



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

Deval L. Patrick
GOVERNOR

Timothy P. Murray
LIEUTENANT GOVERNOR

Ian A. Bowles
SECRETARY

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

April 2, 2010

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME: I-93/Route 110/Route 113 Interchange Reconfiguration
and Reconstruction Project
PROJECT MUNICIPALITY: Methuen
PROJECT WATERSHED: Merrimack
EOEA NUMBER: 14279
PROJECT PROPONENT: Massachusetts Department of Transportation
(MassDOT)
DATE NOTICED IN MONITOR: February 24, 2010

As Secretary of Energy and Environmental Affairs, I hereby determine that the Final Environmental Impact Report (FEIR) submitted on this project **adequately and properly complies** with the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62I) and with its implementing regulations (301 CMR 1 1.00). Because the Draft EIR (DEIR) adequately addressed the substantive issues of the Scope, I published a notice in the Environmental Monitor (February 24, 2010) indicating that the DEIR would be reviewed as a Final EIR (FEIR) in accordance with the provisions of the MEPA regulations at 301 CMR 11.03(8)(8)(b)(2)(a). No additional comments were received on the FEIR.

Project Description

The proposed project is designed to improve traffic flow and traffic safety from both I-93 northbound and southbound and Route 110 eastbound and Route 113 westbound through the interchange. The I-93/Route 110/Route 113 Interchange Reconfiguration and Reconstruction Project is not intended to increase road capacity.

MassDOT's preferred alternative involves the reconstruction of the I-93 interchange in a partial cloverleaf configuration containing loop ramps to serve I-93 northbound traffic exiting onto westbound Route 110/113 and Route 110/113 westbound traffic entering onto I-93 southbound. These loop ramps are located in the northeast and northwest quadrants of the project site, respectively. The proposed cloverleaf design also includes the construction of 4 slip ramps to facilitate traffic movement from I-93 northbound to Route 110/113 eastbound, from Route 110/113 westbound to I-93 northbound, from I-93 southbound to Route 110/113, and from Route 110/113 eastbound to I-93 southbound. As noted in the DEIR, construction of the proposed northbound and southbound loop ramps, slip ramps and signalized intersections will significantly reduce local traffic queuing and delays on the eastbound and westbound Route 110/113 approaches to the interchange and local project area roads during morning and evening peak hours. As described by MassDOT, the project is consistent with the long-term improvement recommendations of the Methuen Rotary Study, undertaken by MassHighway with input from the Study Advisory Committee (SAC).

According to MassDOT, construction of the Partial Cloverleaf design alternative will cost \$71 million dollars and will include the following improvements:

- removal of the existing rotary configuration;
- construction of a partial cloverleaf (two loops) interchange to accommodate westbound Route 110/113 to southbound I-93 on-ramp, and I-93 northbound off-ramp to westbound Routes 110/113;
- widening and re-alignment of western portion of Route 113 and eastern portion of Route 110 to provide continuous through-movements for Routes 113 and 110;
- construction of new traffic signalization at five roadway intersections including:
 - Lowell Street/Route 110 at Bolduc Street/Riverside Drive
 - Route 113/Branch Street
 - Route 113 at Route 110/I-93 southbound off-ramp
 - Route 110/Route 113
 - Route 110/Route 113/I-93 northbound on-ramp
- construction improved stormwater management system to serve Partial Cloverleaf project;
- construction of new roadway signage;
- construction of improved pedestrian/bicycle amenities;
- construction of noise barriers at two locations abutting residential properties pursuant to the Federal Highway Administration (FHWA) Highway Traffic Noise Abatement Policy and MassDOT Type I Noise Policy;
- implementation of Transportation Demand Management (TDM) transit enhancements and improvements; and,
- construction of bicycle and pedestrian accommodations to enable pedestrian and bicycle access from the eastern limits of the project site across I-93 to the western limits of the project site in accordance with MassDOT design standards.

