

Town of Canton, Massachusetts

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TOWN ADMINISTRATOR
WILLIAM T. FRIEL

March 28, 2007

Ian A. Bowles, Secretary
Executive Office of Environmental Affairs
MEPA Office, 100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

William Gage, Environmental Analyst
Executive Office of Environmental Affairs
MEPA Office, 100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

RE: Draft Environmental Impact Report
Westwood Station – EOE A #13826
University Avenue, Westwood, Massachusetts

Dear Secretary Bowles:

The purpose of this letter is to provide you with the comments of the Town of Canton (“Town”) on the Draft Environmental Impact Report (“Draft EIR”) for the proposed Westwood Station project (“project”), dated January 16, 2007 and submitted by Cabot, Cabot and Forbes (“proponent”).

During our review of the proponent’s Draft EIR and Expanded Environmental Notification Form (“Expanded ENF”), the Town identified several extremely serious problems with this massive project, including without limitation the following:

1. The proposed modifications to the existing I-95 SB/Dedham Street Ramp would significantly worsen traffic problems in Canton, in particular on Dedham Street, which is the primary access to the Kennedy Elementary School, Elm Street, and Greenlodge Street;
2. The proposed left turn lane at the Dedham Street/Washington Street intersection will have a direct, adverse impact on at least six adjacent homes and could require eminent domain takings, which would bring these homes even closer to Dedham and Washington Streets;
3. Such takings could cause these homes to become nonconforming for zoning compliance purposes;
4. A superior alternative is the S9 Alternative (described below). The S9 Alternative has been dismissed prematurely by the proponent without adequate consideration on the basis of a claim that certain state institutions will not permit the S9 Alternative, but the proponent has failed to

provide any evidence to substantiate that claim;

5. Other adverse transportation impacts of the project and specific traffic mitigation plans have not been adequately considered or documented;
6. Zoning and possible wetlands permits required for project work within the Town of Canton have not been finalized;
7. Safe transportation of chemicals for the project's wastewater treatment facility has not been assured;
8. Stormwater and economic impacts of the project have not been adequately addressed;
9. The proposal to terminate Canton Street in Westwood using a cul-de-sac will have a severe adverse impact on public safety, will limit mutual aid along Canton Street/Dedham Street, and will cause a great inconvenience to residents and businesses of the Town; and
10. The Draft EIR lacks details regarding the improvement and expansion of Dedham Street, of the I-95 bridge, the Neponset River bridge and the MBTA/Amtrak bridge. Plans for the improvement and/or expansion of these bridges should be developed as part of the proponent's Final Environmental Impact Report ("Final EIR").

The project, which is extraordinarily massive in size and scope, will have severe, negative impacts on the Town. In our opinion, the proponent has made no modifications to the size and scope of the project despite numerous and overwhelming comments to do so. We therefore urge you to disapprove the project in its currently proposed configuration for the reasons described below.

I-95/DEDHAM STREET RAMP ISSUES

The most pressing concern for the Town is the immediate impact of the proposed I-95/Dedham Street Ramp. The Town engaged Design Consultants, Inc. ("DCI") to perform a peer review of the Ramp Justification Study ("RJS") prepared by Traffic Solutions, Inc. ("TSI"). The "Traffic Peer Review Ramp Justification Study I-95 at Dedham Street, Canton, Massachusetts, dated August, 2006" (the "Peer Review Study") is included as an attachment to this letter.

The Peer Review Study included a traffic review of the following reports and memoranda (provided by TSI in response to requests for additional information by DCI during its peer review on Dedham Street and intersecting roads and neighborhoods):

- Ramp Justification Study, I-95 at Dedham Street, Canton, Massachusetts, Prepared by: Traffic Solutions, Inc., April 19, 2006
- TSI Memorandum-Road User Survey, July 6, 2006
- TSI Memorandum-Additional travel time runs, July 13, 2006
- TSI Memorandum-Level-of-Service, July 21, 2006
- TSI Memorandum-Level-of-Service, July 24, 2006
- Expanded ENF, June 15, 2006

TSI has presented several regional access alternatives for the project, including Alternative S9 (the "S9 Alternative"). The S9 Alternative would involve construction of a new interchange that would connect to University Avenue by entering Yale Street to I-95 south of the I-95/I-93 interchange and north of Dedham Street/Canton Street. This connection would be in lieu of the proposed construction of the I-95 NB/Dedham Street Ramp.

The proponent asserts that economic and institutional concerns prohibit the proponent from pursuing the S9 Alternative further, even though it would greatly mitigate the project's adverse impacts upon the Town. Notwithstanding the disadvantages claimed by the project proponent, the Town submits that the S9 Alternative would significantly reduce traffic in downtown Canton and on Dedham Street while providing adequate access to the Shawmut Business Park. There are no insurmountable problems with use of the S9 Alternative, which would require only one ramp rather than two and would be superior to the proposed new I-95 NB/Dedham Street off ramp in several respects.

The project proponent dismissed the S9 Alternative out of hand because of claimed environmental concerns and traffic flow issues. In its September 21, 2006 letter, the Town urged you to require that the S9 Alternative be thoroughly analyzed in the Draft EIR, including without limitation preparation of a full traffic study with computer modeling. To date, that full traffic study has not been provided, and the Town again urges you to require that study, together with design and construction cost estimates and permitting process information. The Town has included an attachment to this response summarizing the town findings relative to the S9 Alternative.

