Commonwealth of Massachusetts
Executive Office of Environmental Affairs ■ MEPA Office

ENF Environmental Notification Form

For Office Use Only *Executive Office of Environmental Affairs*
EOEA No.: 14113
MEPA Analyst: DEIRDRE BUCKLEY
Phone: 617-626- X1044

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: **Lawrence Municipal Airport Runway Safety Area Project**		
Street: 492 Sutton Street		
Municipality: North Andover, MA 01845	Watershed: Merrimack River	
Universal Tranverse Mercator Coordinates: N 4731409 E 326156	Latitude: 42 42 57.98 Longitude: -71 7 19.32	
Estimated commencement date: 7/08	Estimated completion date: 7/09	
Approximate cost: 2,000,000	Status of project design: 25 %complete	
Proponent: Lawrence Municipal Airport Commission		
Street: 492 Sutton Street		
Municipality: North Andover	State: MA	Zip Code: 01845
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Randall P. Christensen – Senior Environmental Scientist		
Firm/Agency: Stantec Consulting Services	Street: 136 West Street	
Municipality: Northampton	State: MA	Zip Code: 01060
Phone: (413)584-4776	Fax: (413)584-3157	E-mail:randy.christensen@stantec.com

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)? ☒Yes ☐No

Has this project been filed with MEPA before? ☐Yes (EOEA No._____) ☒No

Has any project on this site been filed with MEPA before? ☐Yes (EOEA No._____) ☒No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:

a Single EIR? (see 301 CMR 11.06(8))	☐Yes	☒No
a Special Review Procedure? (see 301CMR 11.09)	☐Yes	☒No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	☐Yes	☒No
a Phase I Waiver? (see 301 CMR 11.11)	☐Yes	☒No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): Massachusetts Aeronautics Commission (amount unknown at this time)

Are you requesting coordinated review with any other federal, state, regional, or local agency? ☐Yes(Specify_____) ☒No

List Local or Federal Permits and Approvals: North Andover Wetlands Bylaw, Federal Clean Water Act Section 401 and 404, Massachusetts Wetlands Protection Act, National Env. Policy Act

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):
11.03(3)(2) Alteration Requiring a Variance from the MA Wetlands Protection Act

- ☐ Land
- ☐ Water
- ☐ Energy
- ☐ ACEC
- ☐ Rare Species
- ☐ Wastewater
- ☐ Air
- ☐ Regulations
- ☒ Wetlands, Waterways, & Tidelands
- ☐ Transportation
- ☐ Solid & Hazardous Waste
- ☐ Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	532 ac.		
New acres of land altered		5	
Acres of impervious area		-87,000	-87,000
Square feet of new bordering vegetated wetlands alteration		20,000 SF	
Square feet of new other wetland alteration		370 LF (Bank)	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	N/A		
Number of housing units	N/A		
Maximum height (in feet)	N/A		
TRANSPORTATION			
Vehicle trips per day	N/A		
Parking spaces	N/A		
WATER/WASTEWATER			
Gallons/day (GPD) of water use	N/A		
GPD water withdrawal	N/A		
GPD wastewater generation/ treatment	N/A		
Length of water/sewer mains (in miles)	N/A		

State Permits & Approvals

- ☒ Order of Conditions
- ☒ Superseding Order of Conditions
- ☐ Chapter 91 License
- ☒ 401 Water Quality Certification
- ☐ MHD or MDC Access Permit
- ☐ Water Management Act Permit
- ☐ New Source Approval
- ☐ DEP or MWRA Sewer Connection/ Extension Permit
- ☒ Other Permits (*including Legislative Approvals*) – Specify:

N. Andover Wetlands Bylaw

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

☐Yes (Specify_____) ☒No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

☐Yes (Specify_____) ☒No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

☐Yes (Specify_____) ☒No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

☐Yes (Specify_____) ☐No **RESPONSE PENDING FROM MHC**

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

☐Yes (Specify_____) ☐No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

☐Yes (Specify_____) ☒No

PROJECT DESCRIPTION: The project description should include **(a)** a description of the project site, **(b)** a description of both on-site and off-site alternatives and the impacts associated with each alternative, and **(c)** potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

This project involves the construction of standard runway safety areas (RSAs) at each of the four runway ends at the Lawrence Municipal Airport in North Andover, Massachusetts. 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. They are also intended to provide safe and unobstructed access for firefighting and emergency equipment. A RSA should be clear of all permanent obstructions, except those objects whose locations are fixed by function (e.g., airfield signs, lights and other navigation aids). Data on aircraft overruns over a 12-year period indicate that most come to rest between the extended runway edges within 1,000 feet of the runway end. RSAs are included in runway design to minimize this hazard, and are required by the FAA through FAA Advisory Circular (AC) 150/5300-13 (Chapter 3)

The width and length of respective RSAs are dependent upon the applicable Airport Reference Code (ARC) assigned to the runway in question. Airports are designed according to the size and performance characteristics of the most demanding aircraft presently using, or forecasted to use, the facility relative to landing/takeoff requirements. The ARC has two components: the aircraft approach category and the airplane design group. The first component is depicted by a letter (A, B, C, D, or E) and is determined by the aircraft approach speed. The second component is depicted by a Roman numeral and is determined by the airplane wingspan. The most recent airport master plan update for Lawrence designates the airport as having more than one ARC, with the primary runway (5-23) designed to B-II standards while the crosswind runway (14-32) designed to B-I standards.