The construction program for the proposed interchange reconfiguration project also includes new sidewalks and bicycle shoulder lanes, new lighting and noise barriers. MassDOT has also committed to an extensive program of off-site wetlands mitigation and local roadway improvements. The project requires right-of-way acquisitions of four separate residential properties with relocation, which have already been executed by MassDOT. Structures on the residential properties will be demolished to facilitate the interchange improvements. The project will also require one municipal parcel taking and twenty-five partial or sliver commercial property takings.

Estimated environmental impacts associated with this interchange reconfiguration and reconstruction project include the alteration of nearly all of the 45-acre project site and approximately 6.5 acres of the 13.4-acre off-site wetland mitigation parcel. The project will result in the creation of approximately 1.6 acres of new impervious surfaces. As currently designed, the project will result in direct impacts to wetland resource areas including the alteration of approximately 2.2 acres of Bordering Vegetated Wetlands (BVW), 716 lf of Bank. Areas of BVW will be replicated at approximately 3:1 ratio off-site on a separate 13.4-acre acre property located approximately 1 mile west of the project site on Lowell Boulevard in Methuen. As noted above, no additional traffic capacity is anticipated with this project; it is an improvement project designed to improve safety, relieve congestion and improve existing traffic operations. According to the information provided in the DEIR, the interchange area will operate significantly better upon completion of the Partial Cloverleaf interchange design than under current conditions.

Jurisdiction and Permitting

The project is undergoing review and requires preparation of a mandatory EIR pursuant to Section 11.03(3)(a)(2) of the MEPA Regulations because it will require a Variance in accordance with the Wetlands Protection Act (WPA). The project is also undergoing review pursuant to Sections 11.03 (1)(b)(2), 11.03(3)(b)(1)(d), 11.03(6)(b)(1)(b) and 11.03(6)(b)(2)(a) of the MEPA Regulations because it will result in the creation of five or more acres of impervious surface area; the alteration of 5,000 or more square feet (sf) of bordering vegetated wetlands (BVW); widen an existing roadway for one-half or more miles, and alter terrain ten or more feet from the existing roadway for one-half or more miles. The project will require a Section 401 Water Quality Certificate from the Department of Environmental Protection (MassDEP). The project will require a Variance from MassDEP's Wetlands Regulations and a Notice Regarding Demolition and Construction from MassDEP.

The project must comply with the National Pollution Discharge Elimination System (NPDES) General Permit from the United States Environmental Protection Agency (U.S. EPA) for stormwater discharges from a construction site of over one acre. MassDOT may be required to prepare a blast design plan pursuant to the Board of Fire Protection Regulations (577 CMR 13.09) for the proposed construction of roads, semi-direct ramps and replacement bridges within the project area.

Because the project will be undertaken by and financed in part by MassDOT, a State Agency, MEPA jurisdiction for this project is broad and extends to all aspects of the project that are likely to cause Damage to the Environment as defined in the MEPA regulations.

REVIEW OF THE FEIR

The FEIR was reviewed in the February 19, 2010 Certificate on the DEIR. No comments were received on the FEIR.

Alternatives Analysis

In addition to the preferred project alternative presented in the ENF (Alternative 3A – Partial Cloverleaf), the Proponent evaluated numerous alternative site plan configurations including Alternative 2B (Single Point Urban Interchange – SPUI), and the No-Build alternative as part of the project planning process. The Partial Cloverleaf design was selected based on minimization of environmental impacts and construction costs, and maximizing vehicular, bicycle and pedestrian mobility and safety through the rotary and surrounding arterials. According to MassDOT, the Partial Cloverleaf alternative works best to meet the needs of the project, requires only one bridge crossing, requires no major vehicular weaving conflicts, and provides the lowest anticipated construction costs.

