selected Alternative than simply diverting traffic from Exit 2 to Exit 3. For example, creating the Woodbury Avenue extension from Exit 3 to Arboretum Drive is anticipated to divert a substantial volume of traffic related to the Tradeport that is currently using Exit 1 to travel north to use Exit 3. With this anticipated change in travel pattern, Exit 1 will have more available capacity and will become a more attractive route for some motorists destined to Gosling Road and Woodbury Avenue. Motorists currently using Exit 2 will divert to both Exits 1 and 3 when the Selected Alternative is constructed.

   The NHDOT has reviewed the intersection of Woodbury Avenue and Fox Run Road. In order to accommodate the projected 2025 peak hour traffic demands at the signalized intersection, the improvements associated with the Selected Alternative propose to modify the existing right-turn lane on Woodbury Avenue eastbound to accommodate both through traffic and right-turns. This modification will substantially increase the volume of traffic that can be processed by the existing traffic signal. The intersection is anticipated to operate at LOS C or better throughout the design year (2025) with the proposed improvements. The analysis has been updated to include vehicular trips associated with a proposed 7,135 square foot restaurant and 4,800 square feet of ancillary retail space to be located off Fox Run Road. The results from the updated analysis indicate that the Woodbury Avenue / Fox Run Road intersection will continue to operate acceptably at LOS C through the design year with the additional commercial development on Fox Run Road. As such, an additional traffic signal

and break in the median on Woodbury Avenue at the Wal-Mart driveway is unnecessary. (This is more fully documented in Section 4.2 of the EIS.)

37

Christopher Waszczuk

From: James Moore
Sent: Saturday, September 30, 2006 5:56 PM
To: Christopher Waszczuk
Subject: FW: Newington - Dover Bridge project

Chris: I see you were copied on this. Please add to the record and respond.
Thanks, Jim
-----Original Message-----
From: Jack Bernier [mailto:jack@atlanticinc.com]
Sent: Friday, September 29, 2006 5:49 PM
To: Christopher Waszczuk
Cc: James Moore
Subject: Newington - Dover Bridge project

Gentlemen,

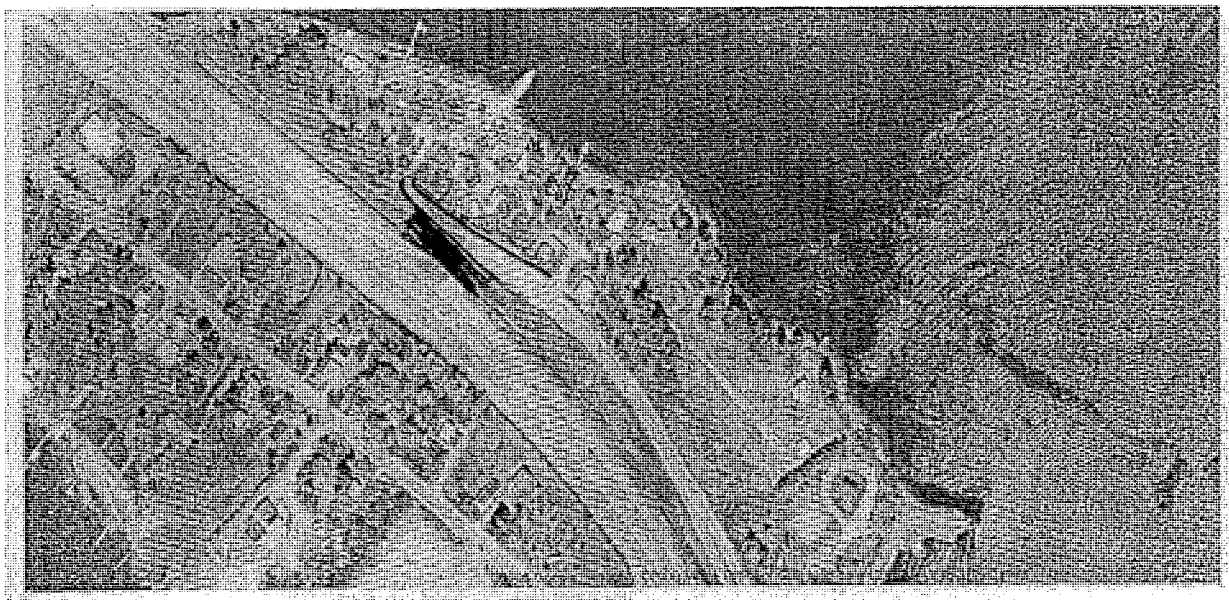
We live at 25 Wentworth Terrace in Dover.

1 My wife, Helen, and I attended the public meeting which was held at St. Thomas Aquinas High School on Thursday September 21st. After looking at the renderings at the meeting and on your website it appears to me when you remove Exit 5 off the Spaulding Turnpike the only way we will be able to come and go from Wentworth Terrace is by going in by the pumping station. The problem with this is it will effectively make Wentworth Terrace a dead end road. We have a lot of delivery trucks; recycle trucks, garbage trucks, and the mail that uses this road along with the people who live hear. People and other vehicles can now enter via the pumping stations and leave by going out past the house located at the corner of 22 Wentworth Terrace and back onto the highway. We at Wentworth Terrace would like it if you could consider changing your plan so vehicles could still be able to exit past 22 Wentworth Terrace and then back past the pumping station toward Hilton Park and then under the bridges. This would also make it much easier for snow removal by the city plows.

I have attached 2 photos one gives an example of what I believe your plan is and the other shows my proposed plan.

I met with Bruce Woodruff who is the City Planner and talked over the information I listed above and he thought that it would be a good idea and it is workable. I believe that he has sent you an email on this subject.

Jack Bernier
Live camera in my favorites at,
www.atlanticinc.com



MY PROPOSAL

YOUR PLAN

Response to Comments Made by
Jack Bernier
25 Wentworth Terrace, Dover, NH 03820
Letter dated September 30, 2006

1. As suggested, a portion of Hilton Drive extending north from the existing ramps to the pump station will be retained to create a loop road for trucks and other vehicles to more easily exit the neighborhood.

38

September 29, 2006

JAM 10/3/06

Dear Sir,

It seems prudent to me that if before we commit $200-$250 million of dollars to the expansion of the highway bridge at Hilton Park in Dover we study the impact of the removal of the toll booths at exit six first. 1

Many of us in Dover have observed this bottleneck effect on the flow of traffic and I among others have thought the problem could be solved or certainly relieved by removal of the toll stop.

Yours truly,

Ellen M. Williams
2 Autumn St.
Dover, NH
743-0981

Response to Comments Made by
Eileen Williams
2 Autumn Street, Dover, NH 03820
Letter dated September 29, 2006

1. See Letter P-25, response #1.

39

Date: 9/30/06

Re: NEWINGTON-DOVER NHS-027-1(037), 11238
PUBLIC HEARING
St. Thomas Aquinas High School, 197 Dover Pt. Rd,

RECEIVED
COMMISSIONERS OFFICE
OCT 03 2006
THE STATE OF NEW HAMPSHIRE
DEPT. OF TRANSPORTATION

Attention: Chairman of the Special Committee
% James A Moore
Director of Project Development
New Hampshire Department of Transportation
P.O. Box 483, Hazen Drive
Concord, New Hampshire 03302-0483

Jam 10/3/06

Dear Sir:

Due to information received during the Public Hearing process for the above-referenced project I(we) hereby make the following request of the Special Committee:

1 Keep the rural character of N.H. through agriculture.
Who has solved traffic congestion by widening the road, Spaulding Turnpike? Negative impact to Communities.
Widen the buffer zones for farming and logging.
Cashing out - a program to pay employees not to drive alone
"Location-efficient" mortgages - an incentive program to let homebuyers live closer to work. Lower transportation costs living close to work.
2 3 Hilton Park - buy land as it comes up for sale.
4 Noise - put the Cars down in a trench ROOF - SNOW & RAIN
use the tourism money to convince commuters to live on the other side of the bridge

I (we) understand that I (we) will be notified in writing of the Special Committee's decision regarding this request. I(we) also understand that this request will be included as part of the official record.

Signed: John Scruton

Name: JOHN SCRUTON
(Please Print)

Address: 99 SIXTH ST.
DOVER, NH. 03820

Phone: # 603 742 2312

NH DOT Project Parcel # — NHS-027-1(037), 11238
SPAULDING TURNPIKE IMPROVEMENT
NEWINGTON - DOVER

Response to Comments Made by
John Scruton
99 Sixth Street, Dover, NH 03820
Letter dated September 30, 2006

1. As part of the project, the NHDOT and FHWA evaluated the existing traffic operations and safety conditions along the Turnpike in both Newington and Dover. Under the existing conditions (2003 base year traffic), poor levels of service (LOS E) have been identified on seven freeway segments and at nine ramp junctions within the study area. Crash data compiled for the project shows 1,263 crashes occurred in the study area over a 7-year period (1997-2003) with an overall crash growth rate of 14% per year. Traffic projections for the future No Build (2025) condition project average daily traffic to increase roughly 30% from 70,650 vehicles per day (vpd) (2003) to 94,300 vpd (2025) on the Little Bay Bridges. With no improvements to the Turnpike, transportation safety and mobility would substantially deteriorate with congestion growing to consume more than two hours in the morning and approaching four hours in the evening.

   The Environmental Impact Statement (EIS) evaluated a number of different alternatives including a 6-lane alternative (three basic travel lanes in each direction). The travel demand projections for the project's design year of 2025 and the traffic capacity analyses that focused on safety and traffic operations along the Turnpike and across the Little Bay Bridges between Exit 3 (Woodbury Avenue) in Newington and Exit 6 (US 4/Dover Point Road) in Dover indicate that a 6-lane alternative, in conjunction with a combination of transportation system management (TSM) and travel demand management (TDM) measures (which include improved bus service) would not be sufficient to accommodate the future travel demands for the corridor. A sensitivity analysis of traffic volume growth on the Little Bay Bridges indicates that a 6-lane bridge would reach capacity and result in unacceptable traffic operations by 2017 (eight years prior to the design year). Furthermore, beyond the limits of the bridge, construction of six lanes between Exits 3 and 6 would result in congestion and system failure in 2017.

   In addition, widening the Turnpike to provide three lanes in each direction would result in a very similar footprint as widening to provide four lanes in each direction. The typical cross-sectional width for a 6-lane highway (122 feet) is nearly as wide as the 8-lane highway (146 feet). Additionally, the interchange configurations at Exits 3 and 6 are relatively the same under both 6- and 8-lane alternatives, with the exception that the length of acceleration and deceleration lanes would be longer under a 6-lane alternative in order to better accommodate traffic entering and exiting the Turnpike. With regard to environmental impacts, the difference between a 6-lane and 8-lane footprint is minor (less than 5 percent) when comparing impacts to wetlands, wildlife habitat (unfragmented lands), groundwater (stratified-drift deposits), noise (number of impacted receptors), and right-of-way (number of residential and business acquisitions).

   The Selected Alternative would provide eight lanes only between Exits 3 and 6 to handle the heavy volume of traffic associated with the Turnpike, US 4, and Woodbury Avenue. South of Exit 3, six lanes are proposed to match into the existing Turnpike cross-section at Exit 1. North of Exit 6, six lanes are proposed to transition into the Dover toll plaza.

Through Dover Point, the Turnpike expansion has been carefully designed to limit property impacts to the greatest degree practicable. Most of the work is contained within the Turnpike's existing ROW with the exception of nine properties where thin strip ROW acquisitions are required. No physical permanent impact to Hilton Park is proposed.

2. As part of the Selected Alternative, the NHDOT and FHWA support TDM strategies which are intended to provide a more balanced transportation system in the seacoast region and provide travel opportunities other than single occupant vehicles (SOV). These strategies include new park-and-ride facilities in Rochester, Dover and Lee, expansion of bus and rail service, and support for employer-based measures. Although the suggestion of "location-efficient" mortgages to reduce commuter traffic within the project study area is a novel idea which private lenders in partnerships with municipalities may wish to explore, the NHDOT and FHWA propose, as part of the Selected Alternative, to help fund the seacoast area Transportation Management Association (TMA), known as Seacoast Commuter Options, for a maximum five (5) year period to further encourage employers to promote employee travel by means other than SOV's. In addition to area-wide ride-sharing and guarantee-ride-home programs, Seacoast Commuter Options is educating area employers and employees about the availability of employee-paid, pre-tax transportation benefits and employer-paid transportation benefits programs as incentives to not driving alone.

3. Hilton Park is currently owned by NHDOT, Bureau of Turnpikes. Since there is no direct impact to Hilton Park, NHDOT will seek to acquire additional land only if necessary for the highway expansion or mitigation, and not necessarily to increase the size of Hilton Park.

4. The alternative of depressing the Turnpike and crossing the channel in a tunnel was discarded early on in the evaluation of alternatives due primarily to the preliminary construction cost estimate of $400 million.

Richard Stern
516 Shattuck Way
Newington, NH 03801

September 30, 2006

Director of Project Development
The State of New Hampshire
Dept. of Transportation
PO Box 483
Concord, NH 03302-0483

Attention: James A. Moore JAM 10/3/06

Dear Sir;

1 I am writing this letter about my home that my family and I live in at 516 Shattuck Way in Newington N.H. My home was involved in the Exit 4 Interim Improvement Construction. My home originally was nestled in the trees, five to six hundred feet from the nearest road. It now has a very busy highway exit 200 ft. from my home. Even though the state planted trees as a visual block, my home is no longer the same, with noise and the sound of large trucks constantly coming and going at all hours. We have lost the quiet enjoyment of our home. As I have stated in previous letters, I do not own any buffer or trees that will protect my home from the encroachment of the present highway or any future change to the Little Bay Bridge.

2 Even if the sound around my home was over the 67dB level, no help would come my way because there are only two homes in the proximity of the proposed construction. No sound receptors were every placed near my home that I am aware of, only a couple of sound readings done by the state at my request and only for 30mins.I don't believe the results were a real reflection of the sound that we are exposed to on a daily basis. The FHWA states that even if the noise level of 67dB is not reached it does not mean the sound does not have an impact.

3 With the building of the Exit 4 ramp through the surrounding property, all the land around my home has been opened up to being commercially developed by the owner, who has gained valuable road frontage .

The owner of the surrounding property has every right to develop his property, but when he does he will open my home to full exposure to the proposed Spaulding Turnpike expansion. The state has left me vulnerable to unacceptable noise and vibration involved in the up coming project. Unlike some Dover residents who bought their homes close to the highway, my home was not.

4 I ask that you consider purchasing my home as part of your plans for the proposed improvements to the Little Bay Bridge and Spaulding Turnpike. My home is also located in Trickey's Cove, near the Watson property, one of the sites for the wetland mitigation.

Please contact me to discuss this matter further. Thank You.

Sincerely,

Richard C. Stern

Response to Comments Made by
Richard Stern
516 Shattuck Way, Newington, NH 03801
Letter dated September 30, 2006

1. – 4. The NHDOT and FHWA are sympathetic to Mr. Stern's concerns. However, Mr. Stern's property is situated approximately 700 feet from the edge of the proposed Turnpike with no physical impacts to the property. Thus the NHDOT and FHWA do not propose to acquire the property. As part of the project's final design effort, the NHDOT and FHWA will investigate and consider items such as "quiet pavement" and added landscaping to lessen the project's acoustic and visual effect in Newington.

