

THE COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION MASSACHUSETTS HIGHWAY DEPARTMENT



BERNARD COHEN SECRETARY LUISA PAIEWONSKY COMMISSIONER

September 25, 2008

BECEIAFF

Jay Doherty, President Cabot, Cabot, & Forbes of New England, Inc. 125 Summer Street Boston, MA 02110

MEDA

OCT 1 - 2008

Dear Mr. Doherty:

Please find attached the Massachusetts Highway Department's M.G.L. Chapter 30, Section 61 Finding for the Westwood Station project (EOEEA #13826) in Westwood. MassHighway has reviewed the project as part of the state environmental review process and concluded that the committed on-site and off-site improvements will satisfy its requirements for the issuance of a permit. Upon satisfactory design review of these improvements, MassHighway will issue a permit for the construction/and or modification of site highway accesses and associated off-site improvements. The finding will be incorporated into the Massachusetts Highway Department permits issued for this project. If you have any questions regarding this finding, please call J. Lionel Lucien, P.E., Manager of the Public/Private Development Unit, at (617) 973-7341.

Sincerely,

Luisa Paiewonsky

Commissioner

LP/djm

cc Wendy Stern, Undersecretary

David J. Mohler, Deputy Secretary for Planning

Frank Tramontozzi, P.E., Chief Engineer_

Alicia McDevitt, MEPA Director, EOEEA

Patricia Leavenworth, P.E., District 4 Highway Director

Neil Boudreau, State Traffic Engineer

Kevin Walsh, Director, Environmental Services

Stanley Wood, P.E., Highway Design Engineer, Highway Design

Thomas Gray, Director, Right of Way Bureau

Marie Rose, P.E., Director, Project Management

Public/Private Development Unit files (2 COPIES)

Planning Board, Town of Westwood

Planning Board, Town of Canton

Planning Board, Town of Dedham

Planning Board, Town of Norwood

Massachusetts Bay Transportation Authority

Metropolitan Area Planning Council

Boston Region Metropolitan Planning Organization

Kay Carson, Director, MassRides

MASSACHUSETTS HIGHWAY DEPARTMENT FINDING PURSUANT TO M.G.L. CHAPTER 30, SECTION 61

PROJECT NAME: Westwood Station

PROJECT LOCATION: Westwood

PROJECT PROPONENT: Cabot, Cabot, and Forbes

EOEEA NUMBER: 13826

I. Project Description

Full-build development of the proposed project involves the construction and occupancy of 4.513 million square feet of housing, retail, office, and hotel space in the Town of Westwood, Massachusetts. The project is located on a 137-acre site on the southwest quadrant of the I-95/I-93 interchange, bordered to the east by the Massachusetts Bay Transportation Authority (MBTA) railroad track, to the south by Canton Street, to the west by existing office development such as NSTAR and State Street Bank, and to the north by Blue Hill Drive and Greenlodge Street. The project will provide 10,874 parking spaces and is estimated to have a cost of approximately \$1.5 billion.

The project will be developed in two phases over a ten-year period. Phase I entails the construction of 2,455,000 square feet of space to include 1,348,000 square feet of retail and restaurant, 125,000 square feet of office, 657,000 square feet (657 units) of housing, 230,000 square feet (328 keys) of hotel, 33,000 square feet of fitness accessory to the residential space, 12,000 square feet of public building, and 50,000 square feet of utility building. Phase II entails the construction of an additional 2,058,000 square feet of space to include 1,383,000 square feet of office and 675,000 square feet (505 units) of housing.

The project proponent will apply to the Massachusetts Highway Department (MassHighway) for permits under M.G.L. c. 81, § 21 for access to Blue Hill Drive, for access off of I-95 for the northbound off-ramp to Dedham Street, and for work within the state highway layout on I-95 (Route 128) and at the I-95/University Avenue Interchange. The project proponent will apply for traffic signal permits to be issued respectively to the Towns of Canton and Westwood under M.G.L. c. 85, § 2.

II. MEPA History

The proponent prepared and submitted, pursuant to M.G.L. c. 30, § 61 and 62A-H of the Massachusetts Environmental Policy Act (MEPA) and its implementing regulations (301 CMR 11.00), a Draft Environmental Impact Report (January 21, 2007)¹ and a Final Environmental

Dates in parentheses refer to when notice of availability for public review was published in <u>The Environmental Monitor</u> for the respective environmental disclosure document.

Impact Report (September 25, 2007), both of which analyze the environmental impacts of the development of 4.513 million square feet of mixed-use space. On November 1, 2007, the Secretary of Environmental Affairs issued a certificate stating that the FEIR adequately and properly complied with MEPA and its implementing regulations.

MassHighway has reviewed and commented on the above MEPA submissions and has considered the comments of various parties on the EIRs, in connection with the permit applications to be submitted by the proponent. This Section 61 Finding is based upon information disclosed and discussed in the MEPA review process.

III. Overall Project Traffic Impacts

Phase I occupancy of the project is expected to generate an additional 43,896 vehicle-trips² to and from the site during an average weekday, including 1,391 vehicle-trips during the weekday AM peak hour and 4,153 vehicle-trips during the weekday PM peak hour. Phase I occupancy of the project is expected to generate an additional 52,868 vehicle-trips to and from the site during an average Saturday, including 5,145 vehicle-trips during the Saturday peak hour.

Full-build occupancy of the project is expected to generate an additional 11,147 vehicle-trips for a total of 55,043 vehicle-trips to and from the site during an average weekday, including an additional 1,196 vehicle-trips for a total of 2,957 vehicle-trips during the weekday AM peak hour and an additional 1,434 vehicle-trips for a total of 5,587 vehicle-trips during the weekday PM peak hour. Full-build occupancy of the project is expected to generate an additional 4,949 vehicle-trips for a total of 57,817 vehicle-trips to and from the site during an average Saturday, including an additional 442 vehicle-trips for a total of 5,587 vehicle-trips during the Saturday peak hour.

IV. Specific Project Impacts and Mitigation Measures

MassHighway has assessed the impacts of this anticipated traffic load on the surrounding regional roadway network based upon information set forth in the DEIR and FEIR.

In the absence of mitigating highway improvements, Westwood Station-related traffic would be expected to have generally detrimental operational and safety impacts in a number of primary areas, including:

In Westwood and Dedham:

- the I-95/University Avenue interchange,
- the Route 1/University Avenue/Everett Street intersection,
- the Blue Hill Drive/Westwood Station Boulevard intersection,
- the Westwood Station Boulevard/Canton Street/Oceana Way intersection,
- the Canton Street/University Avenue intersection,
- the Canton Street/Downey Street intersection,
- the Canton Street/Blue Hill Drive intersection,

Technical terms used in this Finding are as defined in the Transportation Research Board <u>Highway Capacity Manual</u> (2000)

- the Canton Street/Perry Street intersection,
- the Canton Street/Oceana Way intersection,
- the Canton Street/Granger site driveway intersection, and
- the Clapboardtree/Nahantan Street intersection.

In Dedham:

• the I-95 southbound mainline.

In Canton:

- the I-93/I-95 interchange,
- the I-95/Dedham Street interchange,
- the Dedham Street/University Road intersection,
- the Dedham Street/Cumberland Driveway intersection,
- the Dedham Street/Shawmut Road intersection,
- the Dedham Street/Washington Street intersection,
- the Route 138/Washington Street intersection,
- the Route 138/Randolph Street intersection,
- the Route 138/Greenlodge Street intersection, and
- the Route 1A/Clapboardtree Street intersection.

