

Deval L. Patrick GOVERNOR

Timothy P. Murray LIEUTENANT GOVERNOR

Ian A. Bowles SECRETARY

## The Commonwealth of Massachusetts

Executive Office of Energy and Environmental Affairs 100 Cambridge Street, Suite 900 Boston, MA 02114

> Tel: (617) 626-1000 Fax: (617) 626-1181 http://www.mass.gov/envir

August 1, 2007

# CERTIFICATE OF THE SECRETARY OF ENERGY & ENVIRONMENTAL AFFAIRS ON THE SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME: Route 24 Access Improvements

PROJECT MUNICIPALITY: Fall River and Freetown

PROJECT WATERSHED: Taunton EEA NUMBER: 12902B

PROJECT PROPONENT: Massachusetts Highway Department

DATE NOTICED IN MONITOR: June 25, 2007

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that the Supplemental Draft Environmental Impact Report (SDEIR) submitted for this project **adequately and properly complies** with MEPA and its implementing regulations. The Proponent may prepare and submit the Final Environmental Impact Report (FEIR) for MEPA review.

The Route 24 Access Improvements project has been previously reviewed by MEPA in conjunction with the Fall River Executive Park (FREP) project under one EEA file number, #12902. The SDEIR and all previous MEPA submissions were jointly submitted by the Fall River Redevelopment Authority (FRRA) and the Massachusetts Highway Department (MassHighway). In the SDEIR, the FRRA and MassHighway have requested that I allow the two elements of the project – the FREP and the proposed new interchange on Route 24 – to be considered as two separate projects for the remainder of MEPA review. In a separate Certificate issued today, I have amended the December 16, 2002 Special Review Procedure that was established for the project such that the FRRA is now designated the Proponent for the FREP and MassHighway is the Proponent for the Route 24 interchange project. The Fall River Executive Park shall now be referred to as EEA #12902A and the Route 24 Access Improvements project shall now be EEA #12902B.

As a result of the designation of separate Proponents for each project, I am today issuing two Certificates on the SDEIR and will allow the preparation of separate FEIRs for the FREP and the Route 24 Interchange project. This Certificate responds to information presented in the SDEIR on the design, environmental impacts and proposed mitigation for the proposed interchange on Route 24 between Exits 8 and 9 with associated access roads and outlines issues that must be addressed in the FEIR by MassHighway. All references to the Proponent in the body of this Certificate refer to MassHighway. All references to project in this Certificate refer to the Route 24 interchange. A seperate Certificate on the SDEIR has been issued to the FRRA for the Fall River Executive Park project.

#### **Project Description**

EEA #12902B

The Route 24 Access Improvements project is one component of a larger undertaking that involves several interrelated elements, including the conveyance of 300 acres of land owned by the Department of Conservation and Recreation (DCR) and currently part of the Freetown-Fall River State Forest to the City of Fall River for the development of up to 3,000,000 square feet (sf) of office/industrial space to be known as the Fall River Executive Park (FREP). In return, the City of Fall River will convey a Conservation Restriction (CR) on approximately 4,300 acres of City-owned water supply lands to DCR and the Division of Fisheries and Wildlife (DFW). The CR will provide permanent protection to a large parcel, which when taken together with already protected adjacent parcels will create a contiguous 14,000-acre area of protected open space known as the Southeastern Massachusetts Bioreserve. The City will also provide \$2.45 million to the Trustees of the Reservations (TTOR) to aid in additional open space acquisition. The project design is governed by the requirements of Chapter 266 of the Acts of 2002; a Memorandum of Agreement (MOU) among the Executive Office of Energy and Environmental Affairs (EOEEA), DFW, DCR, the City of Fall River, the Fall River Redevelopment Authority (FRRA) and the TTOR (August 7, 2000); and the December 2002 SRP.

The 293-acre site of the proposed Fall River Executive Park is located on the easterly side of Route 24 between Exits 8 and 9 in Fall River and Freetown. The site is located north of the former Fall River Airport, now known as Commerce Park. Of the 293 acres on the site, just over 49 acres are located in the Town of Freetown and the remaining 244 acres are located in the City of Fall River. To provide transportation access for the proposed improvements and other development in the area, MassHighway proposes a new interchange on Route 24 between the existing interchanges 8 and 9.

