

Rehabilitate a Portion of Taxiway C and Construct a New Stub Taxiway

Logan International Airport

East Boston, Massachusetts

Notice of Intent

Prepared for:

Massachusetts Port Authority

Prepared by:

The Smart Associates, Inc.

&

WSP USA

March 2018

**Rehabilitate a Portion of Taxiway C and Construct a New Stub Taxiway
Logan International Airport**

Notice of Intent

Contents

WPA Form 3 – Notice of Intent

Supplemental Narratives

 Project Description

 Existing Conditions and Wetland Resources

 Proposed Impacts

 Abutter Notification

 Stormwater Management Standards

Stormwater Checklist

USGS Map

Aerial Photograph

Estimated Habitat Map

FEMA Floodplain Maps

Test Pit Logs and Location Map

Boston Conservation Commission Checklist

Project Plans (enclosed separately)



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

WPA Form 3 - Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
MassDEP File #:
eDEP Transaction #:996810
City/Town:BOSTON

A.General Information

1. Project Location:

a. Street Address	LOGAN INTERNATIONAL AIRPORT - TAXIWAY C		
b. City/Town	BOSTON	c. Zip Code	02128
d. Latitude	42.35555N	e. Longitude	70.99585W
f. Map/Plat #	NA	g.Parcel/Lot #	NA

2. Applicant:

Individual Organization

a. First Name	JAMES	b.Last Name	STOLECKI
c. Organization	MASSACHUSETTS PORT AUTHORITY		
d. Mailing Address	ONE HARBORSIDE DRIVE		
e. City/Town	EAST BOSTON	f. State	MA
g. Zip Code	02128	j. Email	jstolecki@massport.com
h. Phone Number	617-568-3552	i. Fax	

3.Property Owner:

more than one owner

a. First Name	JAMES	b. Last Name	STOLECKI
c. Organization	MASSACHUSETTS PORT AUTHORITY		
d. Mailing Address	ONE HARBORSIDE DRIVE		
e. City/Town	EAST BOSTON	f.State	MA
g. Zip Code	02128	j.Email	jstolecki@massport.com
h. Phone Number	617-568-3552	i. Fax	

4.Representative:

a. First Name	JENNIFER	b. Last Name	RIORDAN
c. Organization	THE SMART ASSOCIATES		
d. Mailing Address	72 NORTH MAIN STREET		
e. City/Town	CONCORD	f. State	NH
g. Zip Code	03301	j.Email	jrjordan@smartenvironmental.com
h.Phone Number	603-224-7550	i.Fax	

5.Total WPA Fee Paid (Automatically inserted from NOI Wetland Fee Transmittal Form):

a.Total Fee Paid	500.00	b.State Fee Paid	237.50	c.City/Town Fee Paid	262.50
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6.General Project Description:

7a.Project Type:

- | | |
|---|--|
| 1. <input type="checkbox"/> Single Family Home | 2. <input type="checkbox"/> Residential Subdivision |
| 3. <input type="checkbox"/> Limited Project Driveway Crossing | 4. <input type="checkbox"/> Commercial/Industrial |
| 5. <input type="checkbox"/> Dock/Pier | 6. <input type="checkbox"/> Utilities |
| 7. <input type="checkbox"/> Coastal Engineering Structure | 8. <input type="checkbox"/> Agriculture (eg., cranberries, forestry) |
| 9. <input type="checkbox"/> Transportation | 10. <input checked="" type="checkbox"/> Other |

7b.Is any portion of the proposed activity eligible to be treated as a limited project subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?



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1. Yes No If yes, describe which limited project applies to this project:
2. Limited Project

8. Property recorded at the Registry of Deeds for:

a. County:	b. Certificate:	c. Book:	d. Page:
SUFFOLK		29055	333

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. Buffer Zone & Resource Area Impacts (temporary & permanent):

This is a Buffer Zone only project - Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.