OTHER TRANSPORTATION ISSUES

The Town urges you to consider the following additional issues:

1. Five (5) Canton intersections are included in the study area and Levels-of-Service are provided for existing conditions. The Washington Street/Dedham Street intersection is presently operating at Levels-of-Service E-F in the peak hours. The project will only worsen the situation by increasing delays and queues. This issue is not addressed in the Draft EIR and no mitigation for this location has been provided.

Although the Town and the proponent discussed mitigation measures for the Washington Street/Dedham Street intersection, the proponent has failed to propose any adequate mitigation measures for these five intersections. Such mitigation measures should require the proponent to design a mitigation plan to address these traffic issues and to submit that plan to the Town. The proponent has failed to submit any such plan for Town consideration or make any good-faith effort in addressing these traffic issues.

2. The project proponent should use holiday season trip generations for the retail portion of the proposed development, as December numbers are 40% greater than the average month. Additional traffic at night and on the weekends and the effect of three nearby hotels on off-peak traffic must also be analyzed. Despite numerous requests, the Town has received no information regarding holiday season traffic or off-peak traffic.
3. The Washington Street/Route 138 and the Randolph Street/Route 138 intersections are included in the study area, but the Washington Street/Pleasant Street and Washington Street/Randolph Street intersections have not been adequately addressed. Because of the massive size and scope of the project and because those two intersections are between Dedham Street and Route 138, we urge you to require that the Pleasant Street and Randolph Street intersections be included in the study area.
4. Increased truck traffic on Dedham Street has not been addressed, especially with regard to the proposed I-95 off-ramp. Possible truck prohibitions on Dedham and Chapman Streets with alternate truck routes should also be discussed in the Draft EIR because such traffic has a greater effect on roads and neighborhoods than ordinary vehicles. The proponent has not provided any such analysis.
5. With regard to trip distribution, Figures 27, 31 and 33 as shown in the Expanded ENF, indicate

significant added trips at the Dedham Street/Washington Street intersection, but no trips have been added to the Route 138/Washington Street and the Route 138/Randolph Street intersections.

6. In light of the massive size and scope of this project, there will be an impact upon traffic in the Town caused by the proponent's construction of the project, including increase of construction vehicles, trucks and equipment, materials and workers. The proponent has failed to account for or to identify to the Town the impact of the construction of the project will have upon the Town.
7. Revisiting the actual effect of the project on the streets in Canton once the project is completed is an important and necessary step to ensure the safety and welfare of the Town's residents. In the proposed Traffic Monitoring Program (TMP), the proponent stated that the project will provide driveway counts for two years after the project has been fully occupied and, if the project is generating more traffic than anticipated, the proponent will revisit the off-site improvements. If additional improvements are required, the proponent proposes to work in coordination with Mass Highway and the Town of Westwood. The proposal is inadequate. Future traffic monitoring must also include counts on Canton streets, especially Dedham, Elm, and Greenlodge Streets, as future off-site improvements may be required within the Town of Canton. The Town further urges that you require the Traffic Monitoring Program to include, at a minimum, reports submitted by the proponent or its successors annually and at the completion of each phase of the project. The TMP must be an enforceable plan to safeguard Canton including identifying the responsible party, funding source, and schedule for any negative impact "correction" including penalty provisions if corrections are not made.

In summary, the Town reiterates that these transportation issues are of legitimate concern to the Town and its residents. Any failure by the proponent to address these issues would illustrate the proponent's lack of commitment and sincerity in addressing the Town's concerns.

CANTON LAND ISSUES

There are parcels within the project at the northeast corner that are within Canton Town limits as shown on Canton Assessors Maps 27 and 36. The parcels and owners are:

- 36-2 Department of Conservation and Recreation
- 36-4 Department of Conservation and Recreation
- 36-3 CRFI/Doherty Blue Hill Drive LLC
- 27-29 Mass Bay Transportation Authority

Most of the proposed work on this land is construction of a stormwater detention basin and landscaping. Runoff from the project will enter the Neponset River. The project proponent must submit a request to the Town under Chapter 81, § 21 to connect the currently designed northbound slip ramp to Dedham Street, if the S9 Alternative is not adopted. The project proponent must also request the Canton Building Commissioner to make a determination whether a special permit and/or Use Permit will be required from the Canton Board of Appeals for that portion of the project in Canton

WASTEWATER ISSUES

Phase II development includes construction of a wastewater treatment facility located in the northeast corner of the site and a soil absorption system in the central portion of the site. Data must be presented to show that effluent from the leaching field will not generate significant levels of phosphorous and nitrogen that could migrate to the Neponset River over time.

The proposed process diagram for the wastewater treatment plant, Figure I-Appendix G of the Expanded ENF, shows the storage of methanol and chemicals for coagulant, and alkalinity adjustment. The Town is

concerned as to how these chemicals will be delivered to the wastewater site. Will Canton streets be used to truck these chemicals to the plant? There is no data presented as to the quantity of chemicals needed, delivery schedule and proposed delivery route. The proponent must be required to identify the specific delivery route, delivery schedule and type and quantity of chemicals in order to assure public safety.

STORMWATER ISSUES

The Town has reviewed the calculation for the drainage improvements, storm water management plan, and the operation and maintenance (“O&M”) plan. The O&M plan is inappropriately vague in regard to who bears responsibility for these matters. (The plan states only “project proponent.”) The plan must identify a specific responsible party.