Development of the new interchange and access roadways will primarily occur on 35 acres of land in private ownership and approximately 7 acres of former State Forest land. The former State Forest land required for the interchange is part of the 300-acre land swap. The Proponent also proposes the construction of a connection between the new interchange and the new public access roadway to be constructed through the FREP and construction of a new access roadway from the proposed interchange west to South Main Street in Freetown.

#### **MEPA Jurisdiction**

The project is undergoing environmental review and requires the preparation of an EIR pursuant to Section 11.03 (6)(a)(2) of the MEPA regulations because it proposes a new interchange on a limited access highway. Since submittal of the DEIR, the Proponent has refined the design of the Route 24 interchange and has significantly minimized wetland impacts. The project no longer exceeds EIR thresholds for wetlands. The project also meets or exceeds ENF review thresholds related to Article 97 lands, roadway construction, wetlands and possibly archaeological impacts.

The project will require a NPDES Construction General Permit; a Category 2 Programmatic General Permit from the U.S. Army Corps of Engineers (ACOE); a 401 Water Quality Certificate from the Department of Environmental Protection (MassDEP); a land transfer from the DCR; and an Order of Conditions from the Freetown Conservation Commission. Because the project involves the use of state funds and a state land transfer, MEPA jurisdiction extends to all aspects of the project that may cause significant Damage to the Environment as defined in the MEPA statute.

The Proponent should clarify the funding source for the proposed interchange in the FEIR and should outline any required permits and/or review if the interchange receives funding from the federal government.

#### Review of the SDEIR

The purpose of MEPA review is to ensure that a project proponent studies feasible alternatives to a proposed project; fully discloses environmental impacts of a proposed project; and incorporates all feasible means to avoid, minimize, or mitigate Damage to the Environment as defined by the MEPA statute. I have fully examined the record before me, including but not limited to the Scope issued on July 15, 2005; the SDEIR filed in response; and the comments entered into the record. I find that the SDEIR is sufficiently responsive to the requirements of the MEPA regulations and the Scope to meet the regulatory standard for adequacy. In particular, the SDEIR presented a comprehensive analysis of alternative interchange designs. The preferred alternative will result in significantly less environmental impacts as compared to previously proposed designs. Comments submitted on the SDEIR reflect support for the project as currently proposed.

While the Route 24 Access Improvements project will hereafter progress through MEPA review independent of the FREP, there remain several interconnected issues related to project design and impact for the two projects. Furthermore, both projects are dependent on the successful execution of the land swap between DCR and the City of Fall River, which has not yet occurred. The Proponent must continue to coordinate closely with the FRRA during project planning and construction, and during the implementation and monitoring of mitigation, to ensure that the environmental protection and transportation improvement goals of the project are met.

#### **SCOPE**

#### General

The FEIR should contain a copy of this Certificate and a copy of each comment received on the SDEIR. The FEIR should respond to the comments received, to the extent that the comments are within MEPA subject matter jurisdiction. MassHighway should respond to specific comments on the interchange project and the FRRA should respond to specific comments on the FREP. All comments should be reviewed by both Proponents. I strongly encourage FRRA and MassHighway to coordinate on the Response to Comments sections of the FEIRs to ensure that all comments are adequately addressed. The FEIR should present additional narrative and/or technical analysis as necessary to respond to the concerns raised.

The FEIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should be sent to any state agencies from which the Proponent will seek permits or approvals, to the list of "comments received" below, and to Fall River and Freetown officials. Both the FREP and Route 24 Interchange FEIRs should be circulated to all commenters on the SDEIR, regardless of whether comments may have focused only on one aspect of the project. A copy of the FEIR should be made available for public review at the Fall River and Freetown Public Libraries.

#### **Alternatives**

The proposed FREP site is located adjacent to and east of Route 24, just north of the Fall River Commerce Park. The property currently has no access to public roads. A review of access alternatives concluded that providing a new interchange at Route 24 is the most reasonable alternative that exists to accommodate the level of development and traffic expected from the FREP.