In Norwood

• the Route1/Everett Street intersection.

The specific traffic impacts at each of these locations and the mitigation measures required to address them are detailed in Part IV and Part V of this Section 61 Finding.

IV. Specific Project Impacts and Mitigation Measures

MassHighway has analyzed the operational and safety impacts in the affected state highway area due to the proposed project and has determined that the mitigation measures outlined below are required to minimize the traffic impacts of this project. Based on discussions with MassHighway, the project proponent has committed to undertake the following mitigation measures in cooperation with the identified parties.

I-95/University Avenue interchange

I-95 southbound ramps/Blue Hill Drive intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the southbound left-turn movement at this unsignalized intersection will be at Levels D/B/A (Average Delay = 25.2/10.9/9.0 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this intersection will be at Levels D/F/F (Average Delay = 27.2/66.3/116.7 seconds) during the weekday AM/PM/Saturday peak hours. Consistent with MassHighway's plans for the reconstruction of the I-93/I-95 interchange, the mitigation for this project will reconfigure this intersection as the I-95 southbound ramps/Westwood Station Boulevard intersection.

See the discussion below of the "I-95 southbound ramps/Westwood Station Boulevard intersection" for full details of this newly reconfigured intersection.

University Avenue/Blue Hill Drive intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for this signalized intersection will be at Levels C/F/B (Average Delay = 30.1/>80/13.3 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this intersection will be at Levels C/F/D (Average Delay = 20.7/>80/51.8 seconds) during the weekday AM/PM/Saturday peak hours. Consistent with MassHighway's plans for the reconstruction of the I-93/I-95 interchange, the mitigation for this project will reconfigure this intersection as the I-95 southbound ramps/Westwood Station Boulevard intersection.

See the discussion below of the "I-95 southbound ramps/Westwood Station Boulevard intersection" for full details of this newly reconfigured intersection.

I-95 southbound ramps/Westwood Station Boulevard intersection

The 2011 Build with traffic mitigation scenario indicates that LOS for this new signalized intersection will be at LOS B/C/B (Average Delay =14.4/26.0/16.3 seconds) during the weekday AM/PM/Saturday peak hours.

The 2016 Phase II Build with traffic mitigation scenario indicates that LOS for this signalized intersection will be at LOS C/C/C (Average Delay = 32.5/25.8/23.4 seconds) during the weekday AM/PM/Saturday peak hours.

Prior to any site occupancy, the proponent will construct and signalize this intersection in accordance with the conceptual plan entitled, "Westwood Station Boulevard at Blue Hill Drive and University Avenue, Figure 4-24," dated August 28, 2007, prepared and submitted to MassHighway on behalf of the proponent by Traffic Solutions. This plan will be refined as the design progresses to the 100 percent level. The new design will eliminate the existing ramp intersection with Blue Hill Drive, substantially reconstruct and lengthen the ramps to intersect with the proposed Westwood Station Boulevard, and terminate Blue Hill Drive as a cul-de-sac providing access to the adjacent residential neighborhood.

In order to maintain safe traffic operations at the ramp termini with Westwood Boulevard, the proponent will design the 400 Blue Hill Drive driveway to function as a right-in/right-out only access to the site. This driveway will be designed according to MassHighway standards. In addition, the proponent will construct a new driveway on University Avenue opposite the MBTA's garage entrance to accommodate access from I-95 southbound to the 400 Blue Hill Drive site in accordance with the conceptual plans included in the FEIR prepared and submitted to MassHighway on behalf of the proponent by Traffic Solutions. This plan will be refined as the design progresses to the 100 percent level.

See the section entitled "Westwood Station Boulevard Signal Interconnection/Coordination System" for additional mitigation measures at this intersection.

University Avenue/MBTA Garage intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for all westbound MBTA West Garage movements at this unsignalized intersection will be at Levels F/C/B (Average Delay = 55.7/22.3/10.3 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels F/F/F (Average Delay = 52.1/>120.0>120 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2011 Build scenario indicates that the intersection will operate at LOS A/A/A (Average Delay =4.9/9.2/3.7 seconds) during the weekday AM/PM/Saturday peak hours.

The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels A/A/A (Average Delay = 6.1/9.2/4.7 seconds) during the weekday AM/PM/Saturday peak hours.

Prior to any site occupancy, the proponent will construct and signalize this intersection in accordance with conceptual and 100% plans to be submitted to and approved by MassHighway. This plan will be refined as the design progresses to the 100 percent level. Any work that would require breaking the pavement surface, such as installing conduit, must be completed during the construction of the site access drive.

See the section below entitled "Westwood Station Boulevard Signal Interconnection/Coordination System" for additional mitigation measures at this intersection.

Westwood Station Boulevard/Market Street intersection

The 2011 Build with traffic mitigation scenario indicates that LOS for this new signalized intersection will be at Levels B/C/C (Average Delay = 16.2/26.5/26.1 seconds) during the weekday AM/PM/Saturday peak hours.

The 2016 Phase II Build with traffic mitigation scenario indicates that LOS for this new signalized intersection will be at Levels B/C/C (Average Delay = 18.2/24.0/21.4 seconds) during the weekday AM/PM/Saturday peak hours.

Prior to any site occupancy, the proponent will construct and signalize this intersection in accordance with the conceptual plan entitled "Westwood Station Boulevard at Blue Hill Drive and University Avenue, Figure 4-24," dated August 28, 2007, prepared and submitted to MassHighway on behalf of the proponent by Traffic Solutions. This plan will be refined as the design progresses to the 100 percent level. Any work that would require breaking the pavement surface, such as installing conduit, must be completed during the construction of the site access drive.

See the section below entitled "Westwood Station Boulevard Signal Interconnection/Coordination System" for additional mitigation measures at this intersection.

Blue Hill Drive/MBTA South Garage intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the northbound MBTA Garage right-turn movement at this unsignalized intersection will be at Levels A/A/A (Average Delay = 8.6/8.8/8.5 seconds). The 2011 Build without traffic mitigation

scenario indicates that LOS for this movement will be at Levels A/A/A (Average Delay = 8.6/8.8/8.5 seconds) during the weekday AM/PM/Saturday peak hours.

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the northbound MBTA Garage right-turn movement at this unsignalized intersection will be at Levels A/A/A (Average Delay = 8.7/8.8/8.5 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels A/A/A (Average Delay = 8.7/8.8/8.5 seconds) during the weekday AM/PM/Saturday peak hours.

There are no feasible means to avoid or minimize the project's traffic impacts at this location that the proponent could be required to implement.

Route 138/Washington Street intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for this signalized intersection will be at Levels B/B/B (Average Delay = 13.7/10.9/14.4 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this intersection will be at Levels C/B/B (Average Delay = 23.2/12.6/14.5 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2011 Build scenario indicates that the intersection will operate at LOS B/B/B (Average Delay = 16.2/12.4/14.6 seconds) during the weekday AM/PM/Saturday peak hours.

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for this signalized intersection will be at Levels B/B/B (Average Delay = 14.0/11.5/14.8 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this intersection will be at Levels C/B/B (Average Delay = 25.3/12.7/14.9 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2016 Phase II Build scenario indicates that this intersection will operate at LOS B/B/B (Average Delay = 16.3/12.4/14.7 seconds) during the weekday AM/PM/Saturday peak hours.

MassHighway is currently constructing roadway improvements at this intersection to alleviate long-standing operational and safety deficiencies. These improvements include the installation of a new traffic signal, roadway widening, new sidewalks, bicycle accommodations, improved pavement markings and signing, drainage system modifications and retaining wall construction. The above improvements will help mitigate the traffic impacts of the Westwood Station project.