Wetlands

The project site contains a total of approximately 3.18 acres of Bordering Vegetated Wetlands (BVW) located in the northwestern and northeastern sections of the project site that are associated with previously constructed stormwater management infrastructure for the existing Methuen Rotary. In addition to BVW, the project site also contains two intermittent streams, Inland Bank and wetland buffer. The southwest portion of the project site located adjacent to the Merrimac River and contains Riverfront Area (RA) and Bordering Land Subject to Flooding (BLSF). MassDOT has estimated that construction of the Partial Cloverleaf design will result in the permanent alteration of approximately 2.2 acres of BVW, 6,200 sf of Land Under Water and 716 lf of Bank to accommodate the construction of Ramps B/C, Ramps E/F, the widening of Route 110/113, new stormwater management infrastructure and proposed noise barriers along the proposed I-93 northbound on-ramp (Ramp F). As discussed in the DEIR, MassDOT's proposed use of embankment side slopes to construct the Partial Cloverleaf's new I-93 southbound off-ramp (Ramp C) will result in the alteration of greater impacts to wetland resource areas compared to the Single Point Urban Interchange – SPUI (Alternative 2B). However, as noted below, the Partial Cloverleaf design has significant advantages in improving traffic safety and relieving traffic congestion over Alternative 2B.

Wetlands Protection Act Variance

The proposed project continues to require a 401 Water Quality Certificate (401 WQC) from MassDEP, and a Variance from full compliance with MassDEP's Wetlands Protection Act regulations.

In order for the Partial Cloverleaf design alternative to be implemented, the Commissioner of MassDEP will need to issue a Variance from the Wetlands Protection Act regulations.

The Variance eligibility standards (310 CMR 10.05) require the project proponent to satisfactorily demonstrate:

- 1) there are no reasonable conditions or alternatives that would allow the project to proceed in compliance with the Wetlands Regulations;
- 2) mitigation measures are proposed that will allow the project to be conditioned so as to contribute to the protection of the interests identified in the Wetlands Protection Act; and,
- 3) the variance is necessary to accommodate an overriding community, regional, state or national public interest.

According to comments received from MassDEP on the DEIR, MassDOT has demonstrated that the preferred Partial Cloverleaf design alternative will serve as traffic safety improvements, and has significant advantages in improving safety and relieving congestion over Alternative 2B. The Partial Cloverleaf design contains separate ramps for eastbound and westbound traffic entering I-93 South and avoids the need for drivers to accomplish three left hand merges within a relatively short distance to head south on I-93. Based on the additional information provided to MassDEP and the MEPA Office, MassDEP anticipates that MassDOT will be able to demonstrate the project's compliance with in the Variance eligibility standards under the Wetlands Protection Act regulations.

Off-site Mitigation

MassDOT has committed to construct approximately 4.3 acres of off-site wetlands mitigation (approximately 3:1 wetlands replication ratio) for any unavoidable impacts to wetlands. As described in the DEIR, the proposed off-site wetlands mitigation will be constructed on a 13.4-acre former commercial agricultural nursery site located approximately 1.6 miles west of the project site at 18 Lowell Boulevard and abutting the Merrimac River. A portion of the proposed wetlands mitigation parcel is located within BioMap Core Habitat (C149). Most of the mitigation site is located within the 100-year floodplain. MassDOT's proposed mitigation plan includes the demolition and removal of existing buildings, impervious access road and surface parking area, and historic fill, and the restoration of approximately 1.9 acres of emergent wetlands, 1.2 acres of forested wetlands, 3.0 acres of shrub wetlands, 1,500 lf of perennial stream with banks, and approximately 1.6 acres of upland.

Endangered Species

The southwest portion of the project site is located within the Merrimack River corridor, which is a habitat for the Bald Eagle (*Haliaeetus leucocephalus*), Clubtail Dragonfly (*Stylurus spiniceps*) and the UMBER Shadowdragon (*Neurocordulia obsoleta*). Portions of the project site located along Route 113 in Methuen and Dracut are located with priority habitat and estimated habitat for the Wood Turtle (*Glyptemys insculpta*) and the Blanding's Turtle (*Emydoidea blandingii*).