Also, refer to responses to Letter P-4.

Date: Sept. 30, 2006

Re: NEWINGTON-DOVER NHS-027-1(037), 11238
PUBLIC HEARING
St. Thomas Aquinas High School, 197 Dover Pt. Rd,

Attention: Chairman of the Special Committee
% James A Moore JAM 10/4/06
Director of Project Development
New Hampshire Department of Transportation
P.O. Box 483, Hazen Drive
Concord, New Hampshire 03302-0483

Dear Sir:

Due to information received during the Public Hearing process for the above-referenced project I(we) hereby make the following request of the Special Committee:

1 Either remove the Dover toll booth and increase tolls at the Rochester toll OR move them to the Somersworth (exit 9 area) to lessen the traffic congestion on Dover Point Rd and throughout the main streets of Dover (Central Ave, Chestnut Street).

2 Fix the old bridge to accomodate cars + trucks in case of an accident on the newer bridges.

P.S. Thank you for the quick attention given by the force on Spur Rd during the toll booths. For a couple of years, I didn't know who to get in touch with about this matter.

I (we) understand that I (we) will be notified in writing of the Special Committee's decision regarding this request. I(we) also understand that this request will be included as part of the official record.

Signed: John A. Veinott
Rosalie J. Veinott
JOHN A. VEINOTT

Name: Rosalie J. Veinott
(Please Print)

Address: 23 Roberts Rd
Dover, NH 03820

Phone: # (603) 749-2957

NH DOT Project Parcel # _____

Response to Comments Made by
John and Rosalie Veinott
23 Roberts Road, Dover, NH 03820
Letter dated September 30, 2006

1. See Letter P-25, response #1.

2. The NHDOT and FHWA propose to rehabilitate the General Sullivan Bridge as an element of the Selected Alternative identified for the project. The General Sullivan Bridge, regardless of its present day condition, is a landmark structure, the second highest rated historic bridge in the state, and eligible for listing on the National Register of Historic Places. The bridge offers a unique and important bicycle / pedestrian connection across Little Bay, as well as other recreational activities, and is deemed a historic resource with protection under Federal law. The NHDOT and FHWA have estimated the cost to rehabilitate the General Sullivan Bridge to a six-ton capacity, which will be able to accommodate pedestrians, bicycles, recreational activity, and emergency vehicles, at approximately $26 million dollars. This represents a net cost to the project of approximately $10 million dollars taking into account the cost that would be required to dismantle and remove the structure, along with the cost required to provide a replacement recreational connection across the Bay.

   The Selected Alternative requires the existing approach embankment (on the Dover side) leading to the General Sullivan Bridge to be removed to accommodate a two-way local connector, and proposes to retrofit the end of the General Sullivan Bridge with a new pedestrian / bicycle structure, which will be fully designed during the final design stage of the project. The two-way connector is required to provide access to the east side of Hilton Park and the Wentworth Terrace neighborhood. This local roadway is proposed to replace the existing one-way Hilton Park connector that is situated beneath the Little Bay Bridges. This underpass location provides the benefit of utilizing the existing grade–separated crossing and reconstructing the Turnpike on the same general grades as currently exist. Without this concept, the profile of the Spaulding Turnpike just north of the Little Bay Bridges would have to be raised approximately 25 feet to accommodate a separate underpass structure connecting the east and west sides of Dover Point.

   The Selected Alternative proposes the Little Bay Bridges be widened to provide four full travel lanes (12 feet wide) with two full shoulders (10 to 12 feet wide) in each direction. Therefore, incident management and emergency response will be fully accommodated on the Little Bay Bridges once the bridges are reconstructed and widened. Future incident management and response will be greatly improved over the current situation, negating the need to consider the General Sullivan Bridge for such use.

LONG HILL REALTY INVESTMENTS, LLC

340 CENTRAL AVENUE · DOVER PLACE · SUITE 201 · DOVER, NEW HAMPSHIRE 03820
PHONE 603.740.4930 · FAX 603.740.4931

October 1, 2006

Chairman of the Special Committee JAm 10/4/06
c/o James Moore, Director of Project Development
State of New Hampshire DOT
PO Box 483
Concord, NH 03302-0483

Re: Newington-Dover Mitigation Land

Dear Mr. Moore,

Recently we received a copy of the public hearing notice that NHDOT sent to Vivian Tsimekles of 355 Long Hill Road in Dover, New Hampshire (Dover, NH Tax MapA, Lot 28). We currently hold an equitable title to the subject property via a binding purchase and sale agreement. It is our understanding from reading the information sent to Mrs. Tsimekles and subsequently reading the draft EIS for the Newington-Dover project that the NHDOT has interest in purchasing a portion of the Tsimekles property for mitigation of impacts proposed as a result of the project.

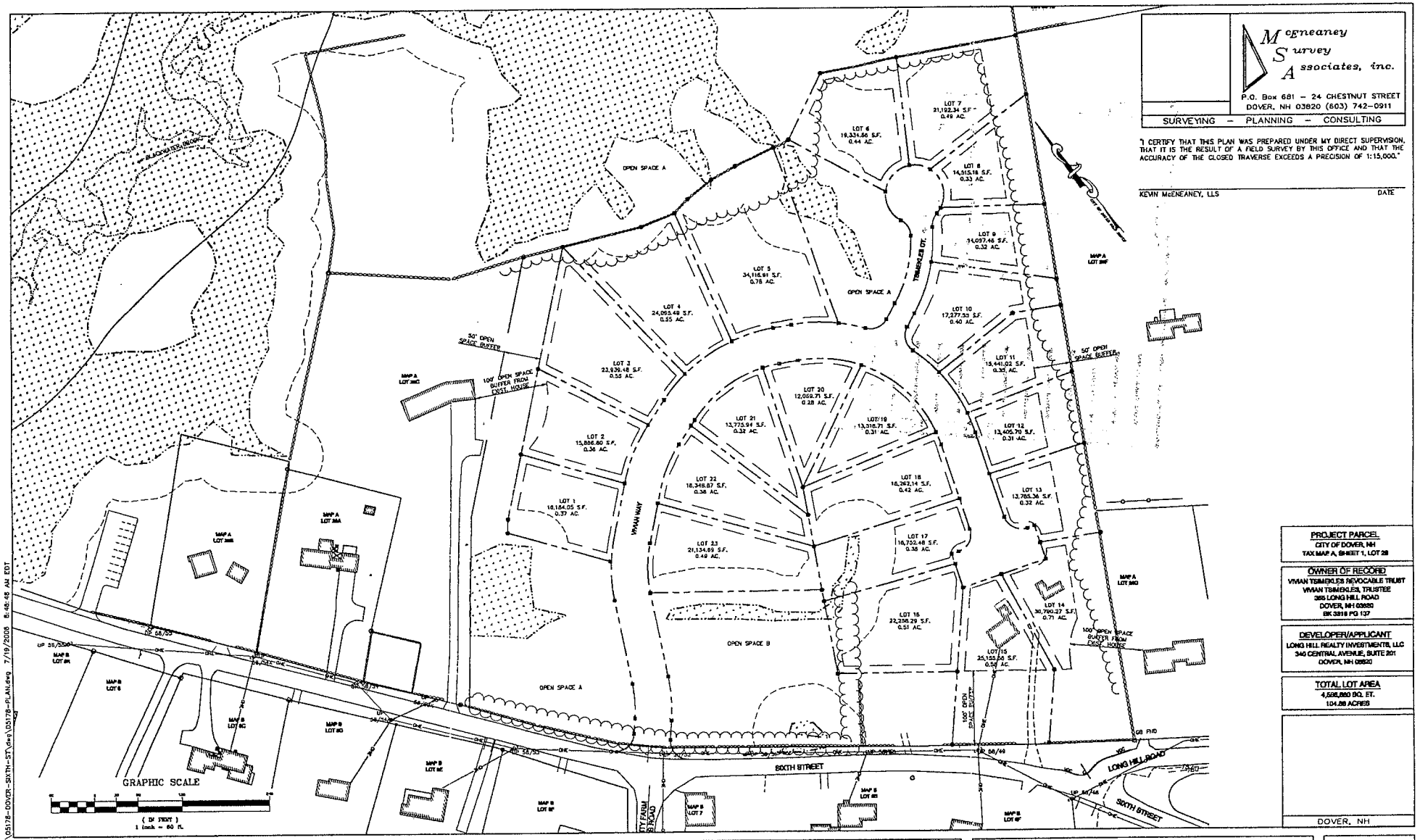
1 We are interested in talking to you about NHDOT's expressed interest in acquiring a portion of the property for wetland impact mitigation purposes, which we understand may be necessary to facilitate the permitting for the Newington- Dover project.

As you may be aware, we have a residential open space subdivision development plan before the Dover Planning Board. The plan proposal presents approximately 93 acres of open space along the Blackwater Brook and its associated watershed. We would be willing to discuss the sale of this open space area or a portion thereof. We have enclosed a copy of the overview plan for your use.

We look forward to discussing this matter with you at your convenience.

Very truly yours,

Michael Garrepy
LONG HILL REALTY INVESTMENTS, LLC



McEneaney Survey Associates, inc.

P.O. Box 681 – 24 CHESTNUT STREET
DOVER, NH 03820 (603) 742-0911

SURVEYING – PLANNING – CONSULTING

"I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND THAT THE ACCURACY OF THE CLOSED TRAVERSE EXCEEDS A PRECISION OF 1:15,000."

KEVIN McENEANEY, LLS DATE

PROJECT PARCEL
CITY OF DOVER, NH
TAX MAP A, SHEET 1, LOT 28

OWNER OF RECORD
VIVIAN TSIMIKLES REVOCABLE TRUST
VIVIAN TSIMIKLES, TRUSTEE
355 LONG HILL ROAD
DOVER, NH 03820
BK 3818 PG 127

DEVELOPER/APPLICANT
LONG HILL REALTY INVESTMENTS, LLC
340 CENTRAL AVENUE, SUITE 201
DOVER, NH 03820

TOTAL LOT AREA
4,595,880 SQ. FT.
104.88 ACRES

DOVER, NH

F:\Land Projects 3\05178-DOVER-SIXTH-ST\dwg\05178-PLAN.dwg 7/19/2006 8:48:48 AM EDT

Design: JSH	Draft: TED	Date: 4/26/06
Checked: JSH	Scale: 1"=60'	Project No.: 05178
Drawing Name: 05178-PLAN.dwg		

REV.	DATE	REVISION	BY
0	7/27/06	ISSUED FOR REVIEW	TED

Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **OPEN SPACE SUBDIVISION PLAN**
Project: OPEN SPACE SUBDIVISION
SIXTH STREET, DOVER, NEW HAMPSHIRE
Client: LONG HILL REALTY INVESTMENTS, LLC
340 CENTRAL AVENUE, SUITE 201, DOVER, NH 03820

DRAWING No.
A2
SHEET 3 OF
JBE PROJECT NO. 05178

Response to Comments Made by
Michael Garrepy
Long Hill Realty Investments, LLC
340 Central Avenue, Suite 201, Dover, NH 03820
Letter dated October 1, 2006

1. The NHDOT and FHWA are working closely with the City to permanently protect the Tsimekles property, a 105-acre parcel located in the Blackwater Brook watershed that is undergoing the threat of development. Should an agreement with the City and developer to acquire the parcel or large portion thereof not be reached, the EIS identified several other parcels in the Blackwater Brook area that are deemed worthy of preservation and permanent protection, which the NHDOT and FHWA will then pursue in coordination with state and federal resource agencies to fulfill the mitigation requirement of the project in Dover.

264 Dover Point Road
Dover, NH 03820
October 4, 2006

Mr. James A. Moore 10/6/06
Director of Project Development
State of NH Department of Transportation
7 Hazen Drive
P.O. Box 483
Concord, NH 03302-0483

Dear Mr. Moore:

RE: NHDOT, Newington-Dover #11238

I attended the joint public hearing on Thursday, September 21, at St. Thomas High School on Dover Point concerning the proposed improvements to 3½ miles of the Spaulding Turnpike. I did not speak nor did I stay through the entire meeting. But I feel I should express my concerns about the design.

I have lived on Dover Point Road for 42 years. There is now a steady flow of traffic by my house night and day as well as a constant steady flow of trucks and cars going onto Route 4 (the major route from the Portsmouth ports and the Pease Tradeport to the interior of the state.) One thing I know is that it will only increase rapidly. Therefore the design of this improvement is crucial. A poor design will cause us all to suffer for decades.

1 Traffic signals are very inefficient. They clump up traffic, waste fuel, add pollution and obstruct travel. I can only imagine the effect of trucks stopped at the light on the off ramp and how fast traffic will back up. We need to maintain a steady flow onto Route 4 and Dover Point Road without a traffic signal.

2 Also, if it isn't in the design, please consider a bike and pedestrian path through this entire area as that traffic has increased rapidly as well.

Thank you for allowing me to comment and offer suggestions on something that would be a major impact upon our lives.

Sincerely yours,

Richard J. Morin

P.S. I would prefer to see the tolls taken out completely to relieve the congestion on Dover Point Road. Otherwise, please consider going to the overhead high speed toll EZ Pass system (it keeps traffic moving and works great in other states).

Response to Comments Made by
Richard Morin
264 Dover Point Road, Dover, NH 03820
Letter dated October 4, 2006

1. The signalized diamond interchange configuration proposed for Exit 6, as part of the Selected Alternative, will provide for safe and efficient traffic operation for northbound traffic desiring to travel west on US 4. Other potential ramp types and interchange configurations were studied in detail and were found to be less desirable.

   The existing single lane loop ramp would not provide sufficient capacity for the anticipated future traffic volumes. In addition, the radius of the existing loop ramp is geometrically deficient relative to current standards and driver expectations. A two-lane loop ramp configuration is not recommended due to safety concerns associated with vehicles, including heavy commercial trucks, traveling at relatively high speeds exiting the Turnpike, traveling side by side on a lengthy, tight curve, and then merging with local traffic from Dover Point Road. Improving the radius of a potential 2-lane loop ramp would increase wetland impacts and severely impact a number of residential properties along Homestead Lane without solving the traffic operational and safety concerns inherent in the 2-lane loop ramp configuration. In addition to the issue of safety and more severe impacts, a 2-lane loop ramp alternative would cost approximately $2 million more to construct (primarily due to the increased span and width of the new bridge carrying US 4 over the Turnpike) than the signalized diamond interchange configuration (exclusive of right-of-way and mitigation costs).

   Under the Selected Alternative, the storage lengths on the proposed diamond shaped northbound off-ramp will sufficiently accommodate the anticipated traffic queues without vehicles backing up onto the Turnpike. Traffic operations at the signalized Exit 6 northbound off-ramp intersection with US 4 will be coordinated with signal operations to the east at the Dover Point Road intersection and to the west at the southbound entrance ramp to the Turnpike. The coordinated signal system will process traffic flow efficiently, minimizing delays and vehicle queuing. Detailed studies conducted for all three intersections indicate that backups will not occur along Dover Point Road or on the Turnpike. All three signalized intersections are projected to operate at Level of Service (LOS) B or better during the 2025 weekday morning and evening peak hours, with the exception of the northbound ramps which will operate at LOS C. These anticipated levels of operation meet or exceed desired standards of LOS for new roadway facilities. With the facility operating at high levels of service with modest delays, motorists will have no reason to seek alternative routes.