There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the proponent could be required to implement.

Route 138/Randolph Street intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for this signalized intersection will be at Levels C/E/B (Average Delay = 23.2/70.1/15.9 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this intersection will be at Levels C/E/B (Average Delay = 24.3/76.8/15.9 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2011 Build scenario indicates that the intersection will

operate at LOS C/D/B (Average Delay = 22.3/38.1/13.2 seconds) during the weekday AM/PM/Saturday peak hours.

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for this signalized intersection will be at Levels C/F/B (Average Delay = 25.3/>80/16.8 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this intersection will be at Levels C/F/B (Average Delay = 26.3/>80/17.4 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2016 Phase II Build scenario indicates that this intersection will operate at LOS C/D/B (Average Delay = 24.2/45.0/13.5 seconds) during the weekday AM/PM/Saturday peak hours.

MassHighway is currently constructing roadway improvements at this intersection to alleviate long-standing operational and safety deficiencies. These improvements include the installation of a new traffic signal, roadway widening, new sidewalks, bicycle accommodations, improved pavement markings and signing, drainage system modifications and retaining wall construction. The above improvements will help mitigate the traffic impacts of the Westwood Station project.

There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the proponent could be required to implement.

Route 138/Greenlodge Street intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the Greenlodge Street eastbound left-turn movement at this unsignalized intersection will be at Levels F/F/F (Average Delay = >120/>120/>120 seconds). [The technical analysis submitted by the proponent indicates the increase in average delay. However, calculated delay values greater than 120 seconds do not accurately reflect the actual delay that a driver will experience.] The 2011 Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels F/F/F (Average Delay = >120/>120/>120 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the LOS for this movement will be at F/F/F (Average Delay=>120/>120/>120 seconds).

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the Greenlodge Street eastbound left-turn movement at this unsignalized intersection will be at Levels F/F/F (Average Delay = >120/>120/>120 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels F/F/F (Average Delay = >120/>120/>120 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2016 Phase II Build scenario indicates that the LOS for this movement will be at F/F/F (Average Delay=>120/>120/>120 seconds).

MassHighway is currently constructing roadway improvements at the Route 138/Washington Street intersection to alleviate long-standing operational and safety deficiencies. These improvements include the installation of a new traffic signal, roadway widening, new sidewalks, bicycle accommodations, improved pavement markings and signing, drainage system modifications and retaining wall construction. These improvements will improve overall operations of the intersection by creating longer traffic gaps in the Route 138 traffic stream that will reduce delay for the left-turn movement exiting Greenlodge Street.

There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the proponent could be required to implement.

I-95 (Route 128)/Dedham Street interchange

Dedham Street/I-95 northbound off-ramp intersection

The 2011 Build scenario indicates that LOS for this new intersection will be at Levels B/B/B (Average Delay = 15.0/16.5/19.2 seconds) during the weekday AM/PM/Saturday peak hours.

The 2016 Phase II Build scenario indicates that this new intersection will operate at LOS C/B/B (Average Delay = 21.0/14.7/19.7 seconds) during the weekday AM/PM/Saturday peak hours.

Prior to any site occupancy, the proponent will construct and signalize this intersection in accordance with the conceptual plan entitled "5-Lane Permanent Conditions (Long Term), Figure 4-53," dated August 28, 2007, prepared and submitted to MassHighway on behalf of the proponent by Traffic Solutions. This plan will be refined as the design progresses to the 100 percent level. Any work that would require breaking the pavement surface, such as installing conduit, must be completed during the construction of the northbound off-ramp intersection.

See the section below entitled "Dedham Street Traffic Signal Interconnection/Coordination System" for additional mitigation measures at this intersection.

Dedham Street/I-95 southbound on-ramp intersection

The 2011 Build scenario indicates that LOS for this intersection will be at Levels A/A/A (Average Delay = 1.9/5.3/0.3 seconds) during the weekday AM/PM/Saturday peak hours.

The 2016 Phase II Build scenario indicates that the intersection will operate at LOS A/A/A (Average Delay = 2.1/5.5/0.3 seconds) during the weekday AM/PM/Saturday peak hours.

Prior to any site occupancy, the proponent will construct and signalize this intersection in accordance with the conceptual plan entitled "5-Lane Permanent Conditions (Long Term), Figure 4-53," dated August 28, 2007, prepared and submitted to MassHighway on behalf of the proponent by Traffic Solutions. This plan will be refined as the design progresses to the 100 percent level. Any work that would require breaking the pavement surface, such as installing conduit, must be completed during the construction of the intersection.

See the section below entitled "Dedham Street Traffic Signal Interconnection/Coordination System" for additional mitigation measures at this intersection.

<u>I-95 southbound mainline/I-95 southbound on ramp junction</u>

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for this ramp junction will be at Levels B/D/B (Density = 17.1/33.1/19.3 passenger cars/mile/lane). The 2011 Build without traffic mitigation scenario indicates that LOS for this ramp junction will be at Levels B/D/C (Density = 17.6/34.1/23.4 passenger cars/mile/lane). The 2011 Build with traffic mitigation scenario indicates that LOS for this ramp junction will be at Levels B/D/C (Density = 18.2/36.8/23.4 passenger cars/mile/lane).

The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this ramp junction will be at Levels B/F/C (Density = 18.7/47.7/24.5 passenger cars/mile/lane). The 2016 Phase II Build with traffic mitigation scenario indicates that LOS for this ramp junction will be at Levels B/F/C (Density = 19.3/40.1/24.5 passenger cars/mile/lane).

Prior to any site occupancy, the proponent will provide pavement marking modifications to extend the ramp merge at this junction in accordance with the conceptual plan entitled "5-Lane Permanent Conditions (Long Term), Figure 4-53," dated August 28, 2007, prepared and submitted to MassHighway on behalf of the proponent by Traffic Solutions. This plan will be refined as the design progresses to the 100 percent level.

Dedham Street/Cumberland Farms Driveway intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the northbound left-turn movement at this unsignalized intersection will be at Levels E/F/B (Average Delay = 58.2/>120/10.8 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels F/F/C (Average Delay = 65.5/>120/17.9 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the LOS for this intersection, which will become signalized, will be at A/B/A (Average Delay= 2.1/10.5/5.1).

The 2016 Phase II Build scenario indicates that LOS for this signalized intersection will be at A/A/A (Average Delay= 6.0/7.1/6.3 seconds).

Prior to any site occupancy, the proponent will construct and signalize this intersection in accordance with the conceptual plan entitled "5-Lane Permanent Conditions (Long Term), Figure 4-53," dated August 28, 2007, prepared and submitted to MassHighway on behalf of the proponent by Traffic Solutions. This plan will be refined as the design progresses to the 100 percent level. Any work that would require breaking the pavement surface, such as installing conduit, must be completed during the construction of this intersection.

This intersection is not under MassHighway jurisdiction. However, because state highway safety and traffic operations may be affected, the proponent will prepare and submit conceptual and 100 percent plans to MassHighway for review and approval, in consultation with the Town of Canton, prior to the construction of this intersection.

See the section below entitled "Dedham Street Traffic Signal Interconnection/Coordination System" for additional mitigation measures at this intersection.

Dedham Street/Shawmut Park driveway intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the eastbound Shawmut Park driveway left-turn movement at this unsignalized intersection will be at Levels F/F/B (Average Delay = >120/>120/10.4 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels F/F/B (Average Delay = >120/>120/12.3 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the LOS for this movement will be at F/F/B (Average Delay= >120/>120/11.6 seconds).