The proponent must develop a stormwater monitoring program to evaluate the effectiveness of the Best Management Practices at the project site to remove sediment and pollutants. Currently, the Neponset River Watershed Association (“NepRWA”) conducts water quality measurements of the Neponset River at quarterly intervals near the project site. The proponent should be required to coordinate its monitoring program with NepRWA.

ECONOMIC ISSUES

The cost of construction of the proposed project is an estimated 1.8 billion dollars. While some materials and products may be purchased from Canton businesses during construction, the Town is concerned about the long-term negative impact to the Canton business community. These concerns include, without limitation, Canton businesses relocating to Westwood Station, and/or customer/client demand shifting from Canton to the project stores and businesses. Both of these impacts would reduce the variability and vitality of business in Canton and would reduce tax revenue for the Town. Such a result would be particularly disturbing given the Commonwealth’s recent PWED Grant to the Town of Canton, designed to revitalize the economic viability of Canton’s downtown business community. Another adverse impact, voiced by Canton businesses located on Dedham Street adjacent to the project area, is the increased, negative traffic effects on those businesses, their customers and their employees. The proponent has provided no response as to how the project will affect the Town’s business community, no evidence that the project is consistent with planning goals and no basis for how the project will benefit the region. The Town requests that the proponent at a minimum provide the Town with these planning goals and reports that the project will benefit the region on which it bases its assertions.

The Town also is concerned that an additional impact of this massive project may be to change land use densities associated with Canton properties in the vicinity of the project, resulting from potentially different uses of the Cumberland Farms facility and Shawmut Business Park. In order to address these concerns, analysis of business/customer impacts for adjoining communities and changes in property values should also be included in the proponent’s Final EIR. The proponent should be required to review the ongoing project every two years and report to MEPA pertinent details for each new building, including without limitation floor area leased or purchased, expected tenants, type of business, number of employees and anticipated customers per day/month/year.

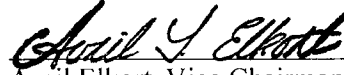
The Town first outlined the Town’s concerns with the project in its September 21, 2006 letter. For the reasons stated above, we reiterate those concerns and urge you to disapprove the project as presently proposed. Alternatively, at a minimum, the proponent should be required by MEPA to complete a Final EIR that addresses the Town’s concerns. The severe, adverse impacts on the Town of Canton, its residences and its citizens and neighborhoods, of a project of the size and scope contemplated here - a combined 4.6 million square feet of usage that dwarfs that of the South Shore Plaza - simply cannot be overstated.

Thank you for your consideration of these comments.

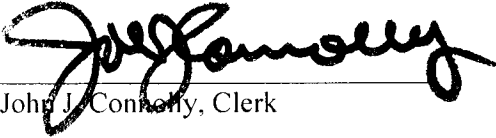
Very truly yours,
Board of Selectmen
Town of Canton



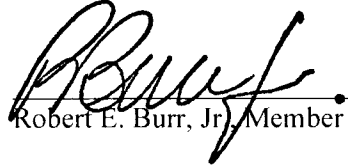
Victor D. Del Vecchio, Chairman



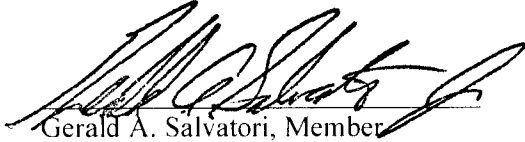
Avril Elkort, Vice Chairman



John J. Connelly, Clerk



Robert E. Burr, Jr., Member



Gerald A. Salvatori, Member

Enclosures: (4)

cc: The Honorable Stephen Lynch
The Honorable Brian Joyce
The Honorable William Galvin
The Honorable William Keating
Secretary of Transportation
Chief Engineer, Mass Highway Department

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Addendum “A”

Canton Conservation Commission

"To Preserve and to Protect"

POST OFFICE BOX 56
CANTON, MASSACHUSETTS 01912
781-821-5035

March 28, 2007

Mr. William F. Friel, Executive Secretary
Town of Canton
801 Washington Street
Canton, Ma 02021

Re: CC&F Access Proposals

Dear Bill:

This letter is to outline the position that I would propose to the Canton Conservation Commission regarding the proposed north bound slip ramp from US Route 95 and the alternative S9, which involves a fly over. Please understand that at this time that the following position is not the position of the Commission as the Commission as a matter of policy takes no position on projects that are not before it. Also be advised that the information that I have seen suggests that the applicant will be funding the access but will be a state project. This means the Article XV (the Town of Canton Wetland By-law) will not be in effect and the applicant will be filing for permits under state and federal laws.

In general the entire I-95 corridor in Canton from the Sharon line to Milton is in the Fowl Meadow & Ponkapoag Bog ACEC (Area of Critical Environmental Concern), River Front Area, NHESP Estimated Habitat of Rare and Endangered Species, extensive wetlands and Zone II's of Public Water Supply Wells. Construction in anyone of these areas would be challenging to permit due to the environmental concerns.

In particular the area along the easterly side I-95 south of Dedham Street has an extensive storm water drainage system, which drains most of Dedham Street and the Shawmut Road industrial park. This system discharges into a Bordering Vegetated Wetland of an Intermittent Stream, which receives the storm water, and discharges under I-95 to the wetland system associated with the Neponset River. This stream and associated wetlands appear to be in the proposed location of the northbound slip ramp. This area is also within the River Front of the Pequinit Brook which is located just to the north of Dedham Street and any proposed project will have to meet all of the standards set forth in the Act.