2. On the Dover side, new sidewalks are proposed in the following locations: along the north side of Spur Road between the Bayview Park parking area and the Scammell Bridge; along the west side of the connector road between Spur Road and Boston Harbor Road; along the west side of Dover Point Road between the existing sidewalk, opposite the Division of Motor Vehicles property and Hilton Park; along the new two-way connector beneath the Little Bay

Bridges; and along Hilton Drive connecting to the reconstructed walkway along Pomeroy Cove.

As part of the project, NHDOT and FHWA propose to build 4-foot wide shoulders, at a minimum, to accommodate bicycles, along the reconstructed segments of Dover Point Road, US 4, Spur Road, Hilton Drive, and the two connector roadways in Dover.

3.0 Public Hearing Documents

REPORT OF THE COMMISSIONER

NEWINGTON-DOVER, NHS-027-1(37), 11238

SPAULDING TURNPIKE IMPROVEMENTS

PUBLIC HEARING

September 21, 2006 -- SAINT THOMAS AQUINAS SCHOOL -- 7:00 PM

As a result of the Public Hearing held on September 21, 2006 for the **NEWINGTON-DOVER, NHS-027-1(37), 11238** project, the following layout with limitations to access is established as shown on the Hearing Plan and as described below:

Beginning at a point in the travel way of the Spaulding Turnpike (NH 16) north of Exit 1 (Gosling Road Interchange) in the Town of Newington, NH and continuing northerly approximately 3.5 miles to the Dover Toll Plaza, just north of Exit 6 (US 4) in the City of Dover, NH.

The layout involves the reconstruction and widening of the Little Bay Bridges and the Spaulding Turnpike. Between Exits 1 and 3, the Turnpike will be shifted slightly to the west and widened to create three lanes in each direction to match the section south of Exit 1. Between Exits 3 and 6, the Little Bay Bridges and the Turnpike will be reconstructed on new alignment and widened to create four lanes (three travel lanes and one auxiliary lane) in each direction. North of Exit 6, the Turnpike will be widened to create three lanes in each direction to match into the Dover Toll Plaza. The project layout continues and expands the Limited Access Right-of-Way designation that exists for the Turnpike interchanges and connector roadways, with modifications as appropriate to accommodate the proposed infrastructure improvements.

The layout includes the reconstruction, reconfiguration, and consolidation of the interchanges along the Spaulding Turnpike at Exit 2 (Fox Run Road), Exit 3 (Woodbury Avenue), Exit 4 (Nimble Hill Road and Shattuck Way), Exit 5 (Hilton Drive) and Exit 6 (US 4 and Dover Point Road). The Exit 2 ramps at Fox Run Road will be eliminated and traffic routed to Exit 3. Exit 3 will be reconfigured to a full service interchange with access provided to the Pease Tradeport and Arboretum Drive. A portion of Arboretum Drive, approximately 1000 feet in length, will be relocated to form a new signalized intersection at the terminus of the new southbound Exit 3 ramps and terminus of the extended section of Woodbury Avenue. Woodbury Avenue will be reconstructed from the intersection of Fox Run Road and extended through the Exit 3 interchange area. The Exit 4N median reverse direction ramps (previously discontinued under a separate project) will be eliminated. Exit 4 will be adjusted to maintain the on and off-ramps at Nimble Hill Road and Shattuck Way. Access to Nimble Hill Road from properties directly adjacent to the Turnpike and adjacent to the on and off-ramps will be modified; a new local roadway will be constructed to provide access to the affected properties. Work on Nimble Hill Road will begin at the intersection with Shattuck Way and the new local road and continue approximately 600 feet to the Turnpike. The work to the existing northbound Exit 4 ramps will be limited to the area directly adjacent to Shattuck Way. The Exit 5 ramps will be discontinued and a new local two-way Connector Road, from Wentworth Terrace and Hilton Park, under the Turnpike to connect with Dover Point Road will be constructed. The existing ramps from Cote Drive to the Turnpike will be discontinued.

Exit 6 will be reconstructed to a full service modified diamond-type interchange. The work on US 4 will begin at the eastern end of the Scammell Bridge and continue over the Turnpike connecting to Dover Point Road and ending at the intersection with Homestead Lane.

Signalized intersections at the southbound ramps, the northbound ramps and Dover Point Road are proposed. The existing signalized intersection on US 4 with Boston Harbor Road and Spur Road will be modified to eliminate the traffic signal and restrict movements to right-turns only. A new local two-way connector road from Spur Road, beneath US 4, to Boston Harbor Road with access to the southbound on-ramps will be constructed.

The General Sullivan Bridge will be rehabilitated to function as a pedestrian/bicycle/recreational facility with the ability to carry emergency and maintenance vehicles from the Newington side. The northern approach embankment will be removed and the northern end of the bridge modified to accommodate the two-way local connector road and allow for continued pedestrian, bicycle and recreational use.

Also included are all potential mitigation and stormwater management areas as may be required to comply with State and Federal permitting requirements and best management practices as shown on the project plans. Further evaluation and coordination with State and Federal agencies will be required to determine the final components of the mitigation package, and in turn, the specific parcels, or portions there of, to be acquired.

The layout also includes the accommodation for a future elevated rail spur line that would extend from the east along the existing rail spur alignment over the Turnpike to the west into the Pease Tradeport.

The limitation of access previously established for the Spaulding Turnpike will be maintained and expanded to prohibit any non-interchange accesses. No access will be allowed to the Turnpike except via designated interchanges.

The project further identifies new Park and Ride facilities near Exit 9 in Dover, Exit 13 in Rochester, and near the US 4 and NH 125 intersection in Lee. Also, other travel demand management components including improvements to bus and rail, and support for employer-based measures will be considered.

Limitations of access, as well as exceptions, are as follows:

NEWINGTON

Woodbury Avenue Extension (west of the Spaulding Turnpike)

PEASE DEVELOPMENT AUTHORITY (Parcel N1): One (1) point of access onto Woodbury Avenue Extension.

Spaulding Turnpike (NB & SB)

Limitation of access previously established for the Spaulding Turnpike will be maintained. No access to the Turnpike will be allowed.

River Road (east of the Spaulding Turnpike)

STATE OF NH remnant land with frontage along River Road located between parcels N18 & N20: One (1) point of access onto River Road.

Spaulding Turnpike (SB, remnant segment from station 550 to station 577 west of the Spaulding Turnpike)

Limitation of access previously established for the Spaulding Turnpike and exceptions thereto will be maintained.

DOVER

Spaulding Turnpike (NB & SB)

Limitation of access previously established for the Spaulding Turnpike will be maintained. No access to the Turnpike will be allowed.

Dover Point Road (east of the Spaulding Turnpike)

STATE OF NH remnant land with frontage along Dover Point Road located between the Turnpike and parcel D80: One (1) point of access onto Dover Point Road at station 238+60.

Dover Point Road (west of the Spaulding Turnpike)

STATE OF NH remnant land with frontage along Dover Point Road abutting parcel D39 to the north: One (1) point of access onto Dover Point Road.

The above limitations of access are established in accordance with RSA Section 230:46.

The following decisions are the Department's resolution of issues as a result of the testimony presented at the September 21, 2006 Public Hearing and written testimony subsequently submitted.

1) Ms. Gail Pare (188 Little Bay Road, Newington) expressed thanks to the Department for the response to public comments throughout the advisory process.

Mr. Bruce Woodruff (Dover City Planner, Advisory Task Force member) commended the Department for the context-sensitive design process and advisory task force procedure of project development.

Mr. Leon Kenison (Facilities Director, Pease Development Authority) extended thanks to the Department staff and engineering consultants for the cooperation exhibited during the project development process.

Mr. David Scott (Dover City Councilor) complimented the Department for the thought that went into the proposal and the process that was followed.

Mr. Cliff Sinnott (Executive Director, Rockingham Planning Commission) and Ms. Cynthia Copeland (Executive Director, Strafford Regional Planning Commission) on behalf of the Seacoast Metropolitan Planning Organization (MPO) expressed their appreciation for the Department's expeditious completion of the Draft Environmental Impact Statement and the Department's cooperation with the communities, Advisory Task Force, and Planning Commissions in developing the preferred alternatives.

Ms. Thelma Briggs (10 Cote Drive, Dover) expressed thanks for the informative and professional presentation at the Public Hearing and prior public meetings.

Response: The Department appreciates the efforts and input from the large number of people that attended the public meetings and followed the project's development and progression. The Department will continue to progress the project in an expeditious manner and will continue to solicit input from the communities, the Advisory Task Force, and Planning Commissions on various aspects of the project during the project's final design.

2) Mr. Leon Kenison (Facilities Director, Pease Development Authority, on behalf of PDA Board of Directors) expressed support for the preferred alternative as described in the Layout Petition noting the Board's concurrence that the preferred alternative will enhance safety and provide congestion relief. The Board also recognized that the new northerly entrance at Exit 3 would help disperse travel patterns within the Tradeport, lessening the travel demand at the Exit 1 Interchange, and making Pease's presence more valued. The Board also acknowledged and supported the proposed

accommodation of future rail service into the Tradeport via an elevated crossing of the Turnpike, as well as the preservation of the necessary right-of-way for its future construction.

Mr. Bruce Woodruff (Dover City Planner, Advisory Task Force member) expressed support for the proposed Turnpike improvements in Dover noting that the needed infrastructure improvements are provided while minimizing the impacts to Dover Point and Hilton Park.

Mr. Tom Morgan (Newington Town Planner), Ms. Eleanor Hendricks (401 Dover Point Road, Dover), Mr. Leon Kenison (Facilities Director, Pease Development Authority, on behalf of PDA Board of Directors), Mr. Scott DeCost (General Manager, Fox Run Mall / Crossings at Fox Run), Mr. John O'Reilly (Chair, Newington Board of Selectmen), Mr. Denis Hebert (Vice-Chair, Newington Planning Board), and Mr. Roy Greenleaf III (Newington Fire Chief) endorsed the proposed Turnpike improvements in Newington. Mr. Morgan, Mr. O'Reilly, and Mr. Hebert noted that the low elevation of the Turnpike in the Preferred Alternative would minimize noise impacts upon the Town.

John Brough (240 Old Garrison Road, Dover), Ms. Linda Pontbriand (40 Belanger Drive, Dover), Ms. Patricia Rose (17 Cote Drive, Dover), Ms. Thelma Briggs (10 Cote Drive, Dover) and Ms. Jan MacMillan and Mr. Gordon Smith (parcel D056, 14 Boston Harbor Road, Dover) expressed support for the proposed Turnpike improvements.

Mr. Cliff Sinnott (Executive Director, Rockingham Planning Commission) and Ms. Cynthia Copeland (Executive Director, Strafford Regional Planning Commission) on behalf of the Seacoast MPO expressed their support for the project, as the project will vastly improve safety. They stated that the proposed improvements have been the top transportation priority of the Seacoast MPO for ten years.

Ms. Joyce Elkovarti (112 Bellamy Woods, Dover) concurred with the need for the bridge widening, but requested that the aesthetics of the bridge be considered so that the bridge's appearance not compromise the views of the water.

Response: The Department acknowledges and appreciates the community's support and will progress the project as presented at the Public Hearing, subject to the modifications contained herein.

Careful attention to aesthetic considerations, particularly concerning landscaping, the Little Bay Bridge structure, and proposed soundwalls, will be made during the project's final design.

3) Ms. Caren Curti Peloso (39 Spur Road, Dover), Mr. Jeff Hollinger (former State Representative, 346 Back Road, Dover), Mr. David Scott (Ward Three Dover City Councilor, 220 Back Road, Dover) expressed concern that the proposed widening of the Turnpike to eight lanes in Dover would have an adverse impact on the natural resources and ruin the character of Hilton Park and Dover Point.

Mr. Cliff Sinnott (Executive Director, Rockingham Planning Commission) and Ms. Cynthia Copeland (Executive Director, Strafford Regional Planning Commission) on behalf of the Seacoast MPO stated their belief that the proposed improvements would enhance safety and travel efficiency. However, they expressed concern with the scale of the improvements and requested assurances of the necessity of the number of lanes proposed and the width of shoulders and other elements that contribute to the extent of the highway expansion.

Ms. Nora Kelly (348 Dover Point Road, Dover) expressed concern with the proposed widening of the Turnpike to eight lanes and stated her preference for the proposed Bus Alternative.

Mr. John Scruton (99 Sixth Street, Dover) expressed concern with the proposed Turnpike widening and its impact upon the rural character of the region, and doubted the efficacy of the proposed widening on reducing traffic congestion.

Response: The Environmental Impact Statement (EIS) evaluated a number of different alternatives including a 6-lane alternative (three basic travel lanes in each direction). The travel demand projections for the project's design year of 2025 and the traffic capacity analyses that focused on safety and traffic operations along the Turnpike and across the Little Bay Bridges between Exit 3 (Woodbury Avenue) in Newington and Exit 6 (US 4/Dover Point Road) in Dover indicate that a 6-lane alternative, in conjunction with a combination of transportation system management (TSM) and travel demand management (TDM) measures (which include improved bus service) would not be sufficient to accommodate the future travel demands for the corridor. A sensitivity analysis of traffic volume growth on the Little Bay Bridges indicates that a 6-lane bridge would reach capacity and result in unacceptable traffic operations by 2017 (eight years prior to the design year). Furthermore, beyond the limits of the bridge, construction of six lanes between Exits 3 and 6 would result in congestion and system failure in 2017.

In addition, widening the Turnpike to provide three lanes in each direction would result in a very similar footprint as widening to provide four lanes in each direction. The typical cross-sectional width for a 6-lane highway (122 feet) is nearly as wide as the 8-lane highway (146 feet). Additionally, the interchange configurations at Exits 3 and 6 are relatively the same under both 6- and 8-lane alternatives, with the exception that the length of acceleration and deceleration lanes would be longer under a 6-lane alternative in order to better accommodate traffic entering and exiting the Turnpike. With regard to environmental impacts, the difference between a 6-lane and 8-lane footprint is minor (less than 5 percent) when comparing impacts to wetlands, wildlife habitat (unfragmented lands), groundwater (stratified-drift deposits), noise (number of impacted receptors), and right-of-way (number of residential and business acquisitions).

The Preferred Alternative proposes three basic travel lanes and one auxiliary lane in each direction between Exits 3 and 6. The auxiliary lanes enable traffic to safely and efficiently enter, exit and switch lanes between Exits 3 and 6. Shoulder areas are proposed to be 10 feet to 12 feet wide. Experience and safety studies of limited access facilities have demonstrated the safety benefit associated with providing adequate space for disabled vehicles. Narrow shoulder areas are deemed to be safety hazards and are not recommended as they give the appearance of being safe areas for stopping but are not due to their confining width and the relatively high traveling speeds along the Turnpike.