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the northbound left-turn movement at this unsignalized intersection will be at Levels F/F/B (Average Delay = >120/>120/10.5 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels F/F/B (Average Delay = >120/>120/12.5 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the LOS for this movement will be at F/F/B (Average Delay= <120/>120/11.8).

Prior to any site occupancy, the proponent will construct this intersection in accordance with conceptual and 100 percent plans to be submitted to and approved by MassHighway. This plan will be refined as the design progresses to the 100 percent level.

This intersection is not under MassHighway jurisdiction. However, because state highway safety and traffic operations may be affected, the proponent will prepare and submit conceptual and 100 percent plans to MassHighway for review and approval, in consultation with the Town of Canton, prior to the construction of this intersection.

Route 1/Everett Street intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for this signalized intersection will be at Levels E/F/E (Average Delay = 60.9/>80/69.1 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this intersection will be at Levels E/F/F (Average Delay = 61.9/>80/>80 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2011 Build scenario indicates that the intersection will operate at LOS E/F/F (Average Delay = 60.0/>80/>80 seconds) during the weekday AM/PM/Saturday peak hours.

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for this signalized intersection will be at Levels C/E/D (Average Delay = 31.7/66.3/38.4 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this intersection will be at Levels C/F/D (Average Delay = 34.6/>80/43.6 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2016 Phase II Build scenario indicates that this intersection will operate at LOS D/F/D (Average Delay = 45.6/>80/54.7 seconds) during the weekday AM/PM/Saturday peak hours.

MassHighway is planning to construct roadway improvements at this intersection to alleviate long-standing operational and safety deficiencies. These improvements include roadway widening, traffic signal upgrade and modifications, new sidewalks, bicycle accommodations, improved pavement markings and signing, and drainage system modifications. These improvements will also help to mitigate the traffic impacts of the Westwood Station project. To assist MassHighway, the proponent has agreed to prepare and

submit a justification report and other documentation necessary for submission of these improvements to the MassHighway Project Review Committee (PRC). The proponent has agreed to submit this information to the MassHighway District 5 Office within six months of the issuance of this Section 61 Finding. Within one year of the approval of these improvements by the PRC, the proponent has agreed to prepare and submit to MassHighway acceptable 100 percent plans, specifications, and estimates (PS&E) for these improvements.

There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the proponent could be required to implement.

Westwood Station Boulevard/Canton Street intersection

The 2011 Build with traffic mitigation scenario indicates that LOS for this new signalized intersection will be at Levels B/D/B (Average Delay = 17.9/38.4/13.2 seconds) during the weekday AM/PM/Saturday peak hours.

The 2016 Phase II Build with traffic mitigation scenario indicates that LOS for this new signalized intersection will be at Levels B/D/B (Average Delay = 12.7/39.5/13.9 seconds) during the weekday AM/PM/Saturday peak hours.

Prior to any site occupancy, the proponent will construct this intersection in accordance with conceptual and 100 percent plans to be submitted to and approved by MassHighway. This plan will be refined as the design progresses to the 100 percent level.

This intersection is not under MassHighway jurisdiction. However, because regional traffic may be affected by the intersection design, the proponent will prepare and submit conceptual and 100 percent plans to MassHighway for review and approval, in consultation with the Town of Westwood, prior to the construction of this intersection.

Dedham Street/University Road intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the northbound University Road left-turn movement at this unsignalized intersection will be at Levels F/F/A (Average Delay = 59.9/>120/9.1 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels F/F/B (Average Delay = 87.4/>120/11.8 seconds) during the weekday AM/PM/Saturday peak hours.

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the northbound left-turn movement at this unsignalized intersection will be at Levels F/F/A (Average Delay = 66.8/>120/9.2 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels F/F/B (Average Delay = 114.6/>120/12.3 seconds) during the weekday AM/PM/Saturday peak hours.

This intersection is not under MassHighway jurisdiction. The determination of appropriate mitigation measures at this intersection should be made between the proponent and the Town of Canton.

Canton Street/Downey Street intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the eastbound Downey Street left-turn movement at this unsignalized intersection will be at Levels D/D/B (Average Delay = 27.4/28.7/12.8 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels D/E/C (Average Delay = 28.5/37.7/17.0 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the LOS for this movement will be at D/D/B (Average Delay= 33.9/31.3/13.6 seconds).

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the eastbound Downey Street left-turn movement at this unsignalized intersection will be at Levels D/D/B (Average Delay = 29.9/31.9/13.1 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels D/E/C (Average Delay = 34.7/45.2/17.8 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the LOS for this movement will be at E/E/C (Average Delay= 41.9/36.2/15.1 seconds).

This intersection is not under MassHighway jurisdiction. The determination of appropriate mitigation measures at this intersection should be made between the proponent and the Town of Westwood.

Canton Street/Blue Hill Drive intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the westbound Blue Hill Drive westbound left-turn movement at this unsignalized intersection will be at Levels C/C/B (Average Delay = 15.8/17.8/10.9 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels C/C/B (Average Delay = 16.1/20.9/12.1 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the LOS for this movement will be at C/D/B (Average Delay= 21.5/25.6/12.3 seconds).

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the northbound left-turn movement at this unsignalized intersection will be at Levels C/C/B (Average Delay = 16.3/18.6/11.0). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels C/C/B (Average Delay = 17.2/22.9/12.4 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the LOS for this movement will be at C/D/B (Average Delay= 23.4/28.5/11.8 seconds).

This intersection is not under MassHighway jurisdiction. The determination of appropriate mitigation measures at this intersection should be made between the proponent and the Town of Westwood.

Canton Street/Perry Drive intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the westbound Perry Drive left-turn movement at this unsignalized intersection will be at Levels C/C/B (Average Delay = 15.1/15.7/11.5). The 2011 Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels C/C/B (Average Delay = 15.3/17.3/13.2).

seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the LOS for this movement will be at C/C/B (Average Delay= 18.8/19.1/12.3 seconds).

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the northbound left-turn movement at this unsignalized intersection will be at Levels C/C/B (Average Delay = 15.6/16.3/11.7 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels C/C/B (Average Delay = 16.3/18.5/13.5 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the LOS for this movement will be at C/C/B (Average Delay= 20.0/20.8/13.2 seconds).

This intersection is not under MassHighway jurisdiction. The determination of appropriate mitigation measures at this intersection should be made between the proponent and the Town of Westwood.

Canton Street/Everett Street intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the Everett Street left-turn movement at this unsignalized intersection will be at Levels C/E/C (Average Delay = 17.6/40.5/15.3 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels C/F/C (Average Delay = 17.9/56.7/20.3 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the LOS for this movement will be at E/F/C (Average Delay= 40/>120/19.5 seconds).

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the Everett Street left-turn movement at this unsignalized intersection will be at Levels C/E/C (Average Delay = 18.4/46.7/15.8 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels C/F/C (Average Delay = 19.8/72.7/21.6 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the LOS for this movement will be at E/F/C (Average Delay= 48.8/>120/23.2 seconds).

This intersection is not under MassHighway jurisdiction. The determination of appropriate mitigation measures at this intersection should be made between the proponent and the Town of Westwood.

Canton Street/Oceana Way intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the Oceana Way eastbound left-turn movement at this unsignalized intersection will be at Levels B/B/B (Average Delay = 10.8/14.7/10.1 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels B/C/B (Average Delay = 10.8/16.1/11.2 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, this intersection will be significantly reconfigured.