If a permit were issued for the slip ramp, the proponent would have to relocate the drainage system and replicate the Bordering Vegetated Wetland that would be filled to construct the ramp. The amount of disturbance of wetland resources created by the proposed project would mean that the applicant would have to file the project as a Limited Access Project. The limited project provisions of the Wetland Protection Act provides the authority (Commission) with the discretion to allow certain work to proceed although the work does not meet performance standards set forth in the Act. This Policy allows projects in which wetlands are crossed with a new roadway to provide access to otherwise unreachable upland areas. However, the proposed project must satisfy the general requirements of a limited roadway, which means that no reasonable alternative means of access from a public way to uplands of the same owner. As everyone is aware there exist any number of ways to enter Westwood and Canton from I-95 with out the needless destruction of resource areas to construct another north bound exit. That being said the proponent can propose to construct alternative S9, which can be constructed with less environmental, and drainage impacts.

In conclusion, the best alternative is to improve existing exits from I-95 to both Westwood and Canton. If you have any questions or need additional information, please feel free to call upon me.

Very truly yours, *Bob*

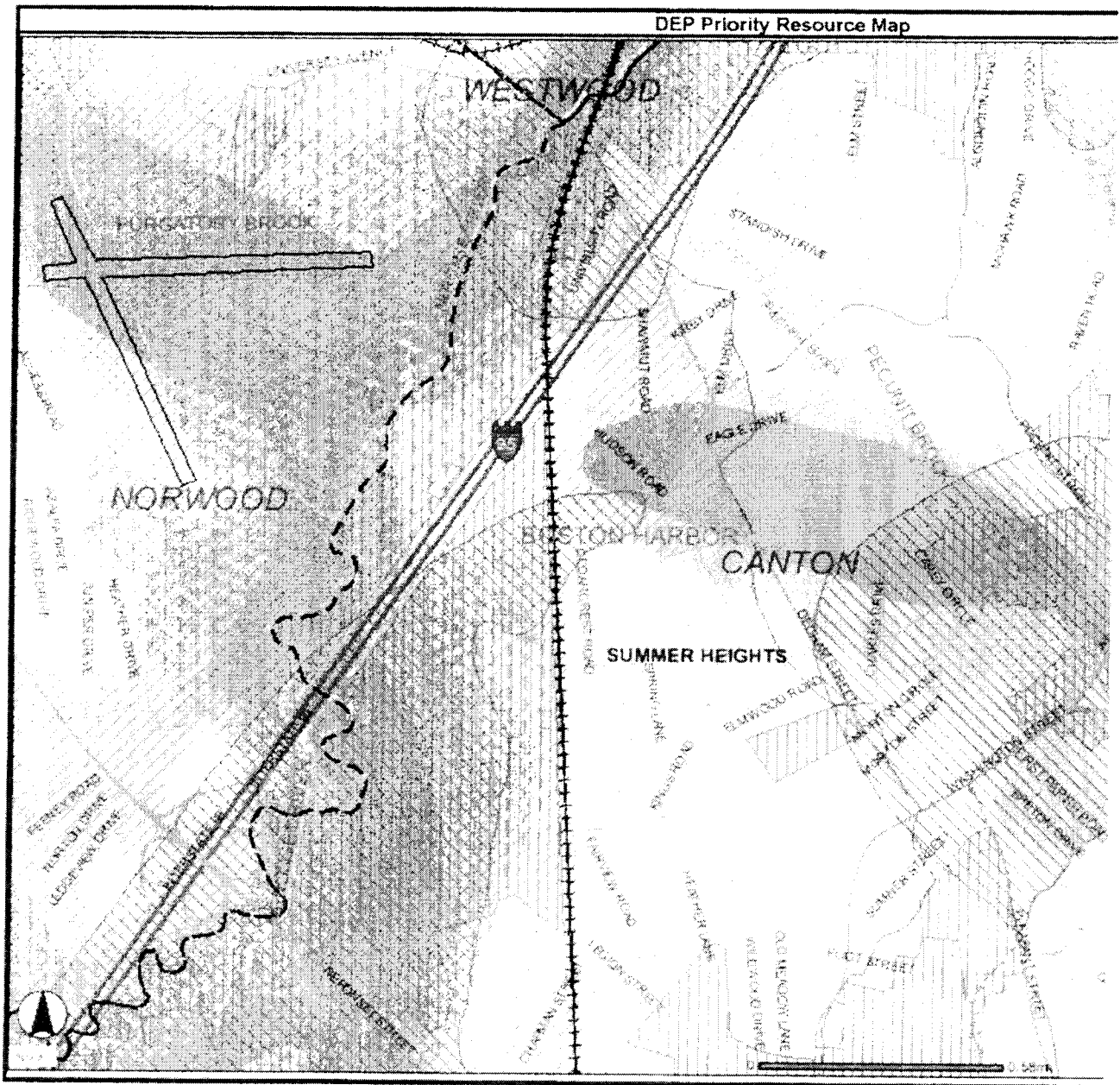
Robert Murphy, as agent to the Commission

Attachments

Addendum “B”



Addendum “C”



Addendum “D”



Traffic Peer Review
Ramp Justification Study
I-95 at Dedham Street
Canton, Massachusetts

August, 2006



PREPARED FOR:
Town of Canton

PREPARED BY:

Design Consultants, Inc.
Consulting Engineers



Transportation, Civil Engineering, Land Surveying

265 Medford Street, Somerville, Massachusetts 02143 ~ Telephone (617) 776-3350 ~ FAX (617) 776-7710



August 15, 2006

Mr. Michael Trotta
Superintendent, Department of Public Works
Town of Canton
801 Washington Street
Canton, MA 02021