The only feasible access from the south to the FREP is via a new road connecting the southern boundary of the FREP to Airport Road and Exit 8 on Route 24. Under this approach, Exit 8 and the Airport Rotary would have to accommodate all of the traffic generated by the FREP during the morning and evening peak hours. Recent and planned capacity improvements at the intersection of the Route 24 northbound ramps and Airport Road will not provide sufficient excess capacity to accommodate the FREP traffic. In addition, directing the FREP traffic from the south through Exit 8 would worsen the existing weave condition on Route 24 northbound between the left-side on-ramp at Exit 7 and the right-side off-ramp at Exit 8.

The proposed site of the FREP is 1.6 miles from Exit 9 in Freetown. Providing access to the site from Route 24 at Exit 9 would require the construction of a new roadway to the interchange and rebuilding the interchange and South Main Street to accommodate the new roadway. The new roadway would pass through the State Forest, cross railroad tracks, and would either cross the Campanelli Business Park or Route 24. According to MassHighway and AASHTO standards, there should be at least one mile between interchanges in urban areas. The

distance between Exits 8 and 9 is almost three miles. As a result, a new interchange could be located in the vicinity of the FREP.

Seven interchange alternatives were initially evaluated in the DEIR based on their traffic operational benefits; total land area taken by the interchange; area of State Forest property impacted; acreage of wetland impacts; area in floodplains; and impacts on historic and cultural resources. Based on the analysis, four alternatives were carried forward and included a full diamond interchange and single point urban interchange (SPUI). Each of the concepts had a variation of crossing over or under Route 24. Interchange concepts that were eliminated included a cloverleaf, half diamond, and a combination of half diamond/half cloverleaf. A SPUI configuration and a diamond interchange with direct connections to a relocated South Main Street were added to the evaluation at the request of MassHighway.

The Proponent evaluated two alternative connections to South Main Street for the "over" Route 24 alternatives. One alternative for the connection would cross over South Main Street and loop to approach an at-grade intersection from the west. A second alternative connection would require the relocation of South Main Street to the west to allow a straight ramp connection at-grade from the east, eliminating the need for a bridge to cross over South Main Street, but requiring a new bridge over the railroad. Both South Main Street connection alternatives were combined with the diamond and SPUI interchange configurations.

The following interchange alternatives were examined in the SDEIR:

- Alternative 2 Full diamond interchange under Route 24
- Alternative 3A Full diamond interchange over Route 24 with loop ramp to South Main Street
- Alternative 3B Full diamond interchange over Route 24 with relocated South Main Street
- Alternative 5 SPUI under Route 24
- Alternative 6A SPUI over Route 24 with loop ramp to South Main Street
- Alternative 6B SPUI over Route 24 with relocated South Main Street

The alternatives analysis was carried forward in the SDEIR using updated wetlands data, new aerial photography and a Phase 1 archaeological study. The Proponent also shifted the location of the interchange crossing of Route 24 approximately 700 feet south to minimize or eliminate impacts on wetlands and State Forest land.

The total land consumed by the interchange ranges from 10.0 acres for the SPUI under Route 24 to 31.6 acres for the diamond interchange over Route 24 with a relocated South Main Street. The SPUI alternatives in general require less land than the diamond configuration. None of the six alternatives has an impact on floodplains and because the interchange location has been shifted, all have minimal impact on wetlands and significantly reduced impacts on State Forest land.

The Proponent undertook an analysis of archaeological and historic resources for one site located near the connector road between the interchange and South Main Street. This site

contains the foundational remains of a late 19<sup>th</sup> century farmstead, including a house and barn (Barnaby-Wordell site), which was considered possibly eligible for inclusion in the National Register of Historic Places. The analysis concluded that the site did not contain any significant resources. A site visit to the area west of South Main Street that would be affected by the loop ramp or the relocation of South Main Street indicates a potential for cultural resources. The Proponent is currently undertaking an assessment of the area.

The Proponent's analysis of traffic operations indicates that both the SPUI and the diamond interchange configurations would accommodate projected traffic volumes and provide acceptable levels of service (LOS). The SPUI alternative has more flexibility to accommodate varying traffic patterns in the future. The "over" interchanges would require far less disruption to Route 24 than the "under" concepts, which would require reconstruction of both sides of the highway to allow for the building of an underpass.