2. Inland Resource Areas: (See 310 CMR 10.54 - 10.58, if not applicable, go to Section B.3. Coastal Resource Areas)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
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a. <input type="checkbox"/> Bank	1. linear feet	2. linear feet
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b. <input type="checkbox"/> Bordering Vegetated Wetland	1. square feet	2. square feet
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c. <input type="checkbox"/> Land under Waterbodies and Waterways	1. Square feet	2. square feet
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	3. cubic yards dredged	
--	------------------------	--

d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet	2. square feet
--	----------------	----------------

	3. cubic feet of flood storage lost	4. cubic feet replaced
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e. <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet	
---	----------------	--

	2. cubic feet of flood storage lost	3. cubic feet replaced
--	-------------------------------------	------------------------

f. <input type="checkbox"/> Riverfront Area	1. Name of Waterway (if any)	
---	------------------------------	--

2. Width of Riverfront Area (check one)	<input type="checkbox"/> 25 ft. - Designated Densely Developed Areas only
	<input type="checkbox"/> 100 ft. - New agricultural projects only
	<input type="checkbox"/> 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project	square feet
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4. Proposed Alteration of the Riverfront Area:

a. total square feet	b. square feet within 100 ft.	c. square feet between 100 ft. and 200 ft.
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5. Has an alternatives analysis been done and is it attached to this NOI? Yes No



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a. number of new stream crossings

b. number of replacement stream crossings

C. Other Applicable Standards and Requirements

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage of Endangered Species program (NHESP)?

a. Yes No

If yes, include proof of mailing or hand delivery of NOI to:

Natural Heritage and Endangered Species
Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581

b. Date of map:2017

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18)....

c. Submit Supplemental Information for Endangered Species Review * (Check boxes as they apply)

1. Percentage/acreage of property to be altered:

(a) within Wetland Resource Area

<0.001% / 0.21 ACRE
percentage/acreage

(b) outside Resource Area

<0.001% / 3.65 ACRES
percentage/acreage

2. Assessor's Map or right-of-way plan of site

3. Project plans for entire project site, including wetland resource areas and areas outside of wetland jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

a. Project description (including description of impacts outside of wetland resource area & buffer zone)

b. Photographs representative of the site

c. MESA filing fee (fee information available at: <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/mass-endangered-species-act-mesa/mesa-fee-schedule.html>)

Make check payable to "Natural Heritage & Endangered Species Fund" and **mail to NHESP** at above address

Projects altering 10 or more acres of land, also submit:

d. Vegetation cover type map of site

e. Project plans showing Priority & Estimated Habitat boundaries

d. OR Check One of the following

1. Project is exempt from MESA review. Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, <http://www.mass.gov/eea/agencies/dfg/dfw/laws-regulations/cmr/321-cmr-1000-massachusetts-endangered-species-act.html#10.14>; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. Separate MESA review ongoing.

a. NHESP Tracking Number

b. Date submitted to NHESP



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3. Separate MESA review completed.

Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review...

2. For coastal projects only, is any portion of the proposed project located below the mean high waterline or in a fish run?

a. Not applicable - project is in inland resource area only

b. Yes No

If yes, include proof of mailing or hand delivery of NOI to either:

South Shore - Cohasset to Rhode Island, North Shore - Hull to
and the Cape & Islands: New Hampshire:

Division of Marine Fisheries - Division of Marine
Southeast Marine Fisheries Station Fisheries -
Attn: Environmental Reviewer North Shore Office
1213 Purchase street - 3rd floor Attn: Environmental
New Bedford, MA 02740-6694 Reviewer
30 Emerson Avenue
Gloucester, MA 01930

If yes, it may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional office.

3. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

Yes No

If yes, provide name of ACEC (see instructions to WPA Form 3 or DEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC Name

4. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

a. Yes No

5. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L.c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L.c. 130, § 105)?

a. Yes No

6. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

a. Yes, Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

1. Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol.2, Chapter 3)

2. A portion of the site constitutes redevelopment

3. Proprietary BMPs are included in the Stormwater Management System

b. No, Explain why the project is exempt:

1. Single Family Home



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City/Town:BOSTON

2. Emergency Road Repair

3. Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department by regular mail delivery.

- 1. USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
- 2. Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.
- 3. Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s). Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.
- 4. List the titles and dates for all plans and other materials submitted with this NOI.

a. Plan Title: **b. Plan Prepared By:** **c. Plan Signed/Stamped By:** **c. Revised Final Date:** **e. Scale:**

TITLE SHEET,
GENERAL PLAN AND
NOTES, GRADING
PLAN (3), EROSION
AND SEDIMENT
CONTROL PLAN (2),
EROSION AND
SEDIMENT
CONTROL DETAIL

WSP/ VALQUIRIO
MENDONCA, PE

03-07-18 / scale as
noted

5. If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. Attach NOI Wetland Fee Transmittal Form.

9. Attach Stormwater Report, if needed.



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 Bureau of Resource Protection - Wetlands
WPA Form 3 - Notice of Intent
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E. Fees

1. Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

<p>1061 _____ 2. Municipal Check Number</p> <p>1060 _____ 4. State Check Number</p> <p>The Smart Associates, Inc. _____ 6. Payer name on check: First Name</p>	<p>3/5/2018 _____ 3. Check date</p> <p>3/5/2018 _____ 5. Check date</p> <p>_____</p> <p>7. Payer name on check: Last Name</p>
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F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

<p>James Stolecki _____ 1. Signature of Applicant</p> <p>Massport _____ 3. Signature of Property Owner(if different)</p> <p>Smart Associates _____ 5. Signature of Representative (if any)</p>	<p>3/5/2018 _____ 2. Date</p> <p>3/5/2018 _____ 4. Date</p> <p>3/5/2018 _____ 6. Date</p>
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For Conservation Commission:

Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:

One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a copy of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:

If the applicant has checked the "yes" box in Section C, Items 1-3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 3 - Notice of Wetland Fee Transmittal
Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
 MassDEP File #:
 eDEP Transaction #:996810
 City/Town:BOSTON

A. Applicant Information

1. Applicant:

a. First Name	JAMES	b. Last Name	STOLECKI
c. Organization	MASSACHUSETTS PORT AUTHORITY		
d. Mailing Address	ONE HARBORSIDE DRIVE		
e. City/Town	EAST BOSTON	f. State	MA
g. Zip Code	02128		
h. Phone Number	6175683552	i. Fax	
j. Email	jstolecki@massport.com		

2. Property Owner:(if different)

a. First Name	JAMES	b. Last Name	STOLECKI
c. Organization	MASSACHUSETTS PORT AUTHORITY		
d. Mailing Address	ONE HARBORSIDE DRIVE		
e. City/Town	EAST BOSTON	f. State	MA
g. Zip Code	02128		
h. Phone Number	6175683552	i. Fax	
j. Email	jstolecki@massport.com		

3. Project Location:

a. Street Address	LOGAN INTERNATIONAL AIRPORT - TAXIWAY C	b. City/Town	BOSTON
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Are you exempted from Fee?

Note: Fee will be exempted if you are one of the following:

- City/Town/County/District
- Municipal Housing Authority
- Indian Tribe Housing Authority
- MBTA

State agencies are only exempt if the fee is less than \$100

B. Fees

Activity Type	Activity Number	Activity Fee	RF Multiplier	Sub Total
A.) CONSTRUCTION OF SINGLE FAMILY HOUSE;	1	500.00		500.00

City/Town share of filling fee	State share of filing fee	Total Project Fee
\$262.50	\$237.50	\$500.00

**Rehabilitate a Portion of Taxiway C and Construct New Stub Taxiway
Logan International Airport
East Boston, MA**

Supplemental Narratives for Notice of Intent

Project Description

The project involves the rehabilitation of approximately 1,600 feet of Taxiway C between Runway 9-27 and Runway 15R-33L at the southeastern edge of Logan International Airport. In addition, the existing elevated taxiway edge lights will be replaced with flush omnidirectional LED light fixtures. The existing taxiway centerline lights will be adjusted to new pavement grades within the limits of the taxiway. The taxiway rehabilitation work will involve milling and overlay of existing pavement, and grading adjacent to the taxiway. The graded area will be loamed and seeded.

In addition to the rehabilitation work, a new stub taxiway will be constructed between Runway 33L and Taxiway C. The new taxiway (C1) will be approximately 375 feet long and 110 feet wide with 40-foot wide paved shoulders on either side.

A second segment of Taxiway C, located in the center of the airfield, will also be rehabilitated. This portion of the project includes an approximate 500 foot section of Taxiway C located between Runway 4R-22L and Taxiway M.

All work will occur on the airfield, within previously disturbed areas. The following table provides a summary of the proposed amount of disturbance, existing/proposed impervious surface, and 100-foot buffer zone impact within each of the two project areas. No direct impacts to wetland resource areas are proposed.

Project Area	Proposed Ground Disturbance*	Existing Impervious Area	Proposed Impervious Area	100-foot Buffer Zone Impact
Southeast end of Taxiway C, by Runway 15R-33L, including new Taxiway C1	158,515 SF (3.64 ac.)	367,825 SF (8.44ac.)	69,560 SF (1.60 ac.)	9,161 SF (0.21 ac.)
West end of Taxiway C, between Runway 4R-22L and Taxiway M	9,780SF (0.22 ac.)	101,460 SF (2.33 ac.)	--	--
Total	168,295 SF (3.86 ac.)	469,285 SF (10.8 ac.)	69,560 SF (1.60 ac.)	9,161 SF (0.21 ac.)