Dear Mr. Trotta:

DESIGN CONSULTANTS, INC (DCI) is pleased to submit this Traffic Peer Review of the Ramp Justification Study (RJS) for I-95 at Dedham Street in Canton, MA. The peer review includes a traffic review of the following reports and memoranda:

- Ramp Justification Study
I-95 at Dedham Street
Canton, Massachusetts
Prepared by: Traffic Solutions, Inc.
April 19, 2006
- TSI Memorandum – Road User Survey – July 6, 2006
- TSI Memorandum – Additional travel time runs – July 13, 2006
- TSI Memorandum – Level-of-Service – July 21, 2006
- TSI Memorandum – Level-of-Service – July 24, 2006
- TSI Memorandum – University Road – July 28, 2006
- Expanded ENF – June 15, 2006

The memorandums were prepared to provide additional information requested by DCI during our peer review and a request by the Town with regard to University Road.

Please call me if you have any questions.

Sincerely,

William D. Carlson
Senior Transportation Engineer

CC: Dan Donahue
Town Engineer

EXECUTIVE SUMMARY

DCI has performed a peer review of the Ramp Justification Study, I-95 at Dedham Street, prepared by Traffic Solutions Inc. (TSI), dated April 19, 2006. DCI has reviewed the following issues presented in the study:

- Study area
- Existing Conditions
- Seasonal Adjustment Factor
- Traffic Growth Factors
- License Plate Survey
- Time Travel Study
- Future Traffic Operations - No Ramp
- New Off-Ramp Travel Patterns
- Future Traffic Operations – With Ramp
- Future Traffic Operations – With Ramp and Proposed Westwood Station

The Ramp Justification Study (RJS) area within Canton is adequate and the existing conditions for the study area is appropriate. As indicated in Table 4 of the RJS, many of the study area intersections are presently experiencing poor Levels-of-Service. DCI has randomly checked volume input for the capacity analyses and has not found any significant errors in the capacity analysis.

A seasonal adjustment factor of 1.09 used in the RJS is appropriate based upon DCI's investigation of MassHighway permanent count station data.

It is DCI's opinion that the original license plate survey information was lacking in level of confidence as if it was performed for only one day. DCI has discussed this issue with TSI and several additional surveys were provided. The license plate surveys indicated that cut-through traffic trying to avoid the I-95/I-93 interchange is minimal. The surveys also indicated a significant portion of the I-95 NB off ramp traffic to Neponset Street EB is headed to Chapman Street and Cedarcrest Road, Washington Street and Dedham Street.

A single travel time study was provided in the RJS to determine I-95 NB cut-through traffic destined for I-93. This time travel study was performed on only one morning and therefore DCI requested that TSI provide additional time travel runs. The original and additional time travel runs indicated greater travel times to cut-through Canton local streets than to stay on I-95 NB to I-93, and therefore cut-through traffic was minimal.

To project traffic volumes to future years an annual growth factor of 0.5 was utilized in the RJS. DCI's research of historic traffic volumes indicates that this factor is conservative and appropriate for the Canton area.

Traffic operations for the study area intersections were provided for the year 2011 both with and without the proposed I-95/Dedham Street off-ramp. The most significant impact of the I-95/Dedham Street off-ramp will be the reduction of morning peak hour

traffic on Neponset Street, Chapman Street, Washington Street and Dedham Street. These traffic volume reductions will be a direct function of how traffic is flowing along I-95 NB at its approach to the I-95/I-93 Interchange. If significant traffic back ups occur on I-95 NB, drivers destined for Washington Street, Randolph Street, Route 138 may revert back to using local streets.

A recent license plate survey by TSI indicated significant cut-through traffic from Chapman Street to Fairview Road to Cedarcrest Road to Dedham Street is presently occurring. This is a result of significant traffic back ups on Chapman Street. DCI agrees with TSI that with the proposed I-95 NB/Dedham Street ramp, this cut-through traffic should be reduced significantly.

Dedham Street SB traffic volumes will increase significantly during the peak hours as driving will remain on I-95 NB to the new off-ramp to Dedham Street to Washington St EB. Projected Levels-of-Service at the signalized Washington Street/Dedham Street intersection with this proposed ramp are "F" in the AM peak hour and "D" in the PM peak hour with significant increases in queues for the Dedham Street SB approach. No mitigation for this intersection has been provided in the RJS. Improvements such as providing a two-lane approach for Dedham Street SB should be considered.

The Randolph Street approach at Washington Street will continue to experience Level-of-Service 'F' during the peak hours with significant queues. A signal warrant analysis should be prepared to determine if traffic signalization is appropriate at this location.

The issue of increases in truck traffic, especially on Dedham Street, has not been addressed in the RJS. This can be addressed in the Expanded ENF for Westwood Station. A prohibition of through truck traffic on Dedham Street should also be investigated.

INTRODUCTION

Cabot, Cabot & Forbes (CCF) is proposing a mixed-use development (Westwood Station) on land adjacent to the Route 128 MBTA station and parking garage in Westwood, MA. This development will consist of approximately 4.58 million square feet of retail, office, residential and hotel uses. With this development, projected travel patterns indicate the need for better access/egress to I-95 in Canton. The project proponent, CCF, is proposing to design and construct a Dedham Street off-ramp from I-95 northbound as part of the infrastructure improvement package for the Westwood Station development. The proposed off-ramp will be located adjacent to the Shawmut Business Park property. The ramp will consist of a 1,200-foot long, single lane ramp that will widen to two lanes at its intersection with Dedham Street. It is anticipated that this ramp will be signalized at its intersection with Dedham Street.