The Proponent's preferred alternative is the SPUI interchange over Route 24 with a loop ramp connection to South Main Street (Alternative 6A). The SPUI interchange requires less land area and less State Forest land than the diamond interchange because the on- and off-ramps are located closer to the Route 24 mainline. Wetlands impacts are comparable for both alternatives. The SPUI provides simpler signal phasing, easy coordination with the adjacent signal at South Main Street, fewer pedestrian crossings for parallel pedestrian movements, and higher capacity for left-turn movements resulting in better queue management through the interchange. According to the SDEIR, the preferred alternative represents the result of collaborative efforts to date between MassHighway and the FRRA to identify the most effective and practicable configuration for the new interchange.

The proposed interchange would include new bridge structures(s) and entrance and exit ramp embankments that would be designed for future two-lane on/off ramps. Associated acceleration and deceleration lanes on the Route 24 mainline for single lane on/off ramps will need to be constructed. The anticipated total length of improvements on the Route 24 mainline is approximately 6,300 feet. The proposed improvements also include construction of a new public access roadway through the FREP from the interchange to the end of Riggenbach Road. The length of this new access roadway, to be known as Executive Park Drive, is approximately 5,800 feet. In its comments on the SDEIR, the Executive Office of Transportation (EOT) has stated that Riggenbach Road must be brought up to existing standards before tying into the new access road. In the FEIR, MassHighway should respond to this comment and identify the party responsible for implementing this improvement.

The location of the interchange is not expected to change as a result of further design or consultation, since it is strategically located to minimize impacts on wetlands to the north and the State Forest to the south. Remaining issues to be addressed include concerns due to significant grade differences when Executive Park Drive crosses over Route 24 and connects to South Main Street. The Proponent may propose design refinements that reduce grades, profiles, number of lanes on ramps, and bridge widths to achieve cost reductions while improving operations, safety and access to the FREP and South Main Street. The Proponent should provide an update on the interchange design and resulting changes to environmental impacts in the FEIR.

Initially the new interchange will be able to accommodate approximately 3.3 million square feet of additional development in the area without triggering the need for capacity improvements on Route 24. Full development of the FREP, the Riverfront Park and other area developments anticipated to occur by the year 2030, may require further improvements and added capacity to Route 24. The Proponent should discuss in the FEIR what monitoring measures will be implemented to determine when additional lanes should be added to the on/off ramps and when additional capacity is required on the Route 24 mainline.

#### Land Alteration and Drainage

As the Proponent for the proposed interchange and access road through the FREP, MassHighway is responsible for stormwater runoff from the associated impervious surfaces created as part of its project. I direct MassHighway to coordinate with the City of Fall River regarding the stormwater management system design for the interchange and new roadways and the FREP. The existing stormwater management system for Route 24 consists of a mix of closed drainage systems. Stormwater runoff in the median is collected and directed toward abutting low lying areas along Route 24; stormwater runoff along the outer lanes of Route 24 sheet flows to the edge of pavement and continues to flow overland to low lying areas.

The proposed Route 24 stormwater management system will provide a significant improvement in stormwater quality management over existing conditions. Where practicable, existing discharge points will be retrofitted or abandoned to enhance total suspended solids (TSS) removal rates. Under post-development conditions, all existing flows will flow into water quality units and/or surface detention basins prior to discharge. The Proponent will construct one or more detention basins at the proposed Route 24 Interchange to control peak discharge rates and infiltrate treated stormwater in the ramp island south of South Main Street in Freetown. Treatment of runoff from the proposed interchange ramps will be handled utilizing Best Management Practices (BMPs) such as open channel flow and the construction of deep sump catch basins. Detention and retention ponds will also be considered and constructed if required.

In the DEIR, the Proponent discussed the compliance of proposed storwmater management measures with the Massachusetts Stormwater Management Policy, the U.S. Environmental Protection Agency's NPDES Stormwater General Permit for Construction Activities, and the Massachusetts Wetlands Protection Act. Stormwater impacts of the Route 24 Access Improvements project will be further reviewed by the Freetown Conservation Commission and MassDEP during wetlands permitting.