According to the comments received from the Natural Heritage and Endangered Species Program (NHESP) on the DEIR, the proposed project construction activities will not occur within habitat areas and the project does not require further review pursuant to the Massachusetts Endangered Species Act (MESA 321 CMR 10.00).

Stormwater

The DEIR and supplemental information provided by MassDOT to the MEPA Office adequately described the consistency of MassDOT's proposed drainage and stormwater management system with the MassDEP Stormwater Management Regulations and Standards for the 2, 10 and 100-year storm events. The existing Rotary's stormwater management system provides the collection of stormwater runoff in catch basins located throughout the Rotary configuration and discharge to adjacent wetland resources areas. From these wetland areas, stormwater is conveyed in intermittent streams in a southerly direction to existing drainage culverts located under Route 113 and the I-93 northbound ramp and into existing stormwater drain pipes to two discharge outlets located along the Merrimac River.

The proposed stormwater management plan has been designed to be consistent with MassDEP's Stormwater Management regulations for redevelopment and Stormwater Management Policy for new development and will achieve 80% Total Suspended Solids (TSS) removal on a project-wide basis. MassDOT's proposed drainage system incorporates portions of the existing Rotary stormwater management system with the construction of new stormwater management infrastructure. Stormwater runoff from the Partial Cloverleaf interchange will be collected in new deep sump catch basins and conveyed in closed drainage systems to two new detention basins and two new infiltration basins with sediment forebays and discharged through outlet control structures to adjacent BVW resource areas located in the northeastern and northwestern sections of the project site. Stormwater will be conveyed from these BVW resource areas in a southerly direction through the existing stormwater culverts and drain pipes and discharged to the Merrimac River at two existing outlets located along the Merrimac River.

MassDOT has committed to monitor and maintain this stormwater management system to ensure that water quality is not degraded as a result of this project. MassDOT has also committed to employ erosion/sedimentation control measures to minimize adverse impacts to the onsite wetlands resources during construction. MassDOT has committed to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the NPDES Construction General Permit to establish erosion and sedimentation control Best Management Practices (BMPs). This maintenance program should outline the actual maintenance operations, sweeping schedule, responsible parties, and back-up systems. MassDOT should also commit to use a non-sodium based de-icer on pavement surfaces. I anticipate that MassDEP's Variance Decision will contain conditions to ensure the consistency of the proposed drainage and stormwater management system with the MassDEP Stormwater Management Guidelines and Standards for areas with higher potential pollutant loads, and with the provisions of the National Pollution Discharge Elimination System (NPDES) General Permit from the U.S. Environmental Protection Agency for stormwater discharges from construction sites.

TransportationTraffic Analysis

The DEIR included a traffic impact and access study that conforms to EOEA/EOTPW and Institute of Traffic Engineers (ITE) guidelines for Traffic Impact Assessment. The DEIR included an updated Level-of-Service (LOS) analysis for interchanges and roadway intersections located within the project area for the morning and evening peak hours during project construction and post-construction. The DEIR also contained a summary of average and 95th percentile vehicle queues for each intersection within the study area and the weave and merge operations on I-93 and the Route 110 and Route 113 ramps. The DEIR satisfactorily demonstrated that MassDOT's proposed interchange reconfiguration and reconstruction project and traffic mitigation plan addresses existing roadway deficiencies in the Route 110/Route 113/I-93 interchange area and will accommodate future 2030 daily and peak traffic impacts to state and local roadways in the project area.

Transportation Demand Management Plan

The Methuen Rotary Study identified a number of conceptual transit, park-and-ride, and Intelligent Transportation Systems (ITS) options that could benefit the project area including expanding parking capacity at existing Park-and-Ride facilities in the project area and expanding the service areas served by local and regional bus routes and Transit Authority transportation systems.