Town of Canton officials are concerned about cut-through traffic that presently uses local streets to avoid daily congestion that occurs at the I-95/I-93 interchange. They are also concerned about potential traffic impacts with regard to the proposed I-95 Dedham Street off-ramp.

The Ramp Justification Study, prepared by Traffic Solutions, Inc. (TSI), presents traffic patterns, traffic volumes and capacity analyses to assess the traffic impacts of the proposed ramp within the Town of Canton. The ramp study included extensive data and traffic modeling. Traffic impacts within the Town of Canton were evaluated for existing conditions, 2011 No-build conditions, 2011 conditions with the new I-95 off-ramp and future 2011 conditions with the ramp and the proposed Westwood Station development.

The study area included 11 local streets and 17 intersections within the Town and those are listed in Section 2.0 of the study report. In addition to recording traffic volume data within the study area, TSI recorded travel times for various routes through Canton and performed a roadside license plate survey to estimate traffic diversions from I-95. A timed travel study was also performed to determine if traffic is bypassing the I-95/I-93 interchange due to congestion.

STUDY AREA

The study area included the following intersections:

- Neponset Street at Chapman Street
- Washington Street at Neponset Street
- Washington Street at Church Street
- Washington Street at Sherman Street
- Washington Street at Chapman Street
- Washington Street at Dedham Street
- Washington Street at Pleasant Street
- Washington Street at Randolph Street
- Washington Street at Pecunit Street

Route 138 at Randolph Street
Route 138 at Washington Street
Route 138 at Greenlodge Street
Route 138 at Royall Street
Dedham Street at Shawmut Business Park
Dedham Street at Elm Street
Elm Street at Pecunit Street
Greenlodge Street at Elm Street

It is DCI's opinion that the study area is adequate in determining the proposed ramp's traffic impacts within the Town of Canton.

PEAK HOUR TRAFFIC VOLUMES

Turning movement counts were performed at the study area intersections in January and February 2006 from 7-9 AM and 4-6 PM.

The recorded peak hour volumes were adjusted for seasonal variation by utilizing an adjustment factor of 1.09. This adjustment factor was based on daily count data obtained from MassHighway permanent count stations.

DCI has researched count data from MassHighway permanent count stations and determined that the 1.09 seasonal adjustment factor utilized by TSI is appropriate.

EXISTING CONDITIONS

Capacity analyses were used to determine Levels-of-Service at the study area intersections for the AM and PM peak hours. Level-of-Service (LOS) describes the quality of traffic flows through an intersection with LOS "A" at best with minimal delays, to "F" at worst, with long delays and traffic demand exceeding capacity.

Table 4 of the RJS indicates poor Levels-of-Service (LOS 'F') at the following intersections for existing conditions:

Washington Street/Dedham Street
Route 138/Randolph Street
Route 138/Washington Street
Washington Street/Nepenset Street
Washington Street/Randolph Street
Chapman Street/Washington Street
Church Street/Washington Street
Pecunit Street/Washington Street
Route 138/Greenlodge Street
Dedham Street/Shawmut Road
Dedham Street/Elm Street
Sherman Street/Pleasant Street

DCI has randomly checked volume input for the capacity analyses and has not found any significant errors.

FIELD OBSERVATIONS

DCI personnel visited the study area during the AM and PM peak periods and noted the following traffic conditions:

AM Peak Period

- Dedham Street traffic experienced long queue delays on its southbound approach to Washington Street. Washington Street EB traffic also experiences long queues at this intersection.



- Dedham Street traffic northbound backed up significantly from Canton Street to Maplecroft Road, a distance of over 0.5 miles. This is due to the heavy volumes destined for Westwood.



- Chapman Street on its approach to Washington Street experienced long delays and excessive queues (15-20 vehicles) due to the lack of acceptable gaps in Washington Street traffic.

PM Peak Period

- Dedham Street experienced long queues and delays on its approach to Washington Street.
- It was also noted that due to the poor Level-of-Service and long queues on Dedham Street, SB vehicles utilized Elm Street to Pecunit Street to Washington to avoid the Dedham Street/Washington Street signalized intersection.
- The Randolph Street approach to Washington Street experienced long queues and delays.

LICENSE PLATE SURVEY

A license plate survey was conducted to determine existing travel patterns through Canton and to determine if traffic is diverting from I-95 onto local roads due to congestion at the I-95/I-93 interchange.

License plates are recorded at various stations along a survey route and then matched up to determine travel patterns within a survey area. A license plate survey is a standard method used in traffic engineering to determine travel patterns within a study area.

During the AM peak period the license plate survey indicated that 26% of traffic exiting I-95 northbound to Neponset Street eastbound travels to Chapman Street. Only 6% of this traffic went to Dedham Street and 11% went to Washington Street northbound.

A major portion of Washington Street traffic (30%) originating south of Canton is destined to Dedham Street and points west.

During the PM peak hour period the license plate survey indicated the following:

- A significant amount (37%) of Canton Street traffic utilized the existing I-95 southbound on-ramp at Dedham Street.
- A very small amount of Washington Street traffic (2%) traveled to the I-95 southbound on-ramp at Neponset Street.

The license plate survey concluded that there is little Interstate cut-through traffic between I-95 and I-93 using the Canton roadway system.

