

# The Commonwealth of Massachusetts

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November 8, 2007

# CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS ON THE ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Lawrence Municipal Airport Runway Safety Area Project

PROJECT MUNICIPALITY : North Andover PROJECT WATERSHED : Merrimack River

EOEA NUMBER : 14113

PROJECT PROPONENT : Lawrence Municipal Airport Commission

DATE NOTICED IN MONITOR : October 9, 2007

Pursuant to the Massachusetts Environmental Policy Act (M.G. L., c. 30, ss. 61-62H) and Sections 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of a mandatory Environmental Impact Report (EIR).

# **Project Description**

As described in the Environmental Notification Form (ENF), the proposed project consists of the construction of runway safety areas (RSAs) at the Lawrence Municipal Airport in North Andover. RSAs are turf areas maintained at ground level symmetrically around a runway and are designed to enhance safety in the event an aircraft undershoots, overruns or veers off the runway. In addition, they are intended to provide safe and unobstructed access for firefighting and emergency equipment. The improvements are proposed in accordance with Federal Aviation Administration (FAA) standards for public airports. According to the ENF, the RSAs are established based on the Airport Reference Code (ARC) assigned to the runway. Runway 5-23 must be designed to B-II standards, which requires an RSA of 300 feet by 150 feet. Runway 14-32 must be designed to B-I standards, which requires an RSA of 240 feet by 120 feet.

The Lawrence Municipal Airport is located on 532 acres in North Andover. The Merrimack River, a sewage treatment plant and municipal land is located to the west of the airport, commercial land is to the north, an active farm is located to the north east, Route 123/133 and commercial land are located to the east and a residential neighborhood is located to the south. The airport is located within the watershed of Lake Cochichewick, a designated Outstanding Resource Water. Wetlands are located throughout undeveloped portions of the site and at each end of the runway ends. Intermittent streams flow perpendicular to both ends of Runway 5-23 and include a narrow band of Bordering Vegetated Wetlands (BVW). An emergent marsh is located between the Runway 23 end and the intermittent stream.

The project involves the placement of fill at each of the at each end of the airport's two runways (5-23 and 14-32) and could impact up to 20,000 square feet of BVW and 370 linear feet (lf) of Inland Bank. To avoid, minimize and mitigate impacts, the proponent is exploring alternative designs, such as varying side slopes, incorporating retaining walls and/or culverts, and shifting runway alignments. In addition, each alternative includes construction techniques to minimize impacts, an overall reduction in impervious surfaces, improved stormwater management and wetlands replication.

# Permits and Jurisdiction

The project is undergoing MEPA review and subject to preparation of a mandatory EIR pursuant to Section 11.03 (3)(a)(2) because it requires a state permit and consists of alteration requiring a Variance in accordance with the Wetlands Protection Act. The project requires a Variance and a 401 Water Quality Certificate from the Department of Environmental Protection (MassDEP). In addition, it requires a Section 404 Permit from the US Army Corp of Engineers (ACOE), a National Pollution Elimination System (NPDES) General Permit for Storm Water Discharges From Construction Activities from the US Environmental Protection Agency (EPA). The project is to review under the National Environmental Policy Act (NEPA).

The proponent has indicated its intention to file a joint EIR/Environmental Assessment to address the requirements of both the state and federal review processes.

The project may receive funding from the Massachusetts Aeronautics Commission (MAC). Therefore, MEPA has broad scope jurisdiction extending to all issues that may cause Damage to the Environment. These include wetlands, open space and historic resources.

#### **SCOPE**

The EIR should follow Section 11.07 of the MEPA regulations for outline and content, as modified by this scope. It should include a copy of this Certificate and all comment letters

# **Project Description & Permitting**

The EIR should include a detailed description of the project, including project phasing, and should briefly describe each state agency action required for the project and each phase of the project. It should demonstrate how the project is consistent with applicable performance standards. The EIR should contain sufficient information to allow the permitting agencies to understand the environmental consequences of their official actions related to the project.

It should discuss the project's consistency with the Commonwealth's Sustainable Development Principles, Executive Order 385 – Planning for Growth, any regional or local planning documents and with the Airport's master plan.