During project construction, erosion and sedimentation (E&S) control BMPs will be installed prior to site clearing and grading. The DEIR provided a description of the following E&S control measures to be implemented: hay bale perimeter controls; site fence barriers; storm drain inlet protection; stone construction exit; hay bale check dams; temporary sediment basins; and vegetative slope stabilization. The E&S control measures will be routinely inspected and maintained throughout construction until structures have been completed and exposed soils are vegetatively stabilized.

In the FEIR, the Proponent should discuss how stormwater runoff from Executive Park Drive will be managed for the length of the roadway through the FREP and for the loop ramp to South Main Street. The Proponent should clarify whether this roadway will be turned over to Freetown and Fall River once constructed, and identify the responsible party for structural and non-structural BMPs. The Proponent should determine whether work related to roadway construction will require review from the Fall River Conservation Commission. The Proponent should also discuss the long-term maintenance of the stormwater management system for the Route 24 Interchange and access ramps.

#### Wetlands

A total of ten federally- or state-regulated wetlands were identified within or adjacent to the project site, including Bank, Bordering Vegetated Wetlands (BVW), Land Under Water Bodies and Waterways (LUWW), Riverfront Area, Vernal Pools and Isolated Wetlands. Mother's Brook, a perennial stream located west of the proposed FREP flows northwest under Route 24 to its confluence with the Taunton River. Rattlesnake Brook is located east of the proposed project within the Freetown State Forest. The Rattlesnake Brook drainage area supports cold water fisheries. All interchange alternatives considered would result in minor impacts to federally-regulated and state-regulated wetlands.

The preferred interchange alternative would result in the loss of approximately 2,370 sf of Bordering Vegetated Wetlands and 17 linear feet of bank. An additional 4,270 sf of BVW areas will be temporarily impacted during construction of interchange ramps. The project requires an Order of Conditions from the Freetown Conservation Commission, a 401 Water Quality Certificate from MassDEP and a Category 2 PGP from the ACOE.

The MA Wetlands Protection Act and its Regulations do not distinguish between permanent and temporary alterations to BVW. Thus the preferred interchange alternative exceeds the 5,000 square foot alteration allowance under 310 CMR 10.55(4). The SDEIR provided an analysis of alternative access routes to the FREP site and concluded that upgrading existing access to support the proposed development and associated traffic is not feasible. MassDEP states in its comments on the SDEIR that there project appears to meet the criteria for a limited project at 310 CMR 10.53(3) and can therefore be permitted at the local and state level.

The Proponent should investigate opportunities to reduce BVW impacts to less than 5,000 sf, including, but not limited to the minimization of work zone width and the use of vertical walls for work in or near BVW. The Proponent should present design changes to the interchange and associated wetland impacts in the FEIR. The Proponent indicated in the SDEIR that it intends to send a letter to the ACOE in response to comments submitted on the DEIR regarding the wetland delineation and impacts to federal wetlands. The Proponent should provide an update on consultation with the ACOE in the FEIR.

The area of temporary disturbance to BVW will be restored and mitigation measures are proposed to stabilize segments of intermittent stream channel to offset losses associated with the project. Four on-site wetland replacement areas totaling 2,625 sf are proposed. The Proponent

states in the SDEIR that additional details on the wetland mitigation will be provided when refinements to the preferred interchange alternative are finalized. A detailed wetlands replication plan should be provided in the FEIR which, at a minimum, should include: replication location(s); elevations; typical cross sections; test pits or soil boring logs; groundwater elevations; the hydrology of areas to be altered and replicated; list of wetlands plant species of areas to be altered and the proposed wetland replication species; planned construction sequence; and a discussion of the required performance standards and long-term monitoring. The FEIR should investigate opportunities for providing a larger wetland replication area at a ratio of at least 1:1.5 to help mitigate the loss of BVW. The Proponent should discuss whether the results of further cultural resources survey work will impact the proposed wetlands mitigation.

#### Archaeological Resources

The land associated with the preferred interchange alternative, acceleration and deceleration lanes, and the FREP was surveyed by the Public Archaeology Laboratory (PAL) in 2003 in response to a request from the Massachusetts Historic Commission (MHC). The PAL survey identified two archaeological sites: a Pre-Contact Period Native American find-spot (the Broken Tree Find Spot) and a 19<sup>th</sup> century farmstead site (the Buffington-Wordell site). In a 2005 letter, MHC dismissed the Native American find-spot as ineligible for listing in the National Register of Historic Places, but requested that a site examination survey be conducted at the potentially significant Buffington-Wordell site. PAL has conducted further survey work and considers it ineligible for listing in the National Register. The Proponent has not yet submitted the report to MHC.