4) Ms. Eleanor Hendricks (401 Dover Point Road, Dover), Mr. Douglas DeDe (143 Locust Street, Dover), Mr. Raymond Bardwell (199 Spur Road, Dover), and Mr. Richard Morin (264 Dover Point Road, Dover) expressed opposition to the proposed modification of the Exit 6W ramp from the existing free-flow loop to a diamond configuration under signal control. They felt that the signal would operate inefficiently, resulting in congestion, traffic queues on the Turnpike and Dover Point Road, and increased traffic diversion onto City streets (e.g. Spur Road).

Ms. Caren Curti Peloso (39 Spur Road, Dover), Mr. Jeff Hollinger (former State Representative, 346 Back Road, Dover), Mr. David Scott (Ward Three Dover City Councilor, 220 Back Road, Dover) expressed concern that the proposed traffic signals on Dover Point Road would create potential backups on Dover Point Road and the Turnpike. They felt the traffic signals would place an additional burden on Spur Road and Boston Harbor Road as motorists would be inclined to utilize these roadways as alternatives to avoid the congestion and backups.

Response: The signalized diamond interchange configuration proposed for Exit 6, as part of the Preferred Alternative, will provide for safe and efficient traffic operation for northbound traffic desiring to travel west on US 4. Other potential ramp types and interchange configurations were studied in detail and were found to be less desirable.

The existing single lane loop ramp would not provide sufficient capacity for the anticipated future traffic volumes. In addition, the radius of the existing loop ramp is geometrically deficient relative to current standards and driver expectations. A two-lane loop ramp configuration is not recommended due to safety concerns associated with vehicles, including heavy commercial trucks, traveling at relatively high speeds exiting the Turnpike, traveling side by side in a circular manner, and then merging with local traffic from Dover Point Road. Further, improving the radius of a potential 2-lane loop ramp would increase wetland impacts and severely impact a number of residential properties along Homestead Lane without absolving the traffic operational and safety concerns inherent in the 2-lane loop ramp configuration. In addition to the issue of safety and more severe impacts, a 2-lane loop ramp alternative would cost approximately $2 million more to construct (primarily due to the increased span and width of the new bridge carrying US 4 over the Turnpike) than the signalized diamond interchange configuration (exclusive of right-of-way and mitigation costs).

Under the Preferred Alternative, the storage lengths on the proposed diamond shaped northbound off-ramp will sufficiently accommodate the anticipated traffic queues without vehicles backing up onto the Turnpike. Traffic operations at the signalized Exit 6 northbound off-ramp intersection with US 4 will be coordinated with signal operations to the east at the Dover Point Road intersection, and to the west at the southbound entrance ramp to the Turnpike. The coordinated signal system will process traffic flow efficiently, minimizing delays and vehicle queuing. Detailed studies conducted for all three intersections indicate that backups will not occur along Dover Point Road or on the Turnpike. All three signalized intersections are projected to operate at Level of Service (LOS) B or better during the 2025 weekday morning and evening peak hours, with the exception of the northbound ramps which will operate at LOS C. These anticipated levels of operation meet or exceed desired standards of LOS for new roadway facilities. With the facility operating at high levels of service with modest delays, motorists will have no reason to seek alternative routes.

5) Mr. Robert Battles, Esq. (representing Wentworth Terrace property owners, Dover) expressed support for the proposed elimination of Exit 5 and the modified neighborhood access via Dover Point Road, as well as the widened two-way Hilton Drive. He felt the proposed improvements would minimize impacts on the Wentworth Terrace neighborhood and provide safer access, not only for the Wentworth Terrace residents, but Turnpike travelers, as well.

Mr. Jack Bernier (25 Wentworth Terrace, Dover) expressed concern that the proposed elimination of Exit 5 and alterations to Wentworth Terrace would create a dead-end road and make truck egress from the neighborhood difficult. He recommended that the portion of Hilton Drive extending north from the existing ramps to the pump station be retained to create a loop road.

Mr. Raymond Bardwell (199 Spur Road, Dover) recommended that Exit 5 be retained to provide convenient access to Hilton Park and not divert traffic to Dover Point Road and Boston Harbor Road.

Mr. James Yeames (409 Dover Point Road, Dover) expressed concern that the elimination of Exit 5 would increase traffic on Dover Point Road. Mr. Yeames noted that all traffic entering and exiting Hilton Park would need to pass by his home once Exit 5 is eliminated.

Response: The closure of Exit 5 is necessitated from a safety and traffic operations standpoint due to its proximity to Exit 6 and the projected increase in traffic (2025 travel demand) along the Turnpike between Exits 3 and 6. Insufficient distance (approximately 2,000 feet) exists between the on-ramp from Exit 5 and the off-ramp to Exit 6 to safely accommodate the weave between vehicles entering the Turnpike at Exit 5 and vehicles exiting the Turnpike at Exit 6. Traffic safety and efficiency aside, reconstructing Exit 5 to minimum design standards would severely impact Hilton Park and the Wentworth Terrace neighborhood, and would preclude the opportunity to construct soundwalls (as proposed with the Preferred Alternative) to reduce existing and future traffic noise levels in the neighborhood.

The potential traffic diversions to Hilton Drive, Dover Point Road and Boston Harbor Road resulting from the closure of Exit 5 have been analyzed. A portion of the existing eastbound traffic on US 4 that seeks to travel north on the Turnpike, and currently enters and exits Hilton Park and Wentworth Terrace via Exit 5, would be re-routed to Exit 6 (which is proposed to include a new northbound on-ramp to the Turnpike) and Dover Point Road. The overall re-distribution of traffic associated with the Preferred Alternative is anticipated to result in a modest increase in traffic along Dover Point Road in the vicinity of Boston Harbor Road. Both Dover Point Road and Boston Harbor Road have adequate capacity to accommodate the projected traffic increases. A detailed capacity analysis conducted for the intersection of Boston Harbor Road/Dover Point Road and the proposed local connector road shows LOS A operations through the year 2025.

Relative to commercial vehicles accessing and exiting the Wentworth Terrace neighborhood and Hilton Drive, the proposed improvements to Hilton Drive in the vicinity of Wentworth Terrace and Hilton Park (including the local connector roadway traversing under the Turnpike and adjacent to the channel) will be designed to accommodate tractor-trailer trucks. Also, as suggested, a portion of Hilton Drive extending north from the existing ramps to the pump station will be retained to create a loop road for trucks to more easily exit the neighborhood.

6) Mr. Scott Myers (Mayor, City of Dover) noted that the project would result in increased traffic along Dover Point Road (west of the Turnpike) and Hilton Drive. He strongly urged that a sidewalk be constructed along Dover Point Road and Hilton Drive to complete a gap section and connect the Boston Harbor Road sidewalk with the pedestrian path at Pomeroy Cove.

Mr. Edward Cartnick (53 Boston Harbor Road, Dover) asked that a sidewalk be constructed along Dover Point Road to connect the existing Boston Harbor Road sidewalk to Hilton Park to mitigate for the anticipated traffic increase along that section of road.

Mr. Raymond Bardwell (199 Spur Road, Dover) questioned whether a sidewalk would be constructed alongside the proposed Boston Harbor Road to Spur Road connector and whether lighting would be provided along the underpass structure beneath US 4.

Mr. Richard Morin (264 Dover Point Road, Dover) suggested that pedestrian and bicycle paths be constructed throughout the Dover Point area as part of the project.

Mr. Robert Battles, Esq. (representing Wentworth Terrace property owners, Dover) expressed support for the walkway that is shown on the plans as being reconstructed, and which connects Dover Point Road, Pomeroy Cove, Wentworth Terrace, and Hilton Park.

Response: The Department acknowledges that the section of Dover Point Road west of the Turnpike will see a moderate increase in traffic once the project is constructed and Exit 5 discontinued. The Department has reviewed the area and proposes to incorporate a sidewalk (approximately 2700 feet) along the west side of Dover Point Road to improve pedestrian safety and provide pedestrian connectivity between the proposed sidewalk at Hilton Park and the existing sidewalk opposite the Division of Motor Vehicles (DMV) property. The sidewalk is proposed to be constructed provided that the additional easements and/or property rights can be secured from the property owners; the additional impacts to wetlands (which are anticipated to be minor) will be permitted; and the City of Dover agrees to maintain (both winter and summer maintenance) the sidewalk in accordance with its accepted policies and practices as mandated in RSA 231:92-a. A municipal agreement between the City and the Department documenting maintenance responsibilities will need to be executed prior to this sidewalk (and the other sidewalks) being incorporated into the project.

A sidewalk is proposed to be constructed alongside the proposed connector road connecting Spur Road with Boston Harbor Road. Lighting is proposed to be installed as part of the proposed underpass structure beneath US 4.

New sidewalks are proposed in the following locations: along the north side of Spur Road between the Bayview Park parking area and the Scammell Bridge; along the west side of the connector road between Spur Road and Boston Harbor Road and along the west side of Dover Point Road as described above; along the new two-way connector beneath the Little Bay Bridges; and along Hilton Drive connecting to the reconstructed walkway along Pomeroy Cove. No other sidewalks are proposed in Dover as part of the project.

As part of the project, the Department proposes to build 4-foot wide shoulder areas, which will accommodate bicycles, along the reconstructed segments of Dover Point Road, US 4, Spur Road, Hilton Drive, and the two connector roadways noted above.

7) Mr. Scott Myers (Mayor, City of Dover) asked that tree clearing be kept to a minimum and that replacement evergreen trees be planted as part of the project to mitigate for the loss of trees.

Mr. and Mrs. Matthew and Angela Carter (parcel D058, 335 Dover Point Road, Dover) asked that project setbacks and tree clearing be minimized and replacement evergreen trees be planted.

Mr. Dean Trefethen (9 Danielle Lane, Dover) asked that trees be planted to replace those removed between the new roads and existing homes to help dampen noise.

Ms. Barbara Rushmore (191 Spur Road, Dover) asked that every effort be made to save mature trees.

Response: The Department is cognizant of the sensitive and scenic nature of the area and will strive to minimize tree clearing and setback areas to the extent practicable. As presented at the Public Hearing, the Department also proposes four segments of soundwalls in Dover totaling approximately 15,600 linear feet in length to mitigate for the elevated noise levels from the Turnpike. In addition, the Department proposes to develop a comprehensive landscaping plan, as part of the project's final design, and plant new trees in select locations to mitigate for the mature trees that will be lost due to construction and to landscape other locations along the corridor, as appropriate.

8) Ms. Gail Pare (188 Little Bay Road, Newington) expressed concern that the reconstruction of the Spaulding Turnpike in Newington would eliminate the existing wooded median. She urged that the design preserve a natural median, or at the very least, consider heavily planting trees alongside the Turnpike to screen the facility.

Mr. Cliff Sinnott (Executive Director, Rockingham Planning Commission), and Ms. Cynthia Copeland (Executive Director, Strafford Regional Planning Commission) on behalf of the Seacoast MPO expressed concern for the loss of the forested median in Newington. They requested that the Department seek to minimize the impact and restore trees where possible to replace the visual and sound absorbing buffer the trees provide.

Response: The Department has held numerous meetings with the communities, Advisory Task Force, and resource agencies to build consensus on a preferred design. The Advisory Task Force, the Newington Selectboard, Newington Planning Board, and Newington Conservation Commission have endorsed the Preferred Alternative in Newington, which proposes to construct the Turnpike within the wooded median. This approach has a number of advantages, particularly with regard to constructibility and maintenance of traffic during construction, as well as minimizing right-of-way impacts to private property. Also by constructing the Turnpike within the wooded median, the facility is further removed from the residential area in Newington.

As part of the project's final design, the Department proposes to develop a comprehensive landscaping plan and plant new trees in select locations to mitigate for the mature trees that will be lost due to construction and to supplement other locations with new plantings along the corridor, as appropriate.

9) Mr. Tom Morgan (Newington Town Planner) requested that the project address the need for pedestrians to cross between the east and west sides of the Turnpike in Newington.

Mr. John O'Reilly (Chair, Newington Board of Selectmen) and Mr. Denis Hebert (Vice-Chair, Newington Planning Board) asked that the design for Exit 3 (Woodbury Avenue) provide a safe and convenient route for pedestrians and bicyclists to cross the Turnpike. They also requested that sidewalks be constructed on both sides of Woodbury Avenue from Exit 3 to Fox Run Road to address the volume of pedestrians that utilize Woodbury Avenue and improve safety for people walking along the road. Furthermore, they recommended that dedicated bike lanes and sidewalks be constructed on Arboretum Drive to accommodate pedestrians and bicyclists that use this key link, which connects Portsmouth with Strafford County.

Response: The Department acknowledges that the Newington Master Plan recommends that sidewalks be provided along several roadways within Newington's Commercial District, including Woodbury Avenue. The Master Plan also provides for funding such sidewalk construction via negotiations with commercial developers and enterprises located within the Commercial District whose employees, customers and clients could benefit from and utilize such sidewalks.

As part of the Preferred Alternative, the reconstruction of Woodbury Avenue proposes a seven (7) foot wide panel, adjacent to the roadway, to accommodate both a future sidewalk and utilities. Should the Town of Newington agree to accept maintenance responsibilities (both summer and winter maintenance) for the new sidewalks in accordance with its accepted policies and practices as mandated in RSA 231:92-a, the Department will construct new sidewalks on both sides of Woodbury Avenue within the limits of the reconstruction project. Also, a new sidewalk would be provided on the north side of the bridge crossing over the Turnpike and extending through the new Woodbury Avenue/Arboretum Drive/Exit 3 southbound ramps intersection. The sidewalk would then continue along the west side of Arboretum Drive to the location of the first driveway on Arboretum Drive.

Roadside shoulder areas (4 to 5 feet wide) to accommodate bicyclists are proposed within the limits of the project along Woodbury Avenue, the bridge over the Turnpike within the Exit 3 interchange area, and along the reconstructed sections of Arboretum Drive.

10) Ms. Gail Pare (188 Little Bay Road, Newington) expressed support for the proposed preservation of the General Sullivan Bridge noting its historicity.

Mr. Bruce Woodruff (Dover City Planner) expressed support for the rehabilitation and preservation of the General Sullivan Bridge, as it is a highly rated and valued historic resource.

Ms. Eleanor Hendricks (401 Dover Point Road, Dover) questioned the historical value of the General Sullivan Bridge due to its poor condition, and its ability to withstand further deterioration until rehabilitation can begin.

Mr. Cliff Sinnott (Executive Director, Rockingham Planning Commission) and Ms. Cynthia Copeland (Executive Director, Strafford Regional Planning Commission) on behalf of the Seacoast MPO expressed support for the rehabilitation of the General Sullivan Bridge for bicycle, pedestrian, and recreational use. However, they expressed concern that the details of the rehabilitation, including the removal of the northerly approach and the limited design load of the replacement deck, would preclude its use as a vehicular crossing in contingency emergency situations.

Mr. and Mrs. John and Rosalie Veinott (23 Roberts Road, Dover) recommended that the General Sullivan Bridge be rehabilitated to accommodate emergency use by vehicular traffic in case of incidents on the Little Bay Bridges.