# **Alternatives Analysis**

The primary focus for this EIR is identification and analysis of alternatives to wetlands alterations. The ENF identifies multiple alternatives for each Runway End including:

RSA 5 - Alternative 1A: Full Length Safety Area @ 3:1 (with box culvert), Alternative 1B: Full Length Safety Area @ 3:1 (with rerouting of the stream channel), Alternative 2A: Full Length Safety Area @ 2:1 (with box culvert), Alternative 2B: Full Length Safety Area @ 2:1 (with rerouting of the stream channel) and Alternative 3: Engineered Material Arresting System (EMAS).

RSA 23 - Alternative 1: Full Length Safety Area @ 3:1, Alternative 2: Full Length Safety Area @ 2:1 (with retaining wall), Alternative 3: Engineered Material Arresting System (EMAS).

RSA 14 – Alternative 1 Full Length Safety Area @ 3:1

RSA 32 – Alternative 1: Full Length Safety Area @ 3:1

RSA 14/32 – Alternative 1: Runway Shift to Provide Full RSAs

The EIR should identify the impacts associated with each of the alternatives (and variations). In addition, it should identify what the criteria and process are for seeking a waiver from FAA to the dimensional requirements of RSAs. It should provide a table that summarizes each alternative, associated impacts and costs. The Alternatives Analysis should be designed to support MassDEP's evaluation of the consistency of the project with the criteria for a Variance and the standards established for a 401 Water Quality Certificate. The alternatives analysis should clearly demonstrate consistency with the objectives of MEPA review, one of which is to document the means by which the proponent plans to avoid, minimize or mitigate Damage to the Environment to the maximum extent feasible.

# Wetland Resources

As noted previously, the project could impact up to 20,000 square feet of bordering vegetated wetlands (BVW) and 370 linear feet (lf) of Inland Bank. The EIR should identify all wetland resource areas, including riverfront area, buffer zones, 100-year flood elevations, priority and/or estimated habitat, water supply and waterways and delineate them on a reasonably scaled plan. The EIR should identify the significance of the resources, including value to flood control, storm damage prevention, pollution prevention and fisheries and wildlife habitat. The EIR should quantify the project's estimated impact on each resource area and identify impacts on reasonably scaled project plans. It should describe the nature of all likely impacts that cannot be avoided, including whether they are temporary or permanent in nature.

#### Variance

Comments from MassDEP indicate that a variance from full compliance with the general standards of the wetlands regulations may be allowed upon a finding that:

- (1) there are no reasonable conditions or alternatives that would allow the project to proceed in compliance with the regulation(s),
- (2) that mitigating measures are proposed that will allow the project to be conditioned so as to contribute to the protection of the interests identified in the Act, and
- (3) that the variance is necessary to accommodate an overriding community regional, state or national public interest; or that it is necessary to avoid an Order that so restricts the use of property as to constitute an unconstitutional taking without compensation.

The EIR and its Alternatives Analysis should clearly demonstrate how the project meets each of these criteria. It should clearly identify measures to avoid and minimize the extent of impacts. The EIR should clearly identify and evaluate alternative mitigation scenarios for review in the EIR. This should include identification and quantification (in text and on plans) of wetlands replication areas and should demonstrate that wetland functions can be restored consistent with regulatory requirements and policies.

#### Wildlife

Comments from MassDEP indicates that a wildlife habitat evaluation is required to demonstrate that the work proposed at the end of Runway 5 will not impact habitat. The EIR should include a wildlife habitat evaluation.

# Drainage

The Draft EIR should present drainage calculations and detailed plans for the management of stormwater. It should include a detailed description of the proposed drainage system design, including a discussion of the alternatives considered along with their impacts. The EIR should identify the quantity and quality of flows. The rates of stormwater runoff should

be analyzed for the 10, 25 and 100-year storm events. The EIR should address the performance standards of MassDEP's Stormwater Management Policy and demonstrate that the design of the drainage system is consistent with this policy.