In 2007, PAL was contracted by MassHighway to conduct an archeological sensitivity assessment for proposed highway improvements west of South Main Street and proposed wetland mitigation areas not previously reviewed during the 2003 intensive survey. Based on preliminary field reconnaissance, PAL found the entire area west of South Main Street and two proposed wetland mitigation areas to be archaeologically sensitive for the identification of Pre-Contact Period Native American sites and historic period farmstead and rural industrial sites. According to the SDEIR, PAL is currently conducting an intensive survey within these areas. Updated information on the project's potential impacts to archaeological resources should be provided in the FEIR.

#### Pedestrian and Wildlife Crossings

The preferred alternative for the interchange would provide for Executive Park Drive to cross over Route 24. The Proponent states in the SDEIR that the interchange design can accommodate sidewalks to allow pedestrian travel through the interchange. The Proponent should commit to the installation of sidewalks and timed pedestrian signals to provide for safe pedestrian passage through the interchange. The Proponent should also discuss whether sidewalks will be provided along Executive Park Drive and outline plans to provide pedestrian connections to South and North Main Street and to Riggenbach Road to the south.

The development of the interchange and the FREP will have a significant impact on habitat and connectivity along the Taunton River Greenway. In response to concerns regarding wildlife passage under Route 24, the Proponent states in the SDEIR that an existing box culvert through which Rattlesnake Brook is carried under Route 24 and is large enough to allow the passage of deer and other wildlife. Several commenters have noted that Rattlesnake Brook fills the culvert frequently and therefore is impassable for wildlife. The Proponent should examine the potential widening of this culvert and other routes in the vicinity of the proposed interchange that could be practicably used to allow wildlife passage under Route 24, such as the existing Algonquin Gas Transmission Company road north of the proposed interchange. A connection between the State Forest and the Taunton River is an important element in preserving a healthy ecosystem in the Bioreserve. Several commenters on the SDEIR offer examples of other projects or agencies that have successfully implemented wildlife passage in highway projects. The Proponent should commit to construction of a wildlife crossing as part of the Route 24 Access Improvements project.

#### Construction

The FEIR should include a construction management plan for the Route 24 interchange, loop ramp to South Main Street and Executive Park Drive. The Proponent should discuss project phasing and outline measures that will be implemented to minimize potential construction period impacts on vegetation, water quality, wetlands, noise, air quality and traffic. I encourage the Proponent to participate in MassDEP's Clean Construction Equipment Initiative, consisting of the retrofitting of equipment and/or use of low sulfur fuel to reduce exposure to diesel exhaust fumes and particulate emissions during construction.

#### **Mitigation**

The SDEIR did not update the Section 61 Findings from the DEIR. The FEIR should outline all mitigation measures to which the Proponent is committed for the Route 24 Access Improvements project. The FEIR should describe all measures proposed to avoid, minimize and mitigate adverse effects on the environment. The FEIR should also include revised draft Section 61 Findings for use by the state permitting agencies. The draft Section 61 Findings should contain a clear commitment to any/all mitigation, an estimate of the individual costs of the proposed mitigation, and the identification of the parties responsible for implementing the mitigation. A schedule for the implementation of all mitigation must also be included.

August 1, 2007 Date

Ian A. Bowles

### Comments received:

6/15/2007	Luisa Paiewonsky, Commissioner, Massachusetts Highway Department
6/15/2007	Vanasse Hangen Brustlin, Inc., for the Fall River Redevelopment Authority
6/20/2007	Vanasse Hangen Brustlin, Inc., for the Fall River Redevelopment Authority
7/12/2007	Friend of Freetown/Fall River State Forest
7/20/2007	Green Futures
7/24/2007	Massachusetts Sportsmen's Council
7/25/2007	Department of Conservation and Recreation
7/25/2007	Department of Environmental Protection
7/25/2007	Conservation Law Foundation
7/25/2007	MassAudubon
7/25/2007	Executive Office of Transportation

IAB/BA/ba