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the Oceana Way eastbound left-turn movement at this unsignalized intersection will be at Levels B/C/B (Average Delay = 10.9/15.3/10.2 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels B/C/B (Average

Delay = 11.1/17.2/11.2 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, this intersection will be significantly reconfigured.

This intersection is not under MassHighway jurisdiction. The determination of appropriate mitigation measures at this intersection should be made between the proponent and the Towns of Westwood and Norwood.

Canton Street/Granger site driveway intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the Granger Site driveway left-turn movement at this unsignalized intersection will be at Levels E/C/A (Average Delay = 44.6/23.4/9.4 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels E/D/B (Average Delay = 49.4/29.1/12.2 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the LOS for this movement will be at F/B/B (Average Delay= >120/13.7/13.5 seconds).

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the northbound left-turn movement at this unsignalized intersection will be at Levels E/C/A (Average Delay = 49.3/24.8/9.4 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels F/E/B (Average Delay = 63.1/43.7/12.8 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the LOS for this movement will be at F/E/F (Average Delay= >120/49.0/>120 seconds).

This intersection is not under MassHighway jurisdiction. The determination of appropriate mitigation measures at this intersection should be made between the proponent and the Town of Westwood.

Canton Street/University Avenue intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for this signalized intersection will be at Levels F/E/B (Average Delay = >80/69.2/15.4 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this intersection will be at Levels F/F/C (Average Delay = >80/>80/25.6 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2011 Build scenario indicates that this intersection will operate at LOS B/C/C (Average Delay = 18.9/28.3/22.2) during the weekday AM/PM/Saturday peak hours.

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for this signalized intersection will be at Levels F/E/B (Average Delay = >80 /77.5/15.6 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this intersection will be at Levels F/F/C (Average Delay = >80/>80/28.6 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2016 Phase II Build scenario indicates that this intersection will operate at LOS C/E/C (Average Delay = 31.0/60.6/30.0 seconds) during the weekday AM/PM/Saturday peak hours.

This intersection is not under MassHighway jurisdiction but does result in impact to the Dedham Street traffic signals that will require mitigation as detailed in the section below entitled "Dedham Street Traffic Signal Interconnection/Coordination System." The

determination of other appropriate mitigation measures at this intersection should be made between the proponent and the Towns of Westwood and Canton.

Washington Street/Dedham Street intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for this signalized intersection will be at Levels E/F/B (Average Delay = 72.6/>80/19.8 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this intersection will be at Levels E/F/C (Average Delay = 76.2/>80/24.3 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2011 Build scenario indicates that this intersection will operate at LOS D/D/C (Average Delay = 47.9/44.3/24.8 seconds) during the weekday AM/PM/Saturday peak hours.

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for this signalized intersection will be at Levels F/F/C (Average Delay = >80/>80/20.3 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this intersection will be at Levels F/F/C (Average Delay = >80/>80/25.8 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2016 Phase II Build scenario indicates that this intersection will operate at LOS B/D/C (Average Delay = 16.3/53.6/30.8 seconds) during the weekday AM/PM/Saturday peak hours.

This intersection is not under MassHighway jurisdiction. The determination of appropriate mitigation measures at this intersection should be made between the proponent and the Town of Canton.

Route 1A/ClapboardTree Street intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for this signalized intersection will be at Levels F/F/D (Average Delay = >80/>80/36.4 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this intersection will be at Levels F/F/D (Average Delay = >80/>80/38.8 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2011 Build scenario indicates that this intersection will operate at LOS E/F/D (Average Delay = 57.8/>80/38.1 seconds) during the weekday AM/PM/Saturday peak hours

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for this signalized intersection will be at Levels F/F/D (Average Delay = >80/>80/37.0 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this intersection will be at Levels F/F/D (Average Delay = >80/>80/40.1 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2016 Phase II Build scenario indicates that this intersection will operate at LOS F/F/D (Average Delay = >80/>80/39.3 seconds) during the weekday AM/PM/Saturday peak hours.

This intersection is not under MassHighway jurisdiction. The determination of appropriate mitigation measures at this intersection should be made between the proponent and the Town of Westwood.

Clapboardtree Street/Nahatan Street intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for all southbound Clapboardtree movements at this unsignalized intersection will be at Levels D/F/B (Average Delay = 26.9/>50.0/13.9 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for these movements will be at Levels D/F/C (Average Delay = 27.5/>50.0/15.4 seconds) during the weekday AM/PM/Saturday peak hours.

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for all southbound Clapboardtree movements at this unsignalized intersection will be at Levels D/F/B (Average Delay = 30.7/>50.0/13.7 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for these movements will be at Levels D/F/C (Average Delay = 32.7/>50.0/17.0 seconds) during the weekday AM/PM/Saturday peak hours.

This intersection is not under MassHighway jurisdiction. The determination of appropriate mitigation measures at this intersection should be made between the proponent and the Town of Westwood.

University Avenue/Everett Street intersection

For the 2011 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the westbound left-turn movement at this unsignalized intersection will be at Levels E/F/B (Average Delay = 46.1/58.6/14.0 seconds). The 2011 Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels E/F/C (Average Delay = 47.5/84.5/21.9 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2011 Build scenario indicates that this intersection will operate at LOS B/B/B (Average Delay = 57.4/>120/31.5 seconds) during the weekday AM/PM/Saturday peak hours

For the 2016 No-Build scenario, weekday AM/PM/Saturday peak hour LOS for the westbound left-turn movement at this unsignalized intersection will be at Levels F/F/B (Average Delay = 50.2/67.2/14.3 seconds). The 2016 Phase II Build without traffic mitigation scenario indicates that LOS for this movement will be at Levels F/F/C (Average Delay = 61.5/>120/23.8 seconds) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2011 Phase II Build scenario indicates that this intersection will operate at LOS B/B/B (Average Delay = 10.0/12.2/13.4 seconds) during the weekday AM/PM/Saturday peak hours

This intersection is not under MassHighway jurisdiction. The determination of appropriate mitigation measures at this intersection should be made between the proponent and the Town of Norwood.

I-95 (Route 128) southbound mainline

For the 2011 No-Build scenario, the weekday AM/PM/Saturday peak hour LOS for the southbound for this section of I-95(Route 128) will be at Levels B/C/B (Average Density = 17.2/20.9/16.3 passenger car/mile/lane). The 2011 Build without traffic mitigation scenario indicates that LOS for the southbound section of I-95(Route 128) will be at Levels B/C/C (Average Density = 17.2/23.0/20.0 passenger car/mi/lane) during the weekday AM/PM/Saturday peak hours. With mitigation in place, the 2011 Build scenario indicates that this section of I-

95(Route 128) will be at Levels B/C/B (Average Density = 17.2/20.9/16.3 passenger car/mi/lane) during the weekday AM/PM/Saturday peak hours.

Prior to any site occupancy, the proponent will widen the I-95 southbound mainline to provide a continuous weaving lane between the I-95 Rest Area on-ramp and the I-95 south bound off-ramp to Westwood Station Boulevard in accordance with the conceptual plan entitled "Continuous Weave Lane Plan and Typical Section, Figure 4-23," included in the FEIR dated August 28, 2007, prepared and submitted to MassHighway on behalf of the proponent by Traffic Solutions. This plan will be refined as the design progresses to the 100 percent level.

There are no additional feasible means to avoid or minimize the project's traffic impacts at this location that the proponent could be required to implement.