MassDOT has proposed a Transportation Demand Management Plan (TDM) plan for the interchange reconfiguration project designed to encourage commuters to use of alternative transportation modes and minimize the reliance on single occupant private vehicles for commuters.

The proposed TDM plan includes the following commitments:

- expand the parking capacity at the Andover Park-And-Ride lot with the construction of 81 new spaces to provide a total of 156 commuter parking spaces. According to MasDOT, this expansion will help better accommodate the demonstrated demand and provide a shelter and allow commuter bus access to the lot;
- install fixed roadside signage along Routes 110 and 113 to promote alternative transportation options during and post project construction;
- install Dynamic Message Signs (DMS) on I-93 to inform commuters of alternative transportation options including the use of the existing Park-and-Ride Lots in Methuen and Andover;
- provide Ridesharing information for project contractors and construction personnel in the on-site resident engineer's office;
- coordinate with MassRides to design and implement a pre-construction awareness program to encourage commuters to use of alternative transportation modes; and,

- install Intelligent Transportation Systems (ITS) technologies including the use of SmartZone trailers containing portable video traffic monitoring technologies, closed circuit television cameras (CCTV), and a permanent traffic data collection and monitoring station in locations throughout the project site and the project area to monitor traffic, enhance traveler information during project construction.

All project contractors should be required to participate in the proposed TDM plan. MassDOT's TDM plan should describe any construction and post-construction monitoring necessary to ensure the success of the proposed transit improvements and TDM program.

Transit

The DEIR included a map of existing public transit and shuttle bus service routes provided by the Merrimac Valley Regional Transit Authority (MVRTA) and the Lowell Regional Transit Authority (LRTA) that serve the project area. MassDOT has committed to work closely with the MVRTA, the LRTA, and local officials from Methuen, Dracut, Lowell and Lawrence to identify additional opportunities to expand the existing transit and shuttle bus service from activity nodes and residential areas through the project area.

I strongly encourage MassDOT to continue identify opportunities to expand connections and service from the project site to the Methuen Park-and-Ride Lot located north of the project site in Methuen and the Andover Park-and-Ride Lot located south of the project area in Andover. MassDEP has also requested that MassDOT continue to work with the New Hampshire Department of Transportation, the Federal Transit Administration and the FHWA to identify opportunities to expand transit alternatives to serve local and regional stakeholders throughout the I-93 corridor.

Pedestrian and Bicycle Facilities

The DEIR included a detailed description of existing and proposed pedestrian sidewalks and bicycle facilities throughout the project site. Under the Partial Cloverleaf alternative, MassDOT has committed to construct a pedestrian access and circulation system that will accommodate pedestrian and bicycle access from the western limits of the project site beginning at the Route 110/Lowell Street/Riverside Drive intersection and extending east along the north side of the new Route 110/113 to the eastern limits of the project site at the Haverhill Street/Route 110/Burnham Road intersection. As described in the DEIR, the proposed pedestrian access and circulation system will include new 5.5ft-wide sidewalks, 4ft-wide on-street bicycle shoulders, new crosswalks with signage, pavement markings and pedestrian signals, and five new signalized intersections.

Air Quality

The proposed Partial Cloverleaf design alternative has been designed to improve traffic flow and traffic safety from both I-93 northbound and southbound, and Route 110 eastbound and Route 113 westbound through the interchange.

The DEIR contained a detailed discussion of the results of MassDOT's microscale analysis for carbon monoxide (CO) and mesoscale analysis for volatile organic compounds (VOC), oxides of nitrogen (NOx), CO and carbon dioxide (CO2) for the Partial Cloverleaf 2030 No-build and build conditions. According to the information provided in the DEIR, MassDOT's preferred interchange design alternative will have the lowest predicted mesoscale emissions of VOCs, NOx, CO and CO2 compared to other project alternatives.