The B-II design standards for RSAs as listed in FAA Advisory Circular 150/5300-13 include a length beyond the runway end of 300 feet, and a width of 150 feet. Presently, both the Runway 5 and 23 ends do not meet the standard, and currently provide about 100 feet of suitable area. The longitudinal grade of the RSA portion beyond the runway end must be within a slope of 0-3% for the first 200 feet, and can then slope downward at a maximum of 5% to the end of the RSA. The RSA side slopes have no design criteria. The B-I design standards for RSAs include a length beyond the runway end of 240 feet, and a width of 150 feet. Both the Runway 14 and 32 ends do not meet the standard, and currently provide less than 100 feet of suitable area.

The project involves the placement of fill at each of the runway ends to create standard RSAs. Most alternatives presented on the attached plans would result in the creation of a turf area as a final cover type. However, the use of the Engineered Material Arresting System (EMAS) alternative would result in an impervious surface at the runway end(s). The use of EMAS can reduce the length of an RSA past the runway end, but at a significantly greater cost. For B-I and B-II runways, EMAS provides little or no reduction in RSA length as demonstrated by the plans. All four runway ends currently contain maintained turf slopes with some minor shrub cover. Wetlands exist at all four runway ends.

The alternatives for the Runway 5 end RSA include differing side slopes to reduce the extent of the fill footprint. Additionally, the alternatives include using a culvert to address the intermittent stream crossing, or routing the channel around the toe of the fill slope. Routing the stream around the project provides opportunities for replication of both bank and vegetated wetland in excess of the impact amount. The EMAS alternative is also shown. Impacts are listed on each plan. The reduction in pavement is common to all of the Runway 5 end alternatives.

The alternatives for the Runway 23 end RSA include differing side slopes to reduce wetland impact; both 3:1 and 2:1 slopes are shown. A retaining wall is included in the Runway 23 end alternatives to further avoid a sensitive wetland area identified by the North Andover Conservation Commission. The EMAS alternative is also shown. Wetland impacts at this end exceed permissible thresholds under the Massachusetts Wetlands Protection Act. It is probable that some off-site mitigation would be necessary to address the vegetated wetland impact at this runway end. No detailed mitigation plans have been developed for this impact, however it is anticipated that a mix of replication, enhancement through invasives control, and wetland buffer protection will be proposed. Depending on the selected alternatives, wetland impacts may total approximately 20,000 square feet.

The Runway 14 and 32 ends (the crosswind runway) are constrained by property boundaries. At the Runway 32 end, construction of the full RSA length would impact wetlands and cross the property boundary into a commercial building. At the Runway 14 end, the RSA would cross into Town of North Andover property; the site if a discontinued wellfield that was originally airport property. The alternatives include the shifting of the runway to the north away from the wetlands, the commercial building, and Route 125. This shift allows for full RSAs at both runway ends. The property issues at the Runway 14 end would require acquisition of the discontinued wellfield from the Town of North Andover. The airport would follow Title 49, Code of Federal Regulations (CFR), Part 24, Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs. This 49 CFR Part 24 represents the implementing regulation for the Uniform Relocation Assistance and Real Property Acquisition Policies Act, also known as the Uniform Act.

No preferred alternatives have been identified. It is the goal of the Lawrence Municipal Airport Commission to achieve full RSAs at each runway tend to comply with FAA requirements and to enhance safety at the airport. In achieving this goal, the Airport Commission seeks to minimize environmental impacts while protecting the current utilization of the airport. Any selected alternatives must be financially feasible. Construction of the RSAs would be completed as soon as possible, with construction to begin in 2009.

Stormwater management is not shown on the attached plans. There will be an overall loss of paved area as a result of the proposed project. In addition to reducing the peak stormwater discharge rate from the site by pavement reduction, the RSA designs will include other stormwater management features to reduce total suspended solids and other pollutants in the storm flows. At a minimum, vegetated swales will be used to convey and treat stormwater from the RSAs.

This project exceeds the threshold for wetland impacts, and the preparation of an Environmental Impact Report (EIR) is required pursuant to the Massachusetts Environmental Policy Act. The purpose of this Environmental Notification Form is to solicit comments from concerned agencies and the public, so that a proper EIR scope can be developed.