The license plate survey was only done on one day and such a small sample provides a low level of confidence in the resulting travel patterns. This issue has been discussed with TSI, and additional surveys were performed in June 2006. The latest license plate surveys were provided in a technical memorandum and the new information supports the initial travel pattern results.

TRAVEL TIME STUDY

A travel time study was performed to determine if I-95 traffic uses Canton streets to cut through to I-93 to avoid congestion at the I-95/I-93 interchange. The two alternative routes are: 1) I-95 to I-93 via the I-93/I-95 interchange; and 2) Neponset Street (I-95 Exit 11) to Chapman Street to Washington Street to Route 138 and to I-93. Travel time runs were performed on these two alternate routes during the AM peak period on February 15, 2006. Using Canton streets resulted in a 6 minute longer travel time than using the I-93 and I-95 interstate route.

The travel time study was performed on one particular day. The TSI report did not specify the number of travel time runs that were performed and the confidence level of the results cannot be determined. The ITE Manual of Traffic Engineering Studies provides sample size requirements based upon average travel speeds. It is recommended that TSI use this reference for the travel speed study and provide additional travel time runs. DCI has discussed this issue with TSI and additional travel time runs were performed in June/July. The new travel-time runs included Neponset Street WB to I-95 NB, to the location of the proposed off-ramp, Neponset Street EB to Washington Street NB to Dedham Street to the location of the off-ramp and the reverse of those routes in the PM peak hour. The additional travel-time runs indicated that it is quicker to remain on the I-95 and I-93 highway system than to use local streets to by-pass the interchange. The new travel time runs were performed during summer conditions, which may skew the results as I-95 NB traffic volumes are lower and less congestion occurs.

FUTURE CONDITIONS

This section of the Ramp Justification Study projected 2006 traffic volumes to 2011 traffic volumes by utilizing a growth factor of 0.5%.

DCI has researched historic traffic volumes collected by MassHighway which indicate a slight decline in traffic volumes in the area and therefore using a growth rate of 0.5% is conservative and appropriate.

TRAFFIC OPERATIONS (NO RAMP)

Capacity analyses were performed for the study area intersections for 2011 conditions without the new Dedham Street off-ramp. Levels-of-Service are presented in Tables 7 and 8 of the report. Degradations in Levels-of-Service occurred at two of the study area intersections: Neponset Street/Chapman Street and Route 138/Royal Street. These degradations were a direct result of traffic volume increases due to background growth.

Levels-of-Service improved at Route 138/Washington Street and Route 138/Randolph Street intersections as the capacity analysis assumed intersection improvements currently under construction were in place.

NEW OFF-RAMP TRAVEL PATTERNS

The report presents anticipated changes in travel patterns due to the new I-95 Dedham Street off-ramp making certain connections more efficient. The assumption that more significant changes in travel patterns will occur during the AM peak hour than the PM peak hour is appropriate given the I-95 northbound volume in the AM peak hour. Table 9 of the RJS presents changes in peak hour volumes due to the proposed I-95/Dedham Street off-ramp. The table indicates that traffic volumes on Washington Street NB will be reduced by 22-33% and Dedham Street NB traffic will be reduced by 35% in the AM peak hour. Traffic volumes on Neponset Street and Chapman Street will also be reduced significantly.

DCI has spent significant time with TSI with meetings as recently as last week to discuss reviewing methodology for re-assignment of peak hour traffic along the affected Canton Streets and is now in agreement with the revised travel patterns. While the ramp will reduce traffic on several streets, traffic volumes on Dedham Street will increase.

Table 10 of the traffic report presents Levels-of-Service for the study area intersections for 2011 with the I-95/Dedham Street off-ramp in place.

While some Levels-of-Service improve or stay the same the Level-of-Service at Washington Street/Dedham Street drops from "E" to "F" in the PM peak hour with an increase in delays from 73 seconds to 88 seconds. At the Washington Street/Pleasant Street intersection, the Level-of-Service in the AM peak hour drops from "B" to "C". The Washington Street/Randolph Street intersection remains at Levels-of-Service "E" and "F" during the peak hours.

FUTURE CONDITIONS WITH OFF-SITE IMPROVEMENTS

This section of the traffic study evaluates the study area intersections assuming the Dedham Street I-95 northbound off-ramp has been built and the multi-use Westwood Station development have been constructed.

The site generated trips from the proposed Westwood Station development were added to the Dedham Street intersections and to the Washington Street/Dedham Street and Washington Street/Pleasant street intersections.

Details of the trip generation and distribution for the proposed Westwood Station development were not included in the RJS and DCI must assume the added traffic numbers are appropriate.

Levels-of-Service for 2011 build conditions are shown in Table 12 of the RJS.

Dedham Street PM peak hour volumes will increase by nearly 35%, and a detailed roadway link analysis should be provided as Dedham Street experiences significant queues approaching Canton Street WB and approaching Washington Street SB.

| Dedham Street 2-Way Peak Hour Volumes (North of Washington Street) | | | | | |
|---|------------|-----------------------------------|-------------|--|-------------|
| 2011 No-Build | | 2011 w/Ramp ⁽¹⁾ | | 2011 w/Ramp and WS ⁽²⁾ | |
| AM | PM | AM | PM | AM | PM |
| 1199 | 919 | 1106 | 1014 | 1244 | 1225 |
| - | - | -8% | +10% | +4% | +34% |

(1) from RJS

(2) from Westwood Station Expanded ENF

The Washington Street/Dedham Street intersection will operate at Level-of-Service 'E' in the AM peak hour and 'F' in the PM peak hour, with significant increases in delays and queues. No mitigation has been proposed for this signalized intersection or the Dedham Street corridor from Washington Street to the Westwood town line. Conceptual plans should be developed to improve Levels-of-Service at this intersection.