Greenhouse Gases

The DEIR included an analysis of the GHG emissions that will be generated from vehicle congestion (vehicle queuing and idling time) that MassDOT has projected under the current and 2030 No-build alternatives and compared it to the GHG emissions associated with the proposed 2030 Build Partial Cloverleaf alternative that MassDOT. The DEIR satisfactorily demonstrated that this project will result in a reduction of traffic congestion and vehicle idling at the interchange and on Routes 110 and 113 and thereby reduce GHG emissions by approximately 6.6% as compared to the No-Build condition. No new developable land will become available as a result of this proposed interchange project and therefore, no secondary growth impacts and indirect GHG emissions are anticipated. MassDOT has committed to mitigation measures related to public transit, Park-and-Ride, and Intelligent Transportation Systems (ITS) that will achieve further reductions in GHG emissions. The DEIR adequately demonstrated that the project will not result in increased GHG emissions.

Noise Impacts to Sensitive Receptors

The DEIR contained a description of MassDOT's noise impact assessment completed for the preferred Partial Cloverleaf alternative. Using federal noise standards for transportation projects, MassDOT identified existing 2009 and projected 2030 noise levels during project construction and post-construction at a number of sensitive receptor locations located throughout the project site. According to the information provided in the DEIR, a total of approximately 81 residential properties located adjacent to the proposed Ramp D in the southeast quadrant of the project site on Noyes Street and Lincoln Street, adjacent to the proposed Ramp A in the project site's southwest quadrant on Griffin Street and Bolduc Street, and adjacent to the proposed Ramp F in the northeast quadrant of the project site on Smith Avenue and Cherry Hill Circle, are currently experiencing significant noise impacts. Construction of the Partial Cloverleaf interchange will result in a minor amount of additional traffic noise impacts that will impact three additional residences under the 2030 Build condition.

A noise barrier analysis was completed for these 84 residential properties to determine the feasibility and reasonableness of constructing noise barriers pursuant to the Federal Highway Administration's (FHWA's) noise abatement policy (*Procedures for Abatement of Highway Traffic Noise and Construction Noise*, 23 CFR Part 772) and MassDOT's Type I Noise Barrier Policy. MassDOT identified and committed to construct noise barriers for the Noyes Street and Lincoln Street neighborhoods and the Smith Avenue and Cherry Hill Circle neighborhoods.

According to MassDOT, the Griffin Street and Bolduc Street neighborhoods did not meet the requirements for noise barriers under MassDOT's Type I Noise Barrier Policy. The construction of the noise barrier along Ramp F for the Smith Avenue and Cherry Hill Circle neighborhoods will result in impacts to approximately 1,100 sf of BVW.

The DEIR also included an analysis of the visual impacts of the proposed project, including renderings of the preferred Partial Cloverleaf interchange alternative and a conceptual-level landscaping plan of the proposed interchange from all sides. The DEIR included a proposed lighting plan depicting the location of new steel pole-mounted street lights with cobra-head style light fixtures and relocated existing utility pole-mounted street light fixtures throughout the project site. The proposed cobra-head style light fixtures are designed to focus light within the roadway layout and minimize potential light pollution impacts to adjacent properties.

Historic and Archaeological Resources

The project area contains a number of historically significant structures/properties included in MHC's Inventory of Historic and Archeological Assets of the Commonwealth (*Enoch H. Griffin House, 51 North Lowell Street MHC# MET.181, Moses G. Smith House, 387 Lowell Street MHC# MET.179, and Patrick Cox House, 256 Haverhill Street MHC# MET.180*). MassDOT has provided MHC with information to confirm that the Enoch H. Griffin House is located outside the Area of Potential Effect (APE) and that the Patrick Cox House was demolished as part of a previously constructed housing project. This information also included an analysis of the project's potential physical and visual impacts on the Moses G. Smith House and outbuildings and the two existing properties/houses located southwest of the Moses G. Smith House on Lowell Street. As described in the DEIR, MHC has completed its review of MassDOT's reconnaissance survey results for the project site and concurred with the FHWA/MassDOT's Section 106 finding of "No Historical Properties Affected" for the proposed Partial Cloverleaf interchange reconfiguration project.