V. Other Mitigation Measures

A. <u>I-93/I-95/University Avenue and Dedham Street Interchanges Project</u> Canton/Dedham/Westwood

MassHighway is currently planning an improvement project along I-95 (Route 128) that involves transportation improvements to the I-95/I-93, University Avenue and Dedham Street Interchanges in Canton, Dedham, and Westwood. The principal change would be to replace the existing loop ramps at the I-93/I-95 Interchange with direct connect flyover ramps, which will eliminate a significant rollover hazard, reduce congestion, and improve the operating efficiency and safety of the congested area roadways and interchanges. These improvements are not expected to be fully implemented within the proposed Westwood Station planned horizon year; however, once in place, they will further mitigate its associated traffic impacts. To assist MassHighway, the proponent has agreed to design and construct the project and all associated mitigation and other work so as to not preclude the implementation of the MassHighway improvements as depicted in the conceptual plan entitled "MassHighway-I-95/I-93 Interchange ENF Plan, Figure 4-7a" included in the FEIR. MassHighway has initiated the environmental permitting for the project and this plan will be refined as the design progresses to the 100 percent level. To that end, the project proponent has committed to the following mitigation measures set forth in paragraphs B, C, D, E, F, G and H:

B. Greenlodge Street Right-of-Way

The MassHighway interchange project necessitates the acquisition of certain rights in real estate along the frontage of the project site. The proponent of the Westwood Station project has agreed to allow MassHighway to acquire by eminent domain at no cost the rights in real estate necessary for the Greenlodge Street ramp. The project proponent has also committed to a no-build zone along the Greenlodge Street right-of-way in accordance with the conceptual plans included in the FEIR prepared and submitted to MassHighway on behalf of the proponent by Traffic Solutions. The purpose of this no-build zone is to facilitate the use of the Greenlodge Street corridor as a connection to the interstate highway system as part of the I-93/I-95 interchange project. Additionally, the proponent will be responsible for the funding of any additional retaining walls needed at the Greenlodge Street/Westwood Station Boulevard intersection should the location of site buildings prevent the construction of standard MassHighway roadway slopes.

C. <u>Dedham Street Corridor Improvements</u>

MassHighway is planning to construct improvements along the segment of Dedham Street corridor between the I-95 northbound off-ramp/Dedham Street intersection and the Canton Street/University Avenue intersection. These improvements will include: the construction of the I-95 northbound off-ramp to Dedham Street, the construction of a five lane bridge on Dedham Street over I-95 including an exclusive left-turn lane to I-95 southbound, the signalization of the northbound and southbound ramp intersections with Dedham Street, and the widening of the bridges over the MBTA railroad tracks and the Neponset River. An EOT Planning study conducted ahead of the FEIR submission concluded that the above improvements need to be in place to accommodate the additional traffic associated with the traffic diversion created by the new northbound off-ramp and the trip generation associated with the Westwood Station project. Based in part on that study, MassHighway further agreed that phased occupancy of the project could proceed subject to traffic volumes and traffic operating thresholds, a concept that is incorporated into the FEIR Certificate. Therefore, the project proponent has agreed to the following conditions to mitigate Phase I of the project:

a) Temporary Improvements along the Dedham Street Corridor

Prior to any Phase I occupancy of the Westwood Station project, the project proponent will:

convert the existing two-lane bridge at Dedham Street to three lanes for westbound traffic.

- install a temporary two-lane bridge over I-95 for eastbound traffic, construct an off-ramp from I-95 to Dedham Street,
- undertake geometric modifications and traffic signalization associated with the I-95/Dedham Street on- and off-ramps, and
- perform the necessary approach work to tie this temporary bridge into the Dedham Street corridor.

b) Traffic Sensing and Monitoring System

The proponent will construct a traffic sensing system to monitor traffic volume, queue and speed along the Dedham Street Corridor as described in the section below entitled "Dedham Street Corridor Traffic Thresholds and Monitoring Method."

c) Environmental Permitting and Construction Documents

The project proponent will provide MassHighway with full documentation necessary to complete the local, state, and federal environmental permitting of the Dedham Street Permanent Improvements (described in paragraph e below). In addition, the proponent will provide MassHighway with 100% Plans, Specifications, and Estimates for the construction of the improvements.

d) Phase II Occupancy

The project proponent has agreed to not proceed with Phase II occupancy until MassHighway has determined that the threshold conditions have not been exceeded as per the section below entitled "Dedham Street Corridor Traffic Thresholds and Monitoring Method."

e) Dedham Street Permanent Improvements

Subject to the requirement outlined in the "Dedham Street Corridor Traffic Thresholds and Monitoring Method," the proponent has agreed to widen Dedham Street to four lanes from its intersection with the Cumberland Farms driveway to the University Avenue intersection including the reconstruction of the bridges over the Neponset River and the MBTA railroad tracks in accordance with the conceptual plan entitled "5-Lane Permanent Conditions (Long Term), Figure 4-53," dated August 28, 2007, prepared and submitted to MassHighway on behalf of the proponent by Traffic Solutions. This plan will be refined as the design progresses to the 100 percent level.

f) Federal Environmental Review Process Implications

By letter dated August 5, 2008, the Federal Highway Administration notified EOT that the mitigation required for the Westwood Station project, including both the temporary and permanent improvements to the Dedham Street Corridor, must be analyzed in a single Environmental Assessment for the I-93/I-95 Canton Interchange. It is possible that this process may impact the implementation plan for Westwood Station as established in this Section 61 Finding. MassHighway does not anticipate that additional mitigation, beyond that identified in this Section 61 Finding (including the Dedham Street Permanent Improvements (see subsection (e) above)) will be required as a result of the federal Environmental Assessment. The necessity for, and timing of, the implementation of the Dedham Street Permanent Improvements may be affected, however. The proponent will remain responsible for mitigation commitments contained in this Section 61 Finding, including the Dedham Street Permanent Improvements, regardless of any changes in timing of construction of those mitigation elements that result from the Environmental Assessment.

D. Dedham Street Traffic Signal Interconnection/Coordination System

The proponent has committed to working closely with MassHighway and the Towns of Canton, Westwood, and Norwood to facilitate coordinated signal operations in the Dedham Street/Canton Street corridor. If warranted and approved, the proponent will install all necessary equipment in order to operate certain traffic signals in the vicinity of the project as a "closed loop" interconnection/coordination system prior to any site occupancy. This traffic signal system will be implemented in accordance with conceptual and 100 percent plans, specifications and estimates to be submitted to and approved by MassHighway. The traffic signals to be operated in this system include those located at the following intersections:

the Dedham Street/I-95 northbound intersection, the Dedham Street/I-95 southbound intersection,

- the Dedham Street/Cumberland Farms site driveway intersection, and
- the Canton Street/University Avenue intersection.

Additionally, the project proponent will provide technical services to maintain, operate, and adjust as needed the system for a one-year period.

E. Westwood Station Boulevard Traffic Signal Interconnection/Coordination System

If warranted and approved and as directed by MassHighway, the proponent will install all necessary equipment in order to operate certain traffic signals in the vicinity of the project as a "closed loop" interconnection/coordination system prior to any site occupancy. This traffic signal system will be implemented in accordance with conceptual and 100 percent plans, specifications and estimates to be submitted to and approved by MassHighway. The traffic signals to be operated in this system should include at a minimum those located at the following intersections:

- the University Avenue/MBTA west driveway/400 Blue Hill Drive intersection,
- the I-95(Route 128) southbound ramps/Westwood Station Boulevard intersection, and
- the Westwood Station Boulevard/Market Street intersection.

Additionally, the project proponent will provide technical services to maintain, operate, and adjust as needed the system for a one-year period.