Mr. Richard Stern (516 Shattuck Way) opposed the restoration and future maintenance of the General Sullivan Bridge as an undue burden on New Hampshire taxpayers.

Response: The Department proposes to rehabilitate the General Sullivan Bridge as an element of the Preferred Alternative identified for the project. The General Sullivan Bridge, regardless of its present day condition, is a landmark structure, the second highest rated historic bridge in the state, and eligible for the National Register of Historic Places. The bridge offers a unique and important bicycle / pedestrian connection across Little Bay, as well as, other recreational activities, and is deemed a historic resource with protection under Federal (USDOT) law. The Department has estimated the cost to rehabilitate the General Sullivan Bridge to a six-ton capacity, which will be able to accommodate pedestrians, bicycles, recreational activity, and emergency vehicles, at approximately $26 million dollars. This represents a net cost to the project of approximately $10 million dollars taking into account the cost that would be required to dismantle and remove the structure, along with the cost required to provide a replacement recreational connection across the Bay.

The Preferred Alternative requires the existing approach embankment (on the Dover side) leading to the General Sullivan Bridge to be removed to accommodate a two-way local connector, and proposes to retrofit the end of the General Sullivan Bridge with a new pedestrian / bicycle structure, which will be fully designed during the final design stage of the project. The two-way connector is required to provide access to the east side of Hilton Park and the Wentworth Terrace neighborhood. This local roadway is proposed to replace the existing one-way Hilton Park connector that is situated beneath the Little Bay Bridges. This underpass location provides the benefit of utilizing the existing grade–separated crossing and reconstructing the Turnpike on the same general grades as currently exist.

The Preferred Alternative proposes the Little Bay Bridges be widened to provide four full travel lanes (12 feet wide) with two full shoulders (10 to 12 feet wide) in each direction. Therefore, incident management and emergency response will be fully accommodated on the Little Bay Bridges once the bridges are reconstructed and widened. Future incident management and response will be greatly improved over the current situation, negating the need to consider the General Sullivan Bridge for incident response or contingent emergency use.

11) Mr. Scott Myers (Mayor, City of Dover), Mr. Bruce Woodruff (Dover City Planner, Advisory Task Force member), Mr. and Mrs. Matthew and Angela Carter (335 Dover Point Road, Dover), Mr. David Scott (Ward Three Dover City Councilor, 220 Back Road, Dover), Mr. Robert Battles, Esq. (representing Wentworth Terrace property owners, Dover), and Ms. Linda Pontbriand (40 Belanger Drive, Dover), endorsed the proposed noise barriers on both sides of the Turnpike, both north and south of Exit 6 to shield the neighborhoods from the highway noise and provide the residents privacy.

Mr. Edward Cartnick (53 Boston Harbor Road, Dover), Ms. Barbara Rushmore (191 Spur Road, Dover), and Mr. Raymond Bardwell (199 Spur Road, Dover) also expressed support for the proposed noise barriers, recommending that they be installed before the highway and bridge construction begin.

Mr. Raymond Bardwell asked that samples of the materials used in the noise barrier construction be provided to the affected residents for inspection and input.

Ms. Joyce Elkouarti (112 Bellamy Woods, Dover) expressed concern with the visual obstruction that the noise barriers would create and requested that the Department seek a way to mitigate the noise impacts upon the Turnpike's abutters without sacrificing the scenic views of the water from the Turnpike.

Mr. Jesse Steed (Dover Point Road, Dover) questioned the effectiveness of the proposed noise barriers and asked if additional mitigation measures would be offered to the abutters impacted by Turnpike noise.

Ms. Patricia Rose (17 Cote Drive, Dover) expressed support for the noise barriers requesting that the lower portion of the walls be solid and the upper portions transparent.

Mr. James Yeames (409 Dover Point Road, Dover) stated that the noise from the Turnpike is objectionable and will become intolerable as traffic increases. He also noted that no noise mitigation is proposed for traffic noise emanating from the Little Bay Bridges. He recommended that noise measurements be taken during summer weekend peak traffic periods to capture the highest noise levels.

Mr. John Scruton (99 Sixth Street, Dover) suggested that the Turnpike be depressed and roofed to reduce traffic noise.

Mr. John O'Reilly (Chair, Newington Board of Selectmen), Mr. Denis Hebert (Vice-Chair, Newington Planning Board), Mr. Tom Morgan (Newington Town Planner) and Mr. Richard Stern (516 Shattuck Way, Newington) requested that noise mitigation measures, including "quiet pavement" or other alternative measures be implemented in Newington to address the noise from the Turnpike.

Mr. Cliff Sinnott (Executive Director, Rockingham Planning Commission), and Ms. Cynthia Copeland (Executive Director, Strafford Regional Planning Commission) on behalf of the Seacoast MPO expressed support for the proposed noise barriers but noted concern with the visual impact they would cause. They recommended that the barriers be kept as low as possible while still achieving the necessary noise reductions, and that architectural treatments and landscaping be incorporated to mitigate the visual impact.

Ms. Anne Buckley (parcel D016, owner of K9 Kaos, 430 Dover Point Road, Dover) expressed opposition to the proposed noise barriers. Ms. Buckley noted that the barriers would eliminate her business' exposure to potential customers on the Turnpike, and the reduction in Turnpike noise within the Dover Point Road neighborhood would make the noise emanating from the kennel operations more prominent.

Response: A detailed noise analysis was conducted for this project in accordance with the Department's Policy and Procedural Guidelines for the Assessment and Abatement of Highway Traffic Noise for Type I Highway Projects and Title 23 Part 772 of the US Code of Federal Regulations. Approximately 300 properties in the project area were included in the analysis. As a result of this analysis, the Department proposes to construct four noise barriers totaling approximately 15,600 feet in length in Dover. The barriers were evaluated as to their feasibility and cost-effectiveness, and will be of sufficient height and length to reduce noise levels (at least 5 decibels) at ground level locations for approximately 170 residential properties.

The noise barrier along the west side of the Turnpike in Dover is proposed to end at the Little Bay Bridge, which will provide a feasible and cost-effective termination for the barrier while providing a noise reduction benefit to the Dover Point Road neighborhood. Noise barriers will not be constructed on the bridge.

Additional meetings with the benefited property owners will be held to discuss the noise barriers and ascertain whether the barriers are desired or not. In accordance with the Department's Policy and Procedural Guidelines, a minimum of 75% of property owners, within the first row adjacent to a particular barrier, will need to support the installation of the barrier in order for it to be constructed. During these meetings with the neighborhoods, more detailed information on the type, height, special features, and length of the noise barriers will be discussed and input gathered.

The Department will strive to design the barriers to be as low as possible while still achieving the necessary noise reductions, and will consider various architectural

treatments and landscaping during the final design phase to mitigate the visual impact of the barriers.

The Department will review the project's constructibility and advance the early construction of the proposed noise barriers, where deemed appropriate and practicable.

As part of the project's final design effort, the Department will investigate the merits and feasibility of utilizing "quiet pavement" to reduce tire noise throughout the project area.

12) Ms. Eleanor Hendricks (401 Dover Point Road, Dover) explained that the existing drainage system along Dover Point Road (west of the Turnpike) is deficient, with blocked culverts that have created wetlands along the west side of the road. She also expressed concern with the quality of the stormwater that will drain toward Pomeroy Cove from the widened turnpike. Ms. Hendricks requested the project's design address the deficient drainage and mitigate for the increased runoff expected from the widened pavement that is proposed.

Mr. Robert Battles, Esq. (representing Wentworth Terrace property owners, Dover) and Mr. John Duffy (owner of 15 Wentworth Terrace, Dover) noted existing drainage problems along Wentworth Terrace and expressed concern that the widened Turnpike would direct more runoff to this area, possibly resulting in erosion of the property and the shore of the Piscataqua River.

Response: The Department acknowledges the concerns regarding stormwater runoff and water quality on Dover Point. As part of the project's final design, the Department will closely review and evaluate the existing drainage conditions. Careful attention will be exercised to identify drainage related issues along the Turnpike on Dover Point and not exacerbate the deficient conditions. Detention basins and stormwater treatment areas will be considered as part of the project's final design to provide no net increase in pollutant loadings and to limit the peak runoff flows to pre-existing conditions.

13) Mr. Roy Greenleaf III (Newington Fire Chief) recommended that utilities serving the former drive-in site be re-established and upgraded by the project. He noted that the proposed widening of Woodbury Avenue would require the relocation of aerial utilities and hydrants. He also noted the presence of the high-pressure gas transmission line that is located parallel to Patterson Lane and crosses the Turnpike beneath Exit 3. He added that with future development along Arboretum Drive, the need for additional hydrants in this area should be reviewed. Similarly, he recommended that the adequacy of the water service and hydrants near Exit 4 should be evaluated.

Mr. Steven P. Burnley (Granite State Gas Transmission) noted the presence of an eight-inch high-pressure gas transmission line within the project limits and that the proposed construction would impact and displace up to 80% of the facilities, requiring substantial relocation. The relocation effort could cost four to seven million dollars and will require FERC approvals. He assumed that the cost of the relocations would be borne by the project. He estimated that the required permits would take two to three years to acquire. Mr. Burnley questioned whether the relocation costs would be reimbursed through a combination of Federal and State aid.

Response: The Department acknowledges Mr. Greenleaf's notation of several utility facilities in the project area. During the project's final design, the Department will closely coordinate the proposed work with local Officials with regards to municipal utilities and with the private utility companies regarding their facilities in the project area. Efforts will be initiated to verify the location of existing facilities, to identify potential areas of conflict and the utility relocations necessary to accomplish the proposed construction, and to accommodate requests for concurrent municipal or private utility improvements.

With regards to the former drive-in theater property, the Department does not envision upgrading the facilities to that parcel as part of the project. Utility upgrades should be accomplished by a prospective developer interested in acquiring and developing the property. However, the Department will coordinate with the Town to include municipally supported utility work, at the Town's expense, in the construction contract. Any property rights or additional right-of-way required for the utility work would be the responsibility of the Town.

With regards to the high-pressure gas facilities within the project limits, the Department will initiate early coordination of the project with Granite State Gas. Unless the gas facilities are located within a utility easement, costs for the relocation of facilities in conflict with the proposed construction are not eligible for reimbursement. The Department will work closely with Granite State Gas to limit the extent of the necessary relocations.

14) Mr. Richard Stern (516 Shattuck Way, Newington) noted that the interim safety improvements at Exit 4 and the proposed expansion of the Turnpike have and will continue to substantially change his property setting and adversely impact his quality of life and property value. He asked that the Department consider purchasing his property, which abuts Tricky's Cove.

Response: The Department is sympathetic to Mr. Stern's concerns. However, Mr. Stern's property is situated approximately 700 feet from the edge of the proposed Turnpike with no physical impacts to the property. Thus the Department does not propose to acquire the property. As part of the project's final design effort, the Department will investigate and consider items such as "quiet pavement" and added landscaping to lessen the project's acoustic and visual effect in Newington.

15) Mr. Francis Bruton, Esq. (representing parcel N031, Cumberland Farms, Newington) stated that the business (Exxon station) would suffer negative impacts with the loss of direct access to the Turnpike. Mr. Bruton acknowledged that direct access from the Turnpike off-ramp would not be possible, in light of the proposed raised median that will be constructed on the exit ramp, and that the proposed connector road and driveway to be constructed behind the business seek to mitigate the negative effect on the business. However, Mr. Bruton requested that a direct access be provided from the site to the Turnpike on-ramp, noting that this access would involve minimal changes to the Preferred Alternative, have good sight lines, and the conflicting traffic approaching the on-ramp would be under signal control at the Shattuck Way intersection.

Response: The Department has reviewed the area and is amenable to Mr. Bruton's request. Both of the existing driveway openings that presently service the property are proposed to be maintained. The present driveway on Nimble Hill Road is proposed to have direct access to and from the Turnpike on-ramp, but be restricted to right turns in and out, as a raised median will be constructed to separate the on- and off-ramp traffic. No direct access from the Turnpike off-ramp to this driveway is proposed. The second driveway from the Exxon Station that presently has direct access to the Turnpike is proposed to be connected to a new local connector roadway that is proposed south of the gas station and will intersect Nimble Hill Road opposite Shattuck Way Extension.

It should be noted that the intersection of Nimble Hill Road and Shattuck Way is not proposed to be signalized as part of the project. Conduit for future traffic signals has been installed at the intersection, as part of the interim safety improvement project at Exit 4, with the intent that traffic signals would be installed should traffic increase in the area and the appropriate signal warrants be met.

16) Ms. Jan MacMillan and Mr. Gordon Smith (parcel D056, 14 Boston Harbor Road, Dover) detailed the encroachments to their property as part of prior improvements to the Exit 6 interchange and the impacts to their quality of life that the proposed

expansion would entail. They noted the following concerns relating to the Preferred Alternative for the project:

a) The proposed increase in elevation of US 4 adjacent to their property would increase noise levels, cause headlights to shine upon their house, would make the highway more prominent, and diminish the property's privacy. They asked that a sound barrier fence of sufficient height be constructed to obscure the view of the highway and help diffuse the traffic noise.
b) An improperly graded ditch along US 4 causes water to pond adjacent to their property. They requested the area be reviewed and the ditch properly graded to carry the runoff away from their property as part of the project.
c) The need for improved maintenance of ditches, culverts, sidewalks, and parking areas that were constructed as part of the Scammell Bridge project.
d) They requested mature (12 feet tall) arborvitae trees be planted to replace any trees that are impacted on their property by the project.
e) They suggest the Department may purchase their property at fair market value.

Response:

a) The Department recognizes the owner's concerns. A detailed noise analysis was conducted for this project in accordance with the Department's Policy and Procedural Guidelines for the Assessment and Abatement of Highway Traffic Noise for Type I Highway Projects and Title 23 Part 772 of the US Code of Federal Regulations. The analysis determined that the existing sound levels do not, and the future levels will not approach, meet, or exceed the Federal Highway Administration's noise abatement criterion. Consequently, a sound wall is not proposed in the location along Ms. MacMillan's and Mr. Smith's property. However, the Department proposes to plant evergreen trees alongside US 4 to shield Ms. MacMillan's and Mr. Smith's property and the pocket neighborhood on Boston Harbor from headlight glare and the increased elevation of US 4. The evergreen trees will over time help to obscure the highway.
b) As part of the project's final design, the Department will closely evaluate the existing drainage in the vicinity of Ms. MacMillan's and Mr. Smith's property and will grade or construct ditches and other drainage appurtenances to minimize the ponding of water adjacent to their property.
c) The Department, as a matter of policy and limited resources, does not maintain sidewalks. The maintenance of sidewalks on the State system is typically deferred to the community. The Department's District Six Office, which is responsible for the maintenance of drainage and other appurtenances to the State highway system, will address and prioritize the maintenance needs in the Scammell Bridge area with respect to the maintenance needs elsewhere in the District Six region.
d) There are no physical impacts proposed to Ms. MacMillan's and Mr. Smith's property. Consequently, the arborvitae trees on their property are not proposed to be impacted.
e) Since no physical impacts are anticipated to Ms. MacMillan's and Mr. Smith's property, the Department does not propose to acquire the property.