As noted previously, the project is located within the watershed of Lake Cochichewick, a designated ORW. The EIR should include a Stormwater Management Pollution Prevention Plan (SWPPP) so that MassDEP can determine whether stormwater management associated with construction is adequate to prevent or minimize stormwater discharge of pollutants to protected resources.

# Article 97 Land

The ENF identifies the boundary of the airport property as a constraint to constructing full RSAs for Runway 14/32. A parcel of municipal land, containing a closed wellfield, is located to the west of the airport and in close proximity to the Runway 14 end. Construction of a full RSA at the Runway 14 end will require the purchase of the municipal land. The Runway 32 end is located in close proximity to an existing commercial business. Construction of a full RSA at this end would extend into the parking lot of the business and is unlikely to be supported by the property owner. RSA 14/32: Alternative 1 explores shifting the runway farther to the west to provide full RSAs for both runway ends and avoid impacts to the commercial business. This Alternative will shift the runway further into the municipal land and would require the purchase of a greater amount of municipal land.

The EIR should identify whether the property, which was purchased for water supply protection, is protected by Article 97 of the Amendments to the State Constitution and whether the sale would require approval by MassDEP. If the land is protected by Article 97, the EIR should address the proposed transfer's consistency with the EEA Article 97 Land Disposition Policy. In particular, the EIR must demonstrate that the no other alternative with less environmental impact is feasible, and that any impacts found unavoidable receive maximum feasible mitigation. The proponent must clearly describe the impacts associated with sale of the water supply land and explore how these impacts can be avoided, minimized and mitigated. The EIR should provide maps at a reasonable scale of existing and proposed conditions that clearly identify the land, its features and ownership.

The EIR should identify compensatory open space land and/or parkland in North Andover (at a 1:1 basis, at a minimum, of replacement land to converted land) that could be permanently protected. The EIR should provide a detailed description of the land area(s) proposed as Article 97 compensation and should also discuss the value of the land in terms of the resources they provide and the opportunities for active and/or passive recreation they afford. Compensatory mitigation for previous projects reviewed by MEPA has been as high as 7:1.

#### Historic Resources

MHC comments indicate that the areas proposed for RSAs appear to have been previously graded and disturbed during original runway construction and maintenance activities. They note that areas outside the immediate runway surface are considered to be archaeologically sensitive and several archaeological sites are recorded in surrounding areas in similar environmental settings adjacent to the Merrimack River and Lake Cochichewick. To avoid areas of importance, MHC requests that the proponent limit equipment access routes and construction staging to previously disturbed areas. If this approach is not feasible, the EIR should include a site plan that identifies proposed routes and equipment staging areas on a site plan.

# Construction

The EIR should present a discussion on potential construction period impacts (including but not limited to noise, vibration, dust, and traffic maintenance) and analyze feasible measures, which can avoid or eliminate these impacts.

Because of the project's close proximity to sensitive receptors, the proponent should consider participation in MassDEP's Clean Air Construction Initiative to minimize diesel emissions associated with the construction period. The EIR should present a discussion of measures to implement construction-period diesel emission mitigation including retrofit of construction equipment after-engine emission controls such as diesel oxidation catalysts (DOCs) or diesel particulate filters (DPFs) and use of on-road low-sulfur diesel (LSD) fuel.

# Mitigation

The EIR should include a separate chapter on mitigation measures. This section should include a Draft Section 61 Finding for all state permits. The Draft Section 61 Finding should contain a clear commitment to 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 mitigation should also be included.

# Comments

The EIR should respond to the comments received to the extent that the comments are within the subject matter of this scope. Each comment letter should be reprinted in the EIR

#### Circulation

The EIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should also be sent to the list of "comments received" below and to North Andover officials. A copy of the EIR should be made available for public review at the Andover Public

Library. The proponent should provide a hard copy of the EIR to each state and city agency from which the proponent will seek permits or approvals.

November 8, 2007
Date

lan A. Bowles

# Comments received:

10/29/07 Department of Environmental Protection/Northeast Regional Office (MassDEP/

NERO)

10/5/07 Massachusetts Historical Commission (MHC)

IAB/CDB/cdb