*Does not include existing pavement that is being milled and overlaid.

Existing Conditions and Wetland Resources

The project area consists of existing pavement and mowed airfield. No wetland resources are located within the limits of the project, although a portion of the work area at the southeastern edge of the airfield will occur within the 100-foot buffer zone associated with the adjacent coastal bank.

The coastal bank near the project area consists of a stone/riprap slope. The coastal bank 100-foot buffer zone within the project area consists of mowed airfield and a paved airfield service road.

Proposed Impacts

The project will result in approximately 9,161 square feet (0.21 acres) of impact to the 100-foot buffer zone of the coastal bank. These impacts will result from grading associated with Taxiway C rehabilitation. No new pavement or structures are proposed within the 100-foot buffer zone. In general, the proposed conditions within the 100-foot buffer zone will be the same as the existing conditions, except for some minor grading changes. Erosion and sedimentation controls are shown on the plans and will be installed prior to any grading activity.

The boundaries of the 100-year flood areas (Zones AE and VE) shown on FEMA's Flood Insurance Rate Maps (Land Subject to Coastal Storm Flowage) are included on the project plans. No impacts to any flood zones are proposed as part of the project. Erosion and sediment controls measures will be temporarily located within the flood zone during construction, however these measures will be removed once the site is stabilized.

Abutter Notification

No abutting property owners are required to be notified since the Airport's property is greater than 50 acres and the project limits are located more than 100 feet from any abutting properties.

Stormwater Management Standards

The following provides a compliance summary of the Massachusetts Stormwater Standards for MPA Project L1303-C1, Rehabilitate a portion of Taxiway C and Construct New Stub Taxiway. The project is a Redevelopment Project where Standards 1, 8, 9, & 10 are met fully and all other standards are met to the maximum extent practicable, providing an improvement over the existing condition.

Standard 1: No New Untreated Discharges

No changes to the Airport's existing drainage system are proposed and no new outfalls will be constructed as part of the project. Stormwater runoff from the proposed stub Taxiway C1 will sheet flow off the pavement and drain into two existing catch basins on either side of Taxiway C1. These catch basins drain to two outfalls located on a tidal flat on the Boston Harbor, just west of the project area.

Runoff from the portions of Taxiway C to be rehabilitated also currently sheet flows off of the pavement and into catch basins. No changes to the existing drainage system are proposed as part of the taxiway rehabilitation. Catch basins near Taxiway C at the southeast end of Runway 15R-33L drain to outfalls located on a tidal flat on the Boston Harbor, just west of the project area. Catch basins near the portion of Taxiway C in the middle of the airfield drain to either an airfield outfall or the West Outfall near the Hyatt.

Standard 2: Peak Rate Attenuation

A waiver to this standard is requested since the project discharges to Land Subject to Coastal Storm Flowage.

Standard 3: Recharge

Based on the test pit soil exploration program it was determined the local soil types were not satisfactory to MADEP recharge requirements. Test pits conducted for the project documented soil consisting of sandy clay corresponding to Soil Type D as referenced in the MassDEP Stormwater Standards. The test pit logs and location plan are included in this application. In addition, it was noted that ground water was generally within 6 to 8 feet of the existing ground surface. These conditions make it difficult to install an infiltration system capable of absorbing the required recharge volume. Therefore, the project is not considered suitable for infiltration. The existing drainage in the project area includes a stone-filled trenches that collect overland sheet runoff prior to collection in the drainage system. The stone trench allows some of the runoff to infiltrate the ground. Since runoff from the existing Taxiway C and the new stub Taxiway C1 will sheet flow into the grassed areas, additional infiltration of runoff will occur before it enters the catch basins.

Standard 4: Water Quality

No additional stormwater management or treatment systems are proposed for the project area. Due to its location on the airfield, the project area is not suitable for detention basins or bioretention areas since these structures would create a wildlife hazard.

Approximately half of the runoff from the Taxiway C rehabilitation area located in the middle of the airfield drains to a pollution control system that is located at the West Outfall near the Hyatt. The other half drains to an airfield outfall. For the portion of the project located at the southeast end of Runway 15R-33L, there is an existing trench drain that provides infield drainage to the catch basins and helps settle suspended solids prior to reaching the catch basins. In addition, catch basins located at the Airport generally have 2-foot sumps.