17) Ms. Anne Buckley (parcel D016, owner of K9 Kaos, 430 Dover Point Road, Dover) noted that the proposed Turnpike expansion would directly impact her property compromising her ability to operate her kennel business, and the proposed noise barriers will hide the business from passing Turnpike traffic thus eliminating her primary means of advertising. She asked that her business be relocated within the immediate area; possibly to land that would become available as a result of the Turnpike reconstruction.

Mr. Brian Dubreuil (Fast Dogs Realty LLC, owner of parcel D016) detailed the impacts to the business property and asked that the Department consider both the partial and, as an alternative, the complete acquisition of the property.

Response: The Department acknowledges Ms. Buckley's and Mr. Dubreuil's concerns. The Department will develop appraisals for a complete and a partial acquisition to reflect the impacts anticipated as a result of the project. The Department will work with the owners to relocate and re-establish their business in accordance with Department policy and the Federal Uniform Relocation Assistance and Real

Property Acquisition Policies Act. The Department will progress the complete acquisition of the property, in addition to the business relocation, should the owners desire.

18) Ms. Gail Pare (Chairman, Newington Historic District Commission) requested more information on the planned disposition of the historic railroad station on Bloody Point, noting that it was mothballed at the start of the Exit 4 interim safety improvement project. Ms. Pare noted that the field office for the prior construction was located near the station, and expressed concern that should the field office for the future Turnpike expansion be located similarly, it could have an adverse impact on the station. She requested the Department treat the sensitive historic area with care.

Response: The Department is presently working with the Town of Newington to develop an agreement and transfer the historic former railroad station building and immediate land surrounding the building on Bloody Point to the Town. The Department does not anticipate locating a field office for the future Turnpike expansion in vicinity of the station. The Department has acquired the former drive-in theater property and anticipates the use of the parcel for the project's staging, field offices, and material and equipment storage during the project's construction.

19) Mr. Anthony McManus (Dover Planning Board) explained that traffic studies completed by the City have shown that congestion in downtown Dover is partly due to traffic avoiding the Dover toll and following Dover Point Road rather than the Turnpike. He recommended that the toll either be eliminated or relocated south of Exit 6 to address this problem.

Mr. and Mrs. John and Rosalie Veinott (23 Roberts Road, Dover) recommended either eliminating the Dover toll or moving the toll to the vicinity of Exit 9 in Somersworth to lessen the congestion on Dover Point Road and throughout downtown Dover.

Ms. Caren Curti Peloso (39 Spur Road, Dover), Mr. Jeff Hollinger (former State Representative, 346 Back Road, Dover), and Mr. David Scott (220 Back Road, Dover) noted excessive traffic using both US Route 4 and Dover Point Road to avoid the Dover toll. They recommended relocating the toll plaza to the vicinity of Exit 9 in Somersworth, consolidating the plaza with the existing Rochester facility, and increasing the toll. In doing so, more traffic would stay on the Turnpike; congestion on US 4 and Dover Point Road would be alleviated; and most of the proposed improvements to Dover Point would become unnecessary.

Mr. David Scott (Ward Three Dover City Councilor, 220 Back Road, Dover) and Mr. John Scruton (99 Sixth Street, Dover) suggested that toll collection at the Dover toll plaza be temporarily halted to determine its effect on traffic patterns and congestion. Both felt that this change alone would solve traffic congestion on Dover Point and allow the delay or elimination of the Dover portion of the proposed Turnpike improvements.

Mr. Raymond Bardwell (199 Spur Road, Dover), Mr. Jerry Lynch (26 Lincoln Street, Dover), and Ms. Eileen Williams (2 Autumn Street, Dover) suggested that toll collection at the Dover toll plaza be temporarily (or permanently) halted to determine its effect on traffic patterns and congestion.

Response: It has been consistently stated and acknowledged throughout the study and public participation process that the Dover toll facility and toll-related issues fall outside the project study area and scope of study. The project's study area was identified and established following the 1998 Route 16 Corridor Protection Study and the 2000 Newington-Dover Feasibility Study by determining that the current and future Turnpike traffic operating conditions north of the toll plaza were satisfactory. In contrast, the section of the Turnpike between Exit 1 and the Dover Toll Plaza operates at a poor level of service, both in the current and future design year. In addition, changes to the Turnpike toll system require State Legislative and Executive

Council approval, and may have revenue impacts. These are state-level issues potentially affecting the entire Turnpike system, not project level matters.

The Department has reviewed the historic traffic data in the area. Since the early 1990s, the data shows an ever-increasing volume of traffic on the Turnpike, while traffic growth on Dover Point Road and US 4 has been relatively flat. This data, along with the regional travel demand projections demonstrate a greater regional use of the Turnpike over time as opposed to a large diversion of traffic to the secondary routes. The travel demand projections indicate that the design year (2025) volume of traffic between Exits 3 and 6 requires the type and scale of Turnpike improvements as reflected in the Preferred Alternative.

The Department has conceptually looked at possible alternative toll plaza locations. Relative to relocating the Dover Toll Plaza further north, the only potentially suitable location is situated north of Exit 9 and south of the Long Hill Road underpass. This section of the Turnpike is largely undeveloped along the west side, however, residential development does exist on the east side. Toll revenue at this location would be considerably lower since traffic north of Exit 9 is roughly 35% lower than the traffic at the Dover toll plaza. Additionally, the construction cost of the toll plaza's relocation is estimated at approximately $10 to $13 million (including the removal of the Exit 6 facility). This location would also be very close to the Rochester toll plaza and shift the noise and perceived toll effects onto a different neighborhood.

Due to the aforementioned reasons, the Department does not propose to relocate or eliminate the Dover Toll Plaza, nor implement a toll test and suspend toll collections.

20) Mr. Bruce Woodruff (Dover City Planner, Advisory Task Force member) and Mr. Raymond Bardwell (199 Spur Road, Dover) recommended that improvements be undertaken at Hilton Park, especially at the existing boat ramp, concurrent with the Turnpike expansion. Mr. Woodruff noted that he does not suggest that the Department fund the improvements, rather the Department should coordinate the work with the appropriate State agencies to have the badly needed improvements completed at the same time as the Turnpike construction. Mr. Bardwell suggested a steeper boat ramp into deeper water, a jetty parallel to the existing ramp, and a dock to secure the boats after launch be provided.

Response: The Department will continue to coordinate with the NH Fish and Game Department (NHF&GD) and Department of Resources and Economic Development (DRED) to determine whether improvements to the boating infrastructure at Hilton Park could be accomplished concurrently with the Little Bay Bridge and Turnpike Expansion project.

21) Mr. Mark West (West Environmental, Inc.) and Mr. Vincent Frank (Chairman, Newington Conservation Commission) requested more detailed information on the proposed stormwater management system be included in the Final Environmental Impact Statement due to the extent of the project's impacts on wetlands and the amount of impervious surface proposed in proximity to tidal wetlands.

Mr. Justin Richardson, Esq. (Newington Conservation Commission) noted concern with water quality in Little Bay and with the risk of further degradation posed by the proposed project. He recommended that stormwater treatment measures be in place prior to roadway construction, that the Final Environmental Impact Statement provide specific locations for stormwater treatment measures, that treatment be provided adjacent to Little Bay in the vicinity of Exit 4, and that environmental inspectors reporting directly to the NH Department of Environmental Services be considered for the project.

Mr. Cliff Sinnott (Executive Director, Rockingham Planning Commission) and Ms. Cynthia Copeland (Executive Director, Strafford Regional Planning Commission) on behalf of the Seacoast MPO recommended that the stormwater management plan

incorporate infiltration. They also asked for details of the proposed detention basins and their outfall locations, whether the potential impact of the temperature of the discharged stormwater had been considered, and that the Department coordinate water quality monitoring with the New Hampshire Estuaries Project of the University of New Hampshire.

Ms. Cynthia Copeland (Executive Director, Strafford Regional Planning Commission) requested details be provided of the outfall locations for several proposed detention basins and drainage swales and noted that some of the stormwater facilities appear to be located within wetlands. She questioned whether the quality of the stormwater discharged from the treatment structures would further degrade the receiving water bodies and whether the shade created by proposed structures (expanded bridges, noise barriers, overpasses, etc.) would impact wetland systems or habitats.

Response: Additional details regarding the stormwater management system and treatment devices will be provided as the project progresses through the final design stages. At the EIS phase, the general drainage patterns and approximate locations for detention basins are identified. These locations and the estimated sizes of the areas needed are rough approximations and generally do not account for site-specific constraints. The presence of wetlands and other site constraints will be factored into the sizing and final layout of the treatment devices as the areas are refined during the final design process.

The Department has worked with NHDES to develop the stormwater treatment needs and the available methods to assess the potential water quality impacts associated with roadway runoff. The Department has also collaborated with the University of New Hampshire (UNH) Stormwater Center to explore the latest in innovative treatment measures, such as gravel wetlands and infiltration measures that can provide a high level of treatment for the various pollutants associated with highway runoff. As a result of this effort with the University and coordination with NHDES, the most current best management practices and design guidance will be incorporated into the water quality treatment measures. A predictive modeling procedure provided by NHDES will determine appropriate stormwater treatment measures, and will also be used to show that to the extent practicable, the estimated future pollutant loads resulting from the expanded roadway area will not increase over the existing conditions.

With regard to the comments pertaining to the potential for water quality degradation and the need for erosion control planning, review and inspection procedures, the Department will require construction contractors to provide detailed erosion control plans including contingency measures and periodic turbidity monitoring of the site discharge during wet weather events. The Department will also require the contractors provide frequent inspections of construction sites to maintain compliance with permit conditions. Stringent requirements in the final design plans will be incorporated requiring contractors minimize any movement of eroded sediment beyond the work area. These requirements are typically a condition of the Army Corps of Engineers and NHDES Wetlands Bureau permits, as well as part of the 401 Water Quality Certificate that will be required for the project.

The Department will evaluate the potential impacts to wetlands and surface waters that may result from shading effects and will address these potential impacts in the Final EIS.

22) Mr. Cliff Sinnott (Executive Director, Rockingham Planning Commission) and Ms. Cynthia Copeland (Executive Director, Strafford Regional Planning Commission) on behalf of the Seacoast MPO noted that the New Hampshire Estuaries Project presently sponsors extensive water quality monitoring in the Great Bay estuary, including a permanent monitoring site beneath the Little Bay Bridges. They strongly encouraged the Department to closely coordinate with and augment this monitoring effort as part of the project.

Response: The Department will coordinate with the NH Estuaries Project to locate and avoid impacts to the existing monitoring station located between Pier 8 of the Little Bay Bridges and the Dover shoreline during construction.

As nitrogen is the limiting factor in estuarine systems, the Department will mitigate any increases in nitrogen (directly resulting from the runoff from the increased impervious surfaces of the proposed widened pavement) in accordance with NHDES guidance on the Best Management Practices (BMP's) for treatment of nitrogen.

The Department will construct BMPs in accordance with NHDES guidelines and will use predictive modeling procedures provided by NHDES to show to the extent practicable, the estimated future pollutant loads from the roadway area will not increase above existing levels, and to determine appropriate stormwater treatment measures. The Department will coordinate with NHDES, and as practicable will assist with their monitoring efforts in the area.

Prior to construction, the Department will take boring samples and test sediments to assess the presence of toxins in the sediments of Little Bay in the vicinity of proposed pier construction and sheet pile installation. If any toxic material is identified, the Department will address the disposition of these toxic substances in accordance with NHDES regulations and through the USEPA's Remedial General Permit (RGP) guidance.

23) Mr. Bruce Woodruff (Dover City Planner, Advisory Task Force member) expressed support for the advanced implementation of an improved southbound merge condition at Exit 6 in Dover, identified in the DEIS as Dover TSM – Exit 6, Southbound.

Response: The Department recognizes the safety and operational benefits of implementing the Transportation System Management Improvement #2 for the southbound merge condition at Exit 6 in Dover. This improvement would create a traditional merge condition and reduce the vehicle delays and vehicle queuing on both the on-ramp and mainline, as compared to the existing condition. The Department will progress the Dover TSM at Exit 6, Southbound as part of an interim project.

24) Mr. Bruce Woodruff (Dover City Planner, Advisory Task Force member) recommended that additional funding for the proposed shuttle between the Dover train station and the proposed Exit 9 park and ride facility be incorporated into the project. He noted that the current Congestion Mitigation and Air Quality (CMAQ) project is under funded by 50%, but is a pertinent element of the local bus alternatives as it provide a critical connection from downtown Dover to the Exit 9 park and ride facility.

Ms. Nora Kelley (348 Dover Point Road, Dover) expressed support for public transportation and the proposed park and ride facilities in Dover, Rochester, and Lee.

Mr. Scott Davidson (Executive Committee, NH Sierra Club – Seacoast Group) expressed concern with the relocation of transit bus service from Downtown Dover to the proposed Exit 9 park and ride facility, noting that downtown Dover residents can now walk or take a local bus to access C&J Trailways intercity bus service without having a need to use a private vehicle. Mr. Davidson recommended that coordinated shuttle service be provided between the Dover Transportation Center and the park and ride facility at Exit 9.

Mr. Steven Wells (Executive Director, COAST) and Mr. Rad Nichols (Manager of Operations & Planning, COAST) expressed support for the inclusion of Bus Alternatives 1, 2, and 3 in the project, but noted concern that the methodologies and assumptions used to project ridership on public transportation were outdated and should be reexamined with more current data. They also expressed doubt that the proposed expansions to the bus service would ever be financially self-supporting or adequately funded by either Federal highway or transit funding, and recommended

that the Department commit to funding the operations of these new bus services at least through the design life of the project (i.e. 2025).

Mr. Cliff Sinnott (Executive Director, Rockingham Planning Commission) and Ms. Cynthia Copeland (Executive Director, Strafford Regional Planning Commission) on behalf of the Seacoast MPO recommended that the project incorporate aggressive transit alternatives and commit to fund and implement those alternatives. They urged the early implementation of all proposed Travel Demand Management (TDM) and Transportation System Management (TSM) measures identified in the Draft Environmental Impact Statement to mitigate existing traffic congestion. They recommended that additional small-scale rail improvements be identified in consultation with NNEPRA to enable future service expansion along the Main Line. They expressed concern with some of the assumptions used in projecting public transportation ridership and noted that the methodologies and assumptions used to project mode choice and ridership on public transportation were outdated and should be reexamined with more current data. They expressed concern that the bus expansions proposed as part of the project, particularly the local fixed-route transit services, would not be sustainable without State funding, and recommended that the Department commit to funding the transit operations through the project's design year of 2025.

Mr. John Scruton (99 Sixth Street, Dover) suggested that Travel Demand Management programs such as paying employees to not drive alone or offering "location-efficient" mortgages that provide incentives for employees to live closer to work be implemented to reduce traffic across the bridges. He suggested that tourism revenue be applied to these efforts.

Mr. John O'Reilly (Chair, Newington Board of Selectmen) and Mr. Denis Hebert (Vice-Chair, Newington Planning Board) recommended that housing be constructed within the Pease International Tradeport as a means of reducing traffic crossing the bridges.

Ms. Eleanor Hendricks (401 Dover Point Road, Dover) recommended that the Lee traffic circle be improved to enhance the viability of NH Route 125 as an alternative route for Turnpike traffic.