F. Agreements and Layout Alterations

Prior to any site occupancy, the proponent will submit to the MassHighway Boston and District 4 Offices any layout alteration plans, land damage agreements documenting that the necessary right-of-way has been or can be acquired at no cost to the Commonwealth, and any other agreements necessary for or resulting from the implementation of the mitigation measures detailed in this finding.

G. Trip Generation Reduction Measures

The proponent will conduct Transportation Demand Management (TDM) measures aimed at reducing site trip generation for the retail and residential components of the project. These TDM measures shall include, but are not limited to: designating an onsite Transportation Coordinator to implement and manage the Comprehensive Commuter Service Program (TDM program), designating a Shuttle Bus Manager to oversee the site shuttle program, promoting the use of staggered or flex-time work scheduling by employees at the site, providing a portion of the site parking supply as preferred parking spaces for employees participating in the carpool or Zip Car program, and constructing safe and adequate pedestrian and bicycle facilities onsite.

The proponent will operate a free shuttle service, with separate retail and commuter routes, which will run daily at regularly scheduled times. The retail shuttle service will operate principally along Market Street, while the commuter shuttle service will provide connections between the site and the MBTA train station. A shuttle shelter and bench will be constructed at each shuttle site.

On-demand services will be provided upon request during non-shuttle operating hours to residents and employees for travel between the site and the MBTA Station.

The proponent will also work with the MBTA to begin the sale of transit passes at the site in order to encourage the use of transit as an alternative means of travel.

The proponent will develop and market the TDM program. Effective marketing by the proponent will include regular dissemination of appropriate commuter information and other techniques such as running yearly events to promote transit and shared ride commuting modes. The project site is located within the area of the Neponset Valley Transportation Management Association (NVTMA). The proponent has agreed to participate in the TMA in order to further the aims of the required TDM program and will participate in any future studies affecting Westwood Station.

H. Pedestrian Connection to Route 128 Station

Prior to site occupancy, the project proponent will provide a pedestrian connection between the project site and the MBTA commuter rail station. This connection will consist of a 20-foot wide multi-use path under the Greenlodge Street Bridge to be constructed in accordance with the conceptual plan entitled "MBTA Connection Concept Sketch (Long Term), Figure 4-60," included in the FEIR, prepared and submitted to MassHighway on behalf of the proponent by Traffic Solutions. This connection will require both the MBTA and MassHighway approvals.

I. Dedham Street Corridor Thresholds, Monitoring Method, and Mitigation

1. Background

The FEIR Certificate provides that "the proponent has committed to monitoring traffic along the Dedham Street Corridor from Phase 1 (2.4 million sf) and if the traffic exceeds its projections, the proponent will bear the cost of expanding the bridges over the MBTA tracks and the Neponset River" The specific traffic monitoring methods, traffic thresholds and mitigation requirements for implementation of this requirement of the FEIR Certificate are set forth below.

2. Definitions

As used in this section, the following terms have the following meanings:

<u>'Canton/Dedham Street Corridor'</u>: The portion of Canton and Dedham Street located between Kirby Drive in Canton and University Avenue in Westwood, inclusive of the proposed new northbound off-ramp from I-95 to Dedham Street.

<u>'Demand Volumes'</u>: The number of vehicles that wish to pass a point or a short section in a given period of time, expressed as a rate of flow in vehicles per hour.

'Hour': Any series of four continuous fifteen minute periods.

<u>'Permanent Canton/Dedham Street Corridor Improvements'</u>: The proposed improvements to the Canton/Dedham Street Corridor, consisting of 1) the widening of the existing two-lane bridges over the Neponset River and the MBTA/Amtrak tracks to four-lane

bridges; 2) the widening of Dedham Street to four lanes from the I-95 westerly bridge abutment in Canton to University Avenue in Westwood; and 3) the construction of directly related, ancillary improvements, such as retaining walls, driveway approaches, utility modifications and transitions to the I-95 southbound on-ramp.

<u>'Phase 1 Buildout'</u>: The date the final certificate of occupancy for the buildings in Phase 1 (as defined in the FEIR Certificate) of the Westwood Station project is issued by the Town of Westwood.

'<u>Threshold Violation</u>': An occurrence, as further defined in Section 3 below, that triggers mitigation requirements as defined in Sections 4 and 5 below.

'<u>Regularly</u>': Conditions occurring during one or more weekday hours for three out of five weekdays over a successive three-week period.

<u>'Volume Counts'</u>: A point in time measurement of vehicle traffic that crosses a set point along a roadway. These counts are typically measured in 15-minute segments to define a peak hour of travel on a roadway and collected for a minimum of 48 continuous hours.

'<u>Volume Projections'</u>: Traditional volume count data that is factored to include estimated new trip generation and background growth for purposes of establishing a future volume condition.

<u>'Vehicle Queues'</u>: A measurement of vehicles that can not be processed through a system traffic control point or restriction, and begin to stack along a roadway. Queues can be stationary queues where vehicles come to a full stop while waiting to advance, or "rolling" queues where vehicles slow down to a low speed (15-mph or less) due to difficulty in the downstream processing of vehicles.

<u>'Vehicle Speeds'</u>: A measurement of the rate at which vehicles are passing a given point on a street or highway.

<u>'Permanent Traffic Data Collection Station'</u>: Various devices that are permanently installed to measure/collect traffic data elements used to monitor traffic operations conditions along a roadway or at an intersection.

3. Traffic Thresholds

Each approach to the two-lane bridges in the Canton/Dedham Street Corridor (at the Neponset River and at the MBTA/Amtrak tracks) has an inherent capacity that can be estimated, but is best measured. If the capacity of the bridges and the lane drops approaching the bridges is exceeded, approaching demand volumes will not be processed, resulting in congestion, queuing and potential safety and emergency access issues for the motoring public. MassHighway is concerned that the capacity limitations due to the two-lane segment, comprised of the MBTA and Neponset River bridges and associated lane drops on both the westbound and eastbound approaches, will inherently result in the inability of the system to process the demand volumes. The following standard measures of traffic operations will be used to evaluate the traffic flow

conditions of the Dedham/Canton Street Corridor and associated impacts to the I-95 interchange ramps.

a. Traffic Volumes – In accordance with the FEIR Certificate, MassHighway and the Proponent have established the traffic volume criteria to be used to evaluate the two-lane cross-section of Canton Street. As required in the FEIR Certificate, traffic volume thresholds are based on the demand volumes established by the modeling effort through the EOT Steering Committee, and the projected traffic volumes calculated by the Proponent in the FEIR. The 2011 traffic volume projections, incorporating traffic from the Phase I Buildout of Westwood Station, will be utilized as the threshold measuring conditions.

The threshold volumes for the Canton/Dedham Street Corridor for a monitoring point on Dedham Street, located immediately west of the Cumberland Farms intersection, are established as follows:

Westbound: 1765 vehicles per hour Eastbound: 1657 vehicles per hour

If the actual westbound traffic volumes regularly exceed 1765 vph or the actual eastbound traffic volumes regularly exceed 1657 vph, a Threshold Violation will have occurred.

b. Queues & Speeds - If traffic volumes approaching the two bridges exceed the capacity of the bridges to accommodate such traffic volumes, the excess traffic volumes may create congestion and queuing into adjacent intersections. It is possible that the vehicle queues will constrain operations at the new I-95 northbound off-ramp intersection with Dedham Street and extend the queue back to the ramp junction with the I-95 mainline.