Construction Period Impacts

The proposed project involves the demolition of significant amounts of existing road and roadway infrastructure. The demolition and removal of existing roadway must comply with both MassDEP's Solid Waste and Air Quality Control regulations. MassDOT should integrate recycling at the planning and design stage to enable the project's management and occupants to establish and maintain an effective waste diversion program and coordinate demolition and construction activities with town officials and abutting property owners.

I encourage the MassDOT to consult with MassDEP for additional guidance on developing a successful waste management program and use of recycled materials. MassDOT must also demonstrate the project's consistency with the applicable Air Quality control regulations. MassDOT should commit to requiring all project contractors install after-engine emission controls such as diesel oxidation catalysts (DOCs) or diesel particulate filters (DPFs).

MassDOT must participate in MassDEP's Clean Air Construction Initiative to minimize emissions from diesel-powered construction equipment. All construction-related refueling and equipment maintenance activities should be conducted under cover on impervious surface areas with containment, and outside of any wetlands resource areas and rare species habitat areas. MassDOT should require its contractors to retrofit diesel-powered equipment with emissions controls, such as particulate filters or traps, and use on-road low and ultra low sulfur diesel (LSD, ULSD) fuel pursuant to MassDEP's Clean Construction Equipment Initiative.

Hazardous Wastes Remediation

The DEIR contained a summary of the results of the Draft Phase 1 Environmental Site Assessment (ESA) undertaken by MassDOT for the proposed off-site wetlands mitigation parcel located at 18 Lowell Boulevard in Methuen. According to MassDOT, the proposed wetlands mitigation parcel contains a number of locations where a release of oil and/or hazardous waste material (OHM) to soil or groundwater may have occurred associated with the parcel's former use as a commercial agricultural nursery operation. MassDOT's ESA discovered the presence of reportable levels of various petroleum compounds, chromium, nickel and endosulfan sulfate that will require additional site assessment and remediation pursuant to the Massachusetts Contingency Plan (MCP). MassDOT has committed to work closely with MassDEP's Bureau of Waste Site Cleanup (BWSC) in the final design of MassDOT's proposed remediation of the wetlands mitigation parcel. MassDOT will retain a Licensed Site Professional (LSP) to assist MassDOT in the required remediation activities prior to the construction of the proposed wetlands mitigation. MassDOT has also committed to ensure that the project contractors and sub-contractors maintain an emergency response plan for performing appropriate response actions in the event contamination is encountered during project construction.

SUMMARY OF MITIGATION COMMITMENTS

The DEIR included mitigation measures and draft Section 61 Findings. The draft Section 61 Findings contained a clear commitment to implement mitigation measures, estimated the costs of specific mitigation measures, and identified the parties responsible and schedule for implementing the mitigation. A copy of the Final Section 61 Findings must be forwarded to the MEPA Office in accordance with Section 11.12 of the MEPA regulations.

MassDOT committed to the following mitigation measures in the DEIR:

Transportation Infrastructure

- remove the existing rotary configuration;
- construct a partial cloverleaf (two loops) interchange to accommodate westbound Route 110/113 to southbound I-93 on-ramp, and I-93 northbound off-ramp to westbound Routes 110/113;
- widen and re-align Route 113/Route 110 to provide continuous through-movements for Routes 113 and 110;

- construct of new traffic signalization at five roadway intersections including:
 - Lowell Street/Route 110 at Bolduc Street/Riverside Drive
 - Route 113/Branch Street
 - Route 113 at Route 110/I-93 southbound off-ramp
 - Route 110/Route 113
 - Route 110/Route 113/I-93 northbound on-ramp
- construct an improved stormwater management system to serve Partial Cloverleaf interchange project;
- install improved signage promoting public transit information;
- construct new pedestrian sidewalks and bicycle shoulder lanes;
- construct noise barriers at two residential locations abutting the project site pursuant to consistent with FHWA Highway Traffic Noise Abatement Policy and MassDOT Type I Noise Policy;
- implement TDM transit enhancements and improvements; and,
- construct bicycle and pedestrian accommodations to enable pedestrian and bicycle access from the eastern limits of the project site across I-93 to the western limits of the project site in accordance with MassDOT design standards.