Response: The Department acknowledges that the City of Dover has initiated a Congestion Mitigation Air Quality (CMAQ) improvement project entitled "Dover 13509" to connect the downtown area, Dover Transportation Center, and other prominent places of employment with the proposed Exit 9 Park and Ride facility. The Department acknowledges that this connection is an important link in the regional transit system and that the project may be under funded. The Department will continue to advocate for this project and will support the City in pursuit of additional CMAQ funding for the project.

The Department also acknowledges the support for the early implementation of the TDM and TSM elements of the Preferred Alternative and will strive to implement these elements prior to or in the early stages of construction. These TDM elements, which are intended as mitigation for the potential for increased congestion during construction, will provide a more balanced transportation system in the seacoast region and travel opportunities other than single occupant vehicles (SOV). These elements include new park and ride facilities in Rochester, Dover and Lee, expansion of bus and rail service, and support for employer-based measures. Although the suggestion of "location-efficient" mortgages to reduce commuter traffic within the project study area is a novel idea which private lenders in partnerships with municipalities may wish to explore, the Department proposes, as part of the Preferred Alternative, to help fund the seacoast area Transportation Management Association (TMA), known as Seacoast Commuter Options, for the duration of the Turnpike's construction or a maximum five-year period to work with and encourage employers to promote employee travel by means other than SOV's. In addition to area-wide ride-sharing and guarantee-ride-home programs, Seacoast Commuter Options is educating area employers and employees about the availability of employee-paid, pre-tax transportation benefits and employer-paid transportation benefits programs as incentives to not driving alone.

With respect to the suggestion that housing be constructed at Pease as a means to help reduce travel across the bridges, the Department acknowledges that mixed use developments offer opportunities to reduce daily vehicular traffic by combining trips and/or by substituting walking, bicycling and transit/trolley service for commuting and other travel purposes (e.g., shopping, social, recreational). At the Pease Tradeport, the generation of daily vehicular traffic has been reduced as a result of the implementation of transit service, employer-based strategies to reduce SOVs, the development of ancillary commercial activities (such as banking, convenience stores and restaurants) and the provision of pedestrian (sidewalk) and bicycle system connectivity. Since transit service within the study area and at the Tradeport will be expanded as part of the Preferred Alternative, additional reductions in vehicular traffic generated at the Tradeport can be expected. However, since current zoning at the Tradeport does not allow residential use, further reductions in daily vehicular traffic resulting from some employees residing at the Tradeport appears infeasible.

With respect to transit service, the methodology and assumptions which form the basis of estimating future transit ridership will be updated for presentation in the FEIS and will include recent ridership data, recent modeling enhancements and updated costs for parking, fuel and travel time.

Developing and maintaining a sustainable funding source for the preservation and improvement of the area's transportation system, transit included, is a challenge that transcends the Newington-Dover, Spaulding Turnpike improvement project. The need for sustainable funding has been recognized as an issue by both the Department during development of the New Hampshire Transportation Business Plan and by the State Legislature. The Department has proposed a maximum five-year commitment to fund the transit-related elements of the Preferred Alternative as mitigating elements to the potential for increased levels of congestion during construction and overall dependency on SOV travel in the region.

The limited capacity along NH 125 between Exit 12 of the Spaulding Turnpike in Rochester and the Lee traffic circle diminishes the viability of NH 125 as a suitable alternative route to the Spaulding Turnpike for many weekday peak period travelers, independent of traffic operations at the Lee traffic circle. In addition, commuters from the Rochester area traveling south to Portsmouth and communities along the I-95 corridor would not travel US 4 and NH 125 as an alternative route to the Turnpike.

25) Ms. Jennifer DeLong (Assistant State Coordinator, National Flood Insurance Program) noted that alterations proposed within special flood hazard areas should be coordinated with Newington and Dover to ensure that the project meets the National Flood Insurance Program (NFIP) requirements, since both communities participate in the NFIP. She also noted that if the Department determines that the proposed construction would have a negligible impact upon flood dynamics, further coordination with the Federal Emergency Management Agency would likely be unnecessary.

Response: Floodplain impacts were evaluated during development of the project and are documented in the EIS. The Preferred Alternative would affect a total of 3.9 acre-feet of 100-year floodplain volume. The majority of this impact (2.7 acre-feet) is associated with the expansion of the bridge piers.

The floodplain impacts are considered inconsequential in the context of the tremendous volume of Little Bay and will have a negligible effect on the base flood elevations in the area. Likewise, changes to the hydraulic characteristics in the channel would have negligible effects on tidal flooding.

A hydrodynamic model was built to analyze the potential effects of the project on the estuary and provided information on tidal heights throughout the estuary. The model compared the existing condition with the Preferred Alternative and predicted that the

pier extensions may change tidal maxima on the order of 0.1 to 0.2 inches, depending on the tidal condition and the location in the estuary. Similarly, current velocities and directions are expected to change only minimally. Thus, effects on local and regional flooding resulting from the additional fill in the Little Bay are considered to be negligible.

The Department has and will continue to coordinate the project with both Dover and Newington and will seek to further minimize, to the extent practicable, floodplain impacts during the project's final design.

26) Mr. James Yeames (409 Dover Point Road, Dover) noted that he was not notified of the Public Hearing and asked that a transcript of the meeting be provided him.

Response: The Department is required by law (RSA 230:17 & 230:18) to provide notice of the Public Hearing by certified mail to owners of property with the potential to be physically impacted by the proposed project. Although residents on the east side of Dover Point Road are not proposed to physically be impacted by the project, mailings were forwarded to the owners of Dover Point Road properties to advise them of the project's Public Hearing. In total over 600 mailings were sent to property owners and property interest holders, as well as state, local, regional agencies and interested individuals advising of the Hearing. Although notice to Mr. Yeames was inadvertently sent to the wrong address, Mr. Yeames did take advantage of the public comment period and submitted correspondence that is included in the Hearing transcript. A copy of the Public Hearing transcript is posted on the project's website titled www.newington-dover.com, and Mr. Yeames has been made aware of the posting.

27) Ms. Rosalie Veinott (23 Roberts Road, Dover) reported that a section of right-of-way fence between the Turnpike and Spur Road, in the vicinity of the toll plaza, was down and in need of repair.

Response: The section of fence has been repaired. The Department appreciates being made aware of the fallen section of fence.

28) Mr. Cliff Sinnott (Executive Director, Rockingham Planning Commission) and Ms. Cynthia Copeland (Executive Director, Strafford Regional Planning Commission) on behalf of the Seacoast MPO expressed concern that the computer visualizations created for the project likely satisfy Federal requirements, but were inadequate to satisfactorily convey to the public the scope of the proposed improvements. They suggested that additional visualizations be prepared of sufficient size and clarity to provide the communities with a better understanding of the relationship of the project to the surrounding area.

Ms. Nora Kelly (348 Dover Point Road, Dover) suggested that more computer animations of the proposed improvements be prepared.

Response: During the project's final design, additional coordination and meetings with the Advisory Task Force, as well as communities and neighborhoods directly affected by the project will be held to further discuss the project and better explain the project details as they are more fully developed. Additional visualizations to help illustrate the proposed improvements will be developed, if necessary, and presented at that time.

29) Mr. Cliff Sinnott (Executive Director, Rockingham Planning Commission) and Ms. Cynthia Copeland (Executive Director, Strafford Regional Planning Commission) on behalf of the Seacoast MPO recommended that the Department work proactively with tidal power companies to study and potentially facilitate, in the design of the bridges, the future placement of tidal power generation equipment on the new bridge or within the bridge area.

Response: The Department is amenable to consider studies and designs of tidal power generation equipment and systems that are developed by the tidal power companies. The Department's concern resides with any potential degradation and/or deterioration of the Little Bay Bridges and General Sullivan Bridge should turbines or equipment be directly attached to or located in close proximity to the bridges.

30) Mr. Cliff Sinnott (Executive Director, Rockingham Planning Commission) and Ms. Cynthia Copeland (Executive Director, Strafford Regional Planning Commission) on behalf of the Seacoast MPO noted their general concurrence that this project would not induce substantial growth. However, they expressed concern that the induced growth projected by the modeling proved to be relatively negligible. They noted anecdotal evidence suggests that the congestion at the bridges has been influencing development decisions for years. They concurred with the use of the REMI model for making socioeconomic predictions, but expressed concern with the manner in which the countywide model results (particularly the Rockingham County data) were interpolated to represent the project study area, and suggested this methodology be reviewed. They also noted concern regarding the assumptions used in estimating the percentage of wetlands within the socio-economic study area and potential wetland impacts that could be caused by the induced growth. Finally, they recommended that a Community Technical Assistance Program, more limited in scope than that implemented by the I-93 expansion project, be incorporated into this project. They noted the Spaulding Turnpike corridor would benefit from a program that focused on assisting communities in two specific ways: local implementation of the *Land Conservation Plan for New Hampshire's Coastal Watersheds (August 2006)* and local assistance to improve opportunities for workforce housing in the region.

Response: The Department acknowledges the Seacoast MPO's assertion that the project would not induce substantial growth. This is substantiated by the fact that growth has and continues to occur in the communities north of the Little Bay Bridges without regard for the congestion levels within the project area. While the delay associated with traffic congestion in the project area is certainly a factor in determining regional economic trends, the results of the Regional Economic Model, Inc. (REMI) suggest that other factors also influence growth in the area. Individuals and businesses make decisions based upon a complex set of factors related to economic benefit and quality of life such as housing costs, health care, environmental characteristics, safety/security, standard of living, shelter and social interaction. The EIS contains information about property values and local tax rates which are also critical factors used by people and businesses to evaluate options about how and where to locate. Thus, while anecdotal evidence may suggest that the chronic congestion on the bridges plays a role in people's economic decisions, traffic congestion is one of a number of factors, the balance of which likely outweighs the issue of congestion within the project area in determining regional growth patterns. It is also important to note that nearly all of the growth in the study area is expected to occur regardless of whether the Turnpike is improved or not, in response to other influences (such as the cost of housing) involving overall quality of life and continued economic prosperity found in New Hampshire. Further, it is not clear whether the additional growth that has been identified by the REMI model, and the associated land conversion, is growth that otherwise would not occur, or growth that would simply occur later in time if the project were not completed. A more thorough discussion of these factors (particularly housing costs) will be included in the Final EIS.

With regard to the treatment of Rockingham County data, it is important to note that the REMI model was used to estimate population growth on a county basis. Due to how model input data is collected by various Federal and State agencies, the county level is the smallest unit for measuring possible social and economic impacts. The model does not allow for analysis of population, employment and housing below the county level. A simple proportional approach was therefore used to compare and analyze potential economic impacts for the Rockingham County portion of the Socio-economic Study Area – which is a standard and accepted statistical practice for this type of analysis. However, given the concerns expressed by the Seacoast MPO and others, the sections of the Final EIS that discuss secondary growth issues will be updated to consider the effects of allocating 100% of the secondary growth to the

Rockingham County communities within the Socio-economic Study Area. Also, the methodology used to allocate the projected future growth and corresponding potential wetland impacts will be re-assessed and data updated in the Final EIS.

Due to the relatively minor level of secondary growth related to the project, the Department does not propose to incorporate a Community Technical Assistance Program (CTAP) for the communities in the area. The CTAP program established for the I-93 corridor has developed several practical resource booklets to help other communities statewide proactively plan and manage growth in their communities. These booklets, as well as, other pertinent material are available on the Department's website at http://www.rebuildingi93.com/content/ctap.

31) Mr. Scott Myers (Mayor, City of Dover), expressed support for the proposed mitigation package for the project noting the City Council and Mayor fully support the proposed mitigation elements.

Mr. Cliff Sinnott (Executive Director, Rockingham Planning Commission) and Ms. Cynthia Copeland (Executive Director, Strafford Regional Planning Commission) on behalf of the Seacoast MPO expressed support for the wetland mitigation package proposed for the project as it contained a mix of preservation and restoration opportunities. They also expressed support for the proposed conservation of the Tuttle Farm as part of the project's mitigation package.

Mr. William Tuttle III (151 Dover Point Road, Dover) and Mr. Kevin McEneaney (President, Strafford Rivers Conservancy) endorsed the preservation of the Tuttle Farm asking that the effort be expedited.

Ms. Anna Boudreau (Executive Director, Strafford Rivers Conservancy) expressed support for the Dover elements of the wetland mitigation package comprising preservation of the Tuttle Farm and land in the Blackwater Brook area.

Ms. Wendy Scribner (130 Henry Law Avenue, Dover) expressed support for the Dover elements of the wetland mitigation package, particularly funding for the preservation of the Tuttle Farm and land in the Blackwater Brook area. Ms. Scriber noted that the Tuttle Farm has a prominent presence in the community and its preservation will protect a rapidly disappearing farming tradition and the scenic views provided by the farm. She also noted that the Nature Conservancy, Audubon Society, and NH Natural Heritage Bureau identified that Blackwater Brook area as one of three watersheds within the Cocheco River watershed that was of exceptional habitat of regional significance.

Ms. Marcia Colbath (Chair, City of Dover Open Lands Committee) and Ms. Joyce Elkovarti (112 Bellamy Woods, Dover) endorsed the proposed preservation of the Tuttle Farm and land in the Blackwater Brook area, requesting that the efforts be expedited in light of the constant threat of development.

Mr. John Pike (Dean and Director, University of New Hampshire Cooperative Extension) endorsed the effort to permanently preserve the 120-acre Tuttle Farm noting the farm as historic, the oldest family farm in America, and an irreplaceable asset.

Ms. Dea Brickner-Wood (Great Bay Coordinator, Great Bay Resource Protection Partnership) supported the effort to permanently preserve the 120-acre Tuttle Farm noting the property contains a diverse habitat of tidal and non-tidal wetlands, streams, and prime agricultural soils. The property's permanent protection from further development will be a positive contribution to the overall water quality of the adjacent streams, rivers, and the Great Bay, as well as protect a regional historic and scenic resource.

Mr. Christopher Snow (10 Mast Road Extension, Dover), Ms. Barbara Rushmore (191 Spur Road, Dover) expressed support for the preservation of the Tuttle Farm.

Mr. Michael Garrepy (Long Hill Realty Investments LLC) expressed interest in discussing the sale of the Tsimekles property, which is located in the Blackwater Brook area and has been identified for potential preservation as an element of the project's mitigation package.

Response: The Department acknowledges and appreciates the community's support for the mitigation package presented for the project. In response to the property owner's request, the Department, in partnership with the City of Dover, has expedited the acquisition of a conservation easement on the Tuttle Farmstead to permanently preserve the 120-acre farm. The preservation was consummated on January 29th, 2007 with the conservation easements executed and property rights transferred to the City, the Department, and Strafford Rivers Conservancy.

The Department is working closely with the City to permanently protect the Tsimekles property, a 105-acre parcel located in the Blackwater Brook watershed that is undergoing the threat of development. Should an agreement with the City and developer to acquire the parcel or large portion thereof not be reached, the DEIS identified several other parcels in the Blackwater Brook area that are deemed worthy of preservation and permanent protection, which the Department will then pursue to fulfill the mitigation requirements of the project in Dover.