If queues, whether rolling or stopped, occur on the new northbound off-ramp and extend from the Dedham Street intersection down the ramp towards the I-95 northbound mainline, the speed of traffic in the queues will decline such that it will create a hazardous differential in the speed between the I-95 northbound mainline and off-ramp traffic, potentially leading to rear end collisions. Additionally, queues extending near or beyond the ramp gore can directly interfere with the vehicles on the I-95 northbound travel lanes, resulting in mainline congestion and additional safety concerns.

To try and prevent this situation from occurring, the traffic signal at the I-95 northbound off-ramp intersection with Dedham Street will be configured with a queue detection system that will, upon activation, call for the signal to provide additional green time for the northbound off-ramp movement.

Additionally, traffic will be monitored through a traffic sensing system located on the new I-95 northbound off-ramp, at a point 200 feet north of the physical gore at I-95. The system will be configured to record individual vehicle speeds, as well as mean speed, volume counts and occupancy collected during consecutive user-defined time periods. Through the traffic sensing system, MassHighway can monitor real-time events based on vehicle-specific, user-defined vehicle speed conditions. In addition, the system will store

user-defined, historical traffic information (vehicle counts, speeds and occupancy) that is collected in consecutive, user-defined time periods. Through built-in communications, the traffic sensing system allows for remote access and data retrieval. Vehicle count, speed and occupancy data passing over a point on the I-95 northbound off-ramp 200 feet north of the physical gore at I-95 will be remotely transmitted to the MassHighway Traffic Operations Center (TOC).

A Threshold Violation will be deemed to have occurred if due to rolling and/or stationary queues on the northbound I-95 off-ramp, monitored operating vehicle speeds at the traffic sensing system are regularly measured to be 15 miles per hour (mph) or less for at least 25% of the measured volume count passing through the detection zone over an hour period.

4. Monitoring Method

The proponent will establish and implement a traffic monitoring program to measure actual traffic volumes and vehicle speeds as described above. The monitoring program will commence upon the opening of the new I-95 northbound off-ramp and will continue for five years thereafter.

In order to measure the described traffic volumes and vehicle speeds, the following permanent continuous counting program is required to be operational when the I-95 northbound off-ramp becomes open for use:

a) Three Canoga Traffic Sensing System detectors for traffic data acquisition through Microloop technology to obtain and record traffic volume, occupancy, and speeds.

The following locations are recommended for detector monitoring:

- 1. On the new off-ramp from northbound I-95 mainline approximately 200 feet north of the physical gore at I-95.
- 2. On Dedham Street westbound, immediately west of the Cumberland Farms signal.
- 3. On Canton Street eastbound, prior to the Neponset River bridge.

Information regarding volumes, occupancy, and speeds from the detectors should be summarized hourly, daily and monthly and be transmittable to MassHighway's Traffic Operations Center.

b) A 360° pan/tilt/zoom closed circuit camera installation as identified in the attached CCTV (Closed Circuit Television) specification – MassHighway Items 819.21 and 819.54,-camera lowering system mounted approximately 60 feet above Dedham Street on the southwest area between the bridge and the southbound I-95 on-ramp. The camera shall be designed to allow two-way communication for directing the camera's position and providing real-time visual data back to MassHighway's Traffic Operations Center. Information obtained will be used to assess peak period queuing, operations, and emergency conditions along the Canton/Dedham Street Corridor, as well as the westbound merge point approaching the two lane

MBTA/Amtrak bridge, the I-95 off-ramp diverge and the I-95 on-ramp merge conditions.

c) A Closed-Loop Traffic Signal Detection System – The traffic signals at the intersection of the I-95 northbound off-ramp with Dedham Street and the I-95 southbound on-ramp intersection with Dedham Street will be configured to measure traffic volumes through the detection system. The volume count report will be accessible to MassHighway via remote wireless access to the signal controllers. MassHighway will periodically monitor the output reports for the volume detectors to evaluate the operating conditions at these locations. Optimal locations for the queue detectors will be worked out with MassHighway during the detailed design process.

The Proponent will also undertake a comprehensive program to monitor vehicle trips generated by the project. As part of this monitoring program, the proponent will conduct driveway counts of all land uses developed as part of the master plan. These counts will be undertaken at three month intervals.

The Proponent's traffic volume projections for the Canton/Dedham Street Corridor, as provided in the FEIR for the Westwood Station project, included both "background growth" in traffic volume and the traffic expected to be generated by specifically identified projects. The threshold volumes set forth in Section 3.a above also take background growth and traffic from identified future projects into account. If a Threshold Violation occurs, but the Proponent is able to demonstrate to MassHighway's reasonable satisfaction that the Threshold Violation would not have occurred but for the traffic generated by a new or expanded project or projects, that were not identified in the FEIR and which caused the assumed background growth rates to be exceeded, then the Proponent will be responsible only for its proportionate fair-share of the required mitigation set forth in Section 5 below. This paragraph shall only apply for projects subject to the state environmental review process or the Approval for Access to State Highway Regulations for which MassHighway will use its permitting authority to ensure that such projects contribute to their fair-share mitigation.

The methodology used to calculate the Proponent's proportionate fair-share shall be as follows:

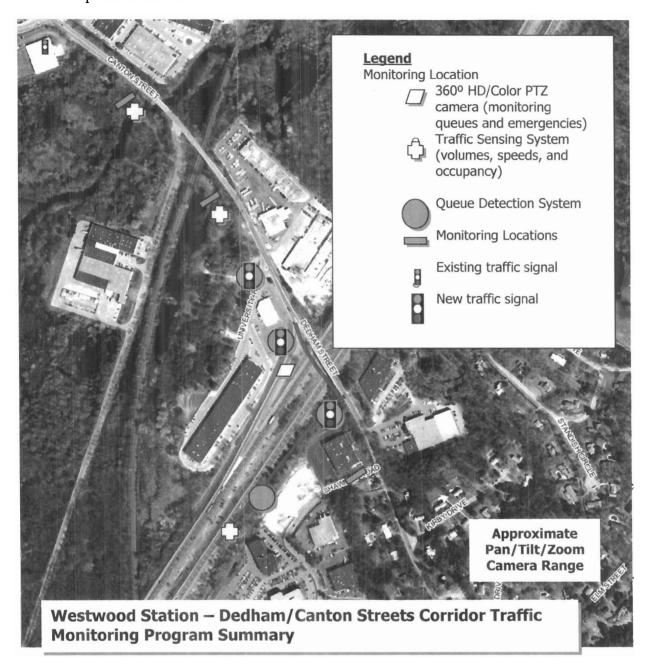
The Westwood Station proponent is responsible for all costs less a fraction equal to the number of trips in the corridor generated by identified unanticipated projects divided by the total number of trips in the corridor, or as expressed as a formula:

Westwood Station Costs = All Costs – [(Unanticipated Development Trips/All Corridor Trips) * All Costs]

Required Mitigation

If a Threshold Violation occurs, upon notification by MassHighway, the Proponent will stop any further occupancy and/or development of the site, and construct, at Proponent's expense, the Permanent Canton/Dedham Street Corridor Improvements.

The figure below provides an approximate graphical description of the traffic monitoring locations specified above.



FINDINGS

For the reasons stated above, MassHighway hereby finds that, with implementation of the mitigation measures described above, all practicable means and measures will be taken to avoid or minimize adverse traffic and related impacts to the environment resulting from the Westwood Station project. Appropriate conditions consistent with this Section 61 Finding will be included in the access and traffic signal permits to be issued by MassHighway in order to describe more fully and ensure implementation of these measures.

September 25, 2008

DATE

Laisa Paiewonsky

Commissioner