Transportation Demand Management

- expand the parking capacity at the Andover Park-And-Ride lot with the construction of 81 new spaces to provide a total of 156 commuter parking spaces, including provide a shelter and allowing commuter bus access to the lot;
- add signage along Routes 110 and 113 to promote alternative transportation options;
- install fixed signs and Dynamic Message Signs (DMS) on I-93 to inform commuters of alternative transportation options including the use of the existing Park-and-Ride Lots in Methuen and Andover;
- provide Ridesharing information for project contractors and construction personnel in the on-site resident engineer's office;
- coordinate with MassRides to design and implement a pre-construction awareness program to encourage commuters to use of alternative transportation modes; and,
- install Intelligent Transportation Systems (ITS) technologies in locations throughout the project site and the project area to monitor traffic, enhance traveler information during project construction.

Noise Abatement

MassDOT identified and committed to construct two noise barriers to serve the Noyes Street and Lincoln Street neighborhoods and the Smith Avenue and Cherry Hill Circle neighborhoods pursuant to MassDOT's Type I Noise Abatement Policy.

Wetlands Mitigation

MassDOT has committed to construct approximately 4.3 acres of off-site wetlands mitigation (approximately 3:1 wetlands replication ratio) and includes the following mitigation activities:

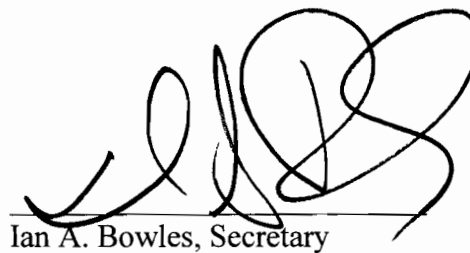
- demolition of existing buildings, impervious access road and surface parking area;

- removal of and historic fill; and,
- restoration of approximately 1.9 acres of emergent wetlands, 1.2 acres of forested wetlands, 3.0 acres of shrub wetlands, 1,500 lf of perennial stream with banks, and approximately 1.6 acres of upland.

Conclusion

The DEIR (which also served as the FEIR) adequately assessed potential project impacts and committed to measures that will avoid, minimize and mitigate adverse impacts. I am satisfied that any remaining outstanding issues can be addressed through the state and local permit and review process. MassDOT should continue to work closely with the City of Methuen, the Town of Dracut and others to finalize the project's roadway infrastructure improvement mitigation measures and TDM commitments.

April 2, 2010
Date



Ian A. Bowles, Secretary

Comments Received on the FEIR: None

Comments Received on the DEIR:

01/27/10	Massachusetts Department of Environmental Protection (MassDEP) – NERO
01/05/10	Natural Heritage and Endangered Species Program (NHESP)
01/15/10	David O'Leary
01/18/10	Marilyn Freeman
01/14/10	MassDOT
01/19/10	Brooks Properties I, LLC
01/19/10	Glen Edwards
01/20/10	Severance Trucking Company, Inc.
01/22/10	Merrimack Valley Planning Commission
01/22/10	Mary Daigle
01/22/10	MassDOT
01/26/10	MassDOT
02/02/10	MassDOT
02/09/10	Massachusetts Department of Environmental Protection (MassDEP) – Boston
02/16/10	Massachusetts Department of Environmental Protection (MassDEP) – Boston

21 Form Comment Letters expressing support to I-93/Route 110/Route 113 Interchange Project EEA #14279

FEIR #14279
IAB/NCZ/ncz