The Randolph Street approach at Washington Street will continue to experience Level-of-Service 'F' in the peak hours with long queues. A signal warrant analysis should be performed to determine if signalization is appropriate and feasible.

Truck traffic on Dedham Street should also be addressed with regard to estimated increases and whether prohibiting through truck traffic is feasible and appropriate.

MITIGATION

No mitigation for the Canton study area intersections has been provided in the RJS. DCI recommends, at a minimum, that a conceptual design be developed providing a two lane Dedham Street SB approach to Washington Street.

SUPPLEMENTAL MEMORANDUMS

TSI has provided supplemental memoranda to provide additional information with regard to road user surveys and travel time runs. This data was requested by DCI to improve levels of confidence in the traffic re-assignments on Canton Streets due to the proposed I-95/Dedham Street off-ramp. Additional license plate surveys were performed by TSI.

The Level-of-Service memorandum was requested by DCI to provide comparisons with regard to queues and delays at critical Washington Street intersections under No-Build, Build Ramp and Build Ramp with the Westwood Station development scenarios.

DCI had significant discussions with TSI with regard to trip re-assignments along the Washington Street corridor. Further discussion is necessary with regard to the magnitude of traffic reductions on Washington Street. DCI is now in agreement that the proposed Dedham Street off-ramp will reduce peak hour traffic volumes on Neponset Street, Clapman Street and Washington Street. The latest memo states that the projected Level-of-Service at the Washington Street/Dedham Street intersection will be 'E' in the AM peak hour and 'D' in the PM peak hour. The data provided indicates the Dedham Street SB approach will experience queues of 500-700 feet in length in the peak hours. This intersection will continue to be a bottleneck within the Town of Canton. Mitigation should be provided to improve Levels-of-Service and reduce queuing and delays at this location.

Randolph Street at its intersection with Washington Street will continue to experience Level-of-Service 'F' during the peak hours. Signal warrant analyses should be performed to determine if traffic signalization is appropriate.

At the request of the Town, TSI performed a license plate survey to determine cut-through traffic from Chapman Street to Dedham Street via Fairview Road and Cedarcrest Road. The survey indicated that 48% of Chapman Street NB traffic used Fairview Road and Cedarcrest Road to access Dedham Street.

DCI agrees with the TSI conclusion that with the proposed I-95 NB Dedham Street off ramp, the Cedarcrest Road cut-through traffic should be reduced significantly.

At the request of the Town, TSI prepared another memorandum evaluating the Westwood Station development's traffic impacts on the Canton Street/University Road intersection.

TSI collected traffic count data, performed capacity analysis and a signal warrant analysis for the intersection. The intersection does not warrant signalization due to the low volumes on University Road. The Level-of-Service under build conditions drops from 'E' to 'F' in the AM peak hour and remains at 'F' in the PM peak hour with significant increases in delays. The memo states that the project proponent will implement traffic calming strategies along Canton Street to ultimately reduce traffic

in the vicinity of University Road resulting in no degradation in Levels-of-Service at this location.

DCI has visited the intersection and recommends that sight distance east of University Road be addressed, as sight distance is limited due to the Canton Street Bridge over I-95. Sight distance should be adequate for the 85th percentile speed recorded for WB vehicles along Canton Street WB.

EXPANDED ENF – WESTWOOD STATION

DCI has briefly reviewed the traffic sections of the Expanded ENF for the proposed Westwood Station development. The study area within Canton does not include the Washington Street/Pleasant Street and Washington Street/Randolph Street intersections.

It is DCI's opinion that the above referenced intersections should be included to the expanded ENF study area. DCI also noted that no traffic mitigation has been discussed for any of the study area locations within Canton. Again, due to the Levels-of-Service that will be experienced at the Washington Street/Dedham Street and Washington Street/Randolph Street intersections, DCI recommends mitigation be provided for these locations.

DCI also recommends that TSI provide a worst case scenario for the retail portion of the Westwood Station development which would be based upon traffic generation during the peak holiday shopping season.

Enclosure: Two

August 15, 2006

Mr. Michael Trotta
Superintendent, Department of Public Works
Town of Canton
801 Washington Street
Canton, MA 02021

Dear Mr. Trotta:

DESIGN CONSULTANTS, INC (DCI) is pleased to submit this Traffic Peer Review of the Ramp Justification Study (RJS) for I-95 at Dedham Street in Canton, MA. The peer review includes a traffic review of the following reports and memoranda:

- Ramp Justification Study
I-95 at Dedham Street
Canton, Massachusetts
Prepared by: Traffic Solutions, Inc.
April 19, 2006
- TSI Memorandum – Road User Survey – July 6, 2006
- TSI Memorandum – Additional travel time runs – July 13, 2006
- TSI Memorandum – Level-of-Service – July 21, 2006
- TSI Memorandum – Level-of-Service – July 24, 2006
- TSI Memorandum – University Road – July 28, 2006
- Expanded ENF – June 15, 2006

The memorandums were prepared to provide additional information requested by DCI during our peer review and a request by the Town with regard to University Road.

Please call me if you have any questions.

Sincerely,

William D. Carlson
Senior Transportation Engineer

CC: Dan Donahue
Town Engineer