The Department will also continue to coordinate the restoration and preservation elements, as identified in the DEIS, with Pease, the Town of Newington, and the property owners of the mitigation parcels to finalize the mitigation requirements of the project in Newington.

32) Mr. Mark West (West Environmental, Inc.) and Mr. Vincent Frank (Chairman, Newington Conservation Commission) presented a preliminary review of the wetland application and compensation mitigation package for the portion of the project in Newington. They suggested additional information concerning temporary impacts to wetlands, as well as impacts within the tidal buffer zone are needed. They generally agreed with the components of the recommended mitigation package in Newington cautioning that a risk assessment regarding potential contamination needs to be completed prior to pursuing stream and wetland restoration work of Railway Brook. They also noted that restoration of segment A is more attractive than segment B, since Restoration Alternative A is further removed from the runway at the Pease Tradeport. They noted general support for the preservation of the Watson property and preservation of land in the Knight Brook area as elements of the wetland mitigation package, but urged the former drive-in theater site be eliminated from further consideration as a candidate site based on its lower ecological value. Lastly, they requested additional information demonstrating that the NHDES compensatory mitigation ratios are met to compensate for the amount of wetlands impacted by the project.

Mr. John O'Reilly (Chair, Newington Board of Selectmen) and Mr. Denis Hebert (Vice-Chair, Newington Planning Board) concurred with the support of the Newington Conservation Commission for the proposed stream restoration and recommended the elimination of the drive-in theater from further consideration as a mitigation site. They added that the name Railway Brook is not recognized and is locally known as either Flagstone's Ditch or Flagstone's Brook.

Response: The Department agrees that it is appropriate to identify impacts to the tidal buffer zone. This information has been developed and will be reported in the Final EIS and submitted as an addendum to the NHDES Wetlands Permit application.

The Department also agrees that temporary impacts to wetland resources must be identified. It is expected that all wetland impacts will be contained within the footprint as shown on the project wetland plans. However, additional temporary impacts may be required. These impacts are typically a function of construction sequencing and procedures, and will be determined during the final design or construction phase. As is standard practice for projects such as this, the Department will continue to track actual wetland impacts during final design and construction of

the project and will submit those updated impacts to the regulatory agencies for their review.

Additional work is being conducted to provide a conceptual design for the restoration of Railway Brook, and Alternative A is the preferred restoration option based on public comment and coordination with various resource agencies. As stated in the DEIS, a conservation easement on the Watson property is also a preferred element of the mitigation package in Newington. Should agreement not be reached on the Watson property, then the Department will pursue the preservation of two of the three parcels (or 60 to 70 acres) identified for preservation in the Knight Brook area. With regard to the former Drive-in Theater property, the Department will not pursue the former drive-in for mitigation.

The name "Railway Brook" derives from maps of the area developed by the US Air Force. Prior to the development of the Pease Air Force Base (AFB) in the 1950s, the watercourse identified as "Railway Brook" was a branch of Pickering Brook which flowed north to join the main stem of Pickering Brook, then east to discharge into the Piscataqua River. Topographic maps from that era show that Flagstone Brook was a relatively short stream located entirely north of Nimble Hill Road and was located in a different watershed which discharged to Tricky's Cove. With development of the AFB, the former branch of Pickering Brook was diverted to Flagstone Brook. The informal name "Railway Brook" is used in the DEIS and related documents to help distinguish the impacted stream reach located between Arboretum Drive and Nimble Hill Road from the true Flagstone Brook north of Nimble Hill Road.

33) Mr. Raymond Bardwell (199 Spur Road, Dover) noted that the proposed road reconfigurations in Dover would change the access to the Division of Motor Vehicles office on Boston Harbor Road. He asked that the intersection designs make accommodations for truck access to the facility, particularly on US 4 westbound at Spur Road.

Response: The Exit 6 proposed improvements at the US 4/Spur Road, Spur Road/local connector, and local connector/Boston Harbor Road intersections will be designed to safely and efficiently accommodate heavy commercial vehicles including tractor-trailer trucks.

34) Mr. Scott DeCost (General Manager, Fox Run Mall and Crossings at Fox Run) noted that the proposed elimination of Exit 2 would change traffic patterns on Fox Run Road directing much more traffic to its intersection with Woodbury Avenue. He expressed concern with the intersection's ability to handle the added traffic and asked that suitable improvements to the intersection be considered. He suggested a traffic signal also be considered on Woodbury Avenue at the Wal-Mart driveway to allow full access under signal control, which would alleviate some of the increase in traffic on Fox Run Road.

Response: The Seacoast Regional Travel Demand Model was used to model the existing and future traffic changes and assist in evaluating the improvement alternatives for the project. The changes in traffic patterns between Exits 1, 2 and 3 are expected to be more complex under the Preferred Alternative than simply diverting traffic from Exit 2 to Exit 3. For example, creating the Woodbury Avenue extension from Exit 3 to Arboretum Drive is anticipated to divert a substantial volume of traffic related to the Pease Tradeport that is currently using Exit 1 to travel north to use Exit 3. With this anticipated change in travel pattern, Exit 1 will have more available capacity and will become a more attractive route for some motorists destined to Gosling Road and Woodbury Avenue. Motorists currently using Exit 2 will divert to both Exits 1 and 3 once the Preferred Alternative is constructed.

The Department has reviewed the intersection of Woodbury Avenue and Fox Run Road. In order to accommodate the projected 2025 peak hour traffic demands at the signalized intersection, the improvements associated with the Preferred Alternative include modifying the existing right-turn lane on Woodbury Avenue eastbound to

accommodate both through traffic and right-turns. This modification will substantially increase the volume of traffic that can be processed by the existing traffic signal. The intersection is anticipated to operate acceptably at LOS C or better throughout the design year (2025) with the proposed improvements. The analysis has been updated to include vehicular trips associated with a proposed 7,135 square foot restaurant and 4,800 square feet of ancillary retail space to be located off Fox Run Road. The results from the updated analysis indicate that the Woodbury Avenue / Fox Run Road intersection will continue to operate acceptably at LOS C through the design year with the additional commercial development on Fox Run Road. As such, an additional traffic signal and break in the median on Woodbury Avenue at the Wal-Mart driveway are unnecessary.

35) Mr. Scott DeCost (General Manager, Fox Run Mall and Crossings at Fox Run) expressed concern that the elimination of Exit 2 and the related guide signs indicating "Fox Run Road" would remove the existing guidance provided for tourist related traffic to the mall. He requested suitable directional signs be placed at Exit 3 to guide motorists to the mall. He also requested consideration to allow the selective trimming or clearing of trees within the Turnpike right-of-way that have grown to obscure the mall's pylon sign.

Response: The Department is presently investigating the benefits of the Attraction Logo Program, similar to the Tourist Attraction Sign program enacted in the State of Massachusetts, where signs for specific, high volume attractions are installed on the freeway or Turnpike system to provide directional information to the traveling public. Should the Attraction Logo Program be implemented statewide, signage for the Fox Run Mall could be considered under the program.

As an element of the project's construction, the Department does not anticipate the need to undertake tree clearing or trimming in the area of the mall's pylon sign. As a matter of practice, the Department does not permit the clearing or trimming of trees that are located within the State right-of-way for the benefit of exposing signs located on private property.

36) Mr. David Scott (Ward Three Dover City Councilor, 220 Back Road, Dover) expressed concern for the residents that own land which will be impacted by the project and expressed hope that property acquired through the eminent domain process will be appraised to determine its fair market value and will be fully compensated.

Response: Any land or property that is impacted by the project will be acquired at fair market value based on an appraisal of the property's highest and best use in accordance with State and Federal law.

25 June 07
Date

Charles P. O'Leary, Jr.
Commissioner
N.H. Department of Transportation

S:\Newington\11238\MISC\ROTC11238.doc

REPORT OF THE SPECIAL COMMITTEE

FOR

NEWINGTON-DOVER, NHS-027-1(37), 11238

September 21, 2006 St. Thomas Aquinas High School, Dover

Upon the foregoing Petition, the Governor and Executive Council assembled on July 19, 2006, appointed:

Hon. Ruth Griffin, Councilor, District 3, Portsmouth
Hon. Raymond J. Wieczorek, Councilor, District 4, Manchester
Hon. Peter Spaulding, Councilor, District 2, Hopkinton

a Special Committee to hold a hearing in accordance with the provisions of Chapter 230:45, RSA, to determine whether there is occasion for the laying out of the highway.

On June 7, 2006 the Governor and Council appointed:

Leroy Syphers, Greenland
Raymond Curti, Dover
Richard Adams, Portsmouth

a Commission to serve as alternates to the Special Committee and to purchase the land needed for the project if approved.

Upon said hearings held at St. Thomas High School in the City of Dover, after interested parties appeared, and having heard and read all of the evidence the Special Committee received, for the accommodation of the public there is occasion for the laying out of the highway petitioned for and the limitation of access.

PROJECT DESCRIPTION

Given under our hands this 22nd day of August, 2007.

Ruth Griffin

Raymond J. Wieczorek ~~Raymond J. Wieczorek~~ RICHARD G ADAMS SPECIAL COMMITTEE

Peter J. Spaulding

- PUBLIC NOTICE -

NEWINGTON-DOVER, NHS-027-1(37), 11238

The Special Committee appointed by the Governor and Executive Council on July 19, 2006, to determine if there is occasion for the laying out of alterations to the Spaulding Turnpike from Exits 1 through 6 to include the Little Bay Bridges in the Town of Newington and City of Dover, will be meeting on Wednesday, August 22, 2007, at 2:00 pm at the NH Department of Transportation, 7 Hazen Drive, Room 114 in Concord, NH, to discuss the proposed project. This meeting is a public proceeding under RSA Chapter 91-A. The intent of the meeting is **not** to continue taking testimony as was done at the September 21, 2006, Public Hearing, but instead the meeting serves as a decision-making forum for the Special Committee. The public may observe the proceedings.

The Report of the Commissioner, which addresses all issues raised during the public hearing process, is available. Those interested in obtaining copies should contact Chris Waszczuk, Project Manager, at (603) 271-6675.

Any individuals needing assistance or auxiliary communication equipment due to sensory impairment or other disability, should contact William P. Janelle, PE, Administrator, Bureau of Right-of-Way, New Hampshire Department of Transportation, PO Box 483, Concord, NH 03302-0483, (603) 271-3222-TDD access: Relay NH 1-800-735-2964. Notification of the need for assistance must be made no later than August 12, 2007. This project will be administered according to the requirements of Title VI of the Civil Rights Act of 1964 and related statutes to ensure nondiscrimination.

PROJECT DESCRIPTION

Beginning at a point in the travel way of the Spaulding Turnpike (NH 16) north of Exit 1 (Gosling Road Interchange) in the Town of Newington, NH and continuing northerly approximately 3.5 miles to the Dover Toll Plaza, just north of Exit 6 (US 4) in the City of Dover, NH.

The layout involves the reconstruction and widening of the Little Bay Bridges and the Spaulding Turnpike. Between Exits 1 and 3, the Turnpike will be shifted slightly to the west and widened to create three lanes in each direction to match the section south of Exit 1. Between Exits 3 and 6, the Little Bay Bridges and the Turnpike will be reconstructed on new alignment and widened to create four lanes (three travel lanes and one auxiliary lane) in each direction. North of Exit 6, the Turnpike will be widened to create three lanes in each direction to match into the Dover Toll Plaza. The project layout continues and expands the Limited Access Right-of-Way designation that exists for the Turnpike interchanges and connector roadways, with modifications as appropriate to accommodate the proposed infrastructure improvements.

The layout includes the reconstruction, reconfiguration, and consolidation of the interchanges along the Spaulding Turnpike at Exit 2 (Fox Run Road), Exit 3 (Woodbury Avenue), Exit 4 (Nimble Hill Road and Shattuck Way), Exit 5 (Hilton Drive) and Exit 6 (US 4 and Dover Point Road). The Exit 2 ramps at Fox Run Road will be eliminated and traffic routed to Exit 3. Exit 3 will be reconfigured to a full service interchange with access provided to the Pease Tradeport and Arboretum Drive. A portion of Arboretum Drive, approximately 1000 feet in length, will be relocated to form a new signalized intersection at the terminus of the new southbound Exit 3 ramps and terminus of the extended section of Woodbury Avenue. Woodbury Avenue will be reconstructed from the intersection of Fox Run Road and extended through the Exit 3 interchange area. The Exit 4N median reverse direction ramps (previously discontinued under a separate project) will be eliminated. Exit 4 will be adjusted to maintain the on and off-ramps at Nimble Hill Road and Shattuck Way. Access to Nimble Hill Road from properties directly adjacent to the Turnpike and adjacent to the on and off-ramps will

be modified; a new local roadway will be constructed to provide access to the affected properties. Work on Nimble Hill Road will begin at the intersection with Shattuck Way and the new local road and continue approximately 600 feet to the Turnpike. The work to the exiting northbound Exit 4 ramps will be limited to the area directly adjacent to Shattuck Way. The Exit 5 ramps will be discontinued and a new local two-way Connector Road, from Wentworth Terrace and Hilton Park, under the Turnpike to connect with Dover Point Road will be constructed. The existing ramps from Cote Drive to the Turnpike will be discontinued.

Exit 6 will be reconstructed to a full service modified diamond-type interchange. The work on US 4 will begin at the eastern end of the Scammell Bridge and continue over the Turnpike connecting to Dover Point Road and ending at the intersection with Homestead Lane. Signalized intersections at the southbound ramps, the northbound ramps and Dover Point Road are proposed. The existing signalized intersection on US 4 with Boston Harbor Road and Spur Road will be modified to eliminate the traffic signal and restrict movements to right-turns only. A new local two-way connector road from Spur Road, beneath US 4, to Boston Harbor Road with access to the southbound on-ramps will be constructed.

The General Sullivan Bridge will be rehabilitated to function as a pedestrian/bicycle/recreational facility with the ability to carry emergency and maintenance vehicles from the Newington side. The northern approach embankment will be removed and the northern end of the bridge modified to accommodate the two-way local connector road and allow for continued pedestrian, bicycle and recreational use.

Also included are all potential mitigation and stormwater management areas as may be required to comply with State and Federal permitting requirements and best management practices as shown on the project plans. Further evaluation and coordination with State and Federal agencies will be required to determine the final components of the mitigation package, and in turn, the specific parcels, or portions there of, to be acquired.

The layout also includes the accommodation for a future elevated rail spur line that would extend from the east along the existing rail spur alignment over the Turnpike to the west into the Pease Tradeport.

The limitation of access previously established for the Spaulding Turnpike will be maintained and expanded to prohibit any non-interchange accesses. No access will be allowed to the Turnpike except via designated interchanges.

The project further identifies new Park and Ride facilities near Exit 9 in Dover, Exit 13 in Rochester, and near the US 4 and NH 125 intersection in Lee. Also, other travel demand management components including improvements to bus and rail, and support for employer-based measures will be considered.

Charles P. O'Leary, Jr.
Commissioner
NH Department of Transportation

Dated at Concord, N.H.
this 26th day of July, 2007.


VHB Vanasse Hangen Brustlin, Inc.