The pollutant loading associated with the taxiway will be limited because there is no sand or salt used on the pavement and there will be no oil and grease typically generated from pavement where vehicles are parked. Massport Operations does apply deicers consisting of a potassium acetate solution or a sodium acetate solid which is used when there is an ice build-up. The deicers are applied to meet FAA requirements for the pavement during winter conditions.

Massport implements a comprehensive Stormwater Pollution Prevention Plan (SWPPP) for the airport in accordance with an individual NPDES permit.

Standard 5: Land Uses with Higher Potential Pollutant Loads (LUHPPLs)

Since Logan International Airport has an individual NPDES permit, it is considered a land use with higher potential pollutant loads. However, as noted above the pollutant loading associated with the taxiway is limited.

Standard 6: Critical Areas

N/A – There are no critical areas within the project site.

Standard 7: Redevelopment Projects and Other Projects Subject to the Standards only to the maximum extent practicable

The two Taxiway C rehabilitation areas are considered redevelopment. The applicable stormwater standards have been met to the maximum extent practicable. As discussed above, stormwater treatment and infiltration systems were not considered practicable for the project area given its location on the airfield and high water table. As required, Standards 1, 8, 9, and 10 have been met.

Standard 8: Construction Period Pollution Prevention and Erosion and Sediment Control

Proposed erosion and sediment controls during construction are shown on the enclosed project plans. Coverage under the NPDES Construction General Permit will be obtained prior to the

start of construction and a SWPPP will be prepared. The SWPPP will be prepared by the contractor selected for the project.

As shown on the plans, erosion and sediment controls will include fiber rolls around the perimeter of the work area at the southeast end of Runway 15R-33L. In addition, catch basin inlet protection will be used for all catch basins adjacent to the project. Fiber roll check dams will also be used in adjacent swales if necessary. All disturbed areas located beyond the edge of the proposed taxiway pavement will be loamed and seeded once grading is complete.

The erosion and sediment controls mentioned above will be installed prior to any ground disturbance and will be inspected regularly during construction. They will remain in place and be maintained until the project area is stabilized.

Construction is scheduled to start in July 2018. Work associated with the pavement rehabilitation and taxiway light modification will occur first. The second phase of the work is the construction of the new Taxiway C1. This work will start no earlier than August 1, 2018 and is expected to be completed no later than August 31, 2018. The Phasing Sequence Plan included with the project plans provides more information on the proposed project schedule.

Standard 9: Operation and Maintenance Plan

As noted above, Massport implements a comprehensive Stormwater Pollution Prevention Plan (SWPPP) for the airport in accordance with an individual NPDES permit. The SWPPP details Best Management Practices including the maintenance of the stormwater drainage system.

Standard 10: Prohibition of Illicit Discharges

There are no known illicit discharges to the stormwater management system in the area of the proposed project.



Checklist for Stormwater Report

A. Introduction

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the [Massachusetts Stormwater Handbook](#). The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.¹ This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8²
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

¹ The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

² For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.



Checklist for Stormwater Report

B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

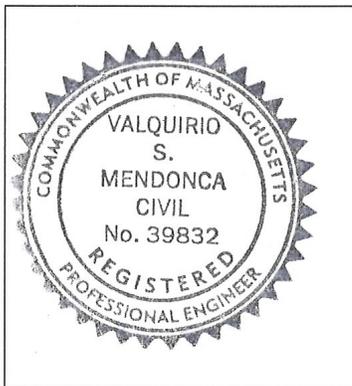
Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature



Valquirio Mendonca *March 2, 2018*

Signature and Date

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment?

- New development
- Redevelopment
- Mix of New Development and Redevelopment



Checklist for Stormwater Report

Checklist (continued)

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- No disturbance to any Wetland Resource Areas
- Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- Reduced Impervious Area (Redevelopment Only)
- Minimizing disturbance to existing trees and shrubs
- LID Site Design Credit Requested:
 - Credit 1
 - Credit 2
 - Credit 3
- Use of “country drainage” versus curb and gutter conveyance and pipe
- Bioretention Cells (includes Rain Gardens)
- Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- Treebox Filter
- Water Quality Swale
- Grass Channel
- Green Roof
- Other (describe): _____

Standard 1: No New Untreated Discharges

- No new untreated discharges
- Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.



Checklist for Stormwater Report

Checklist (continued)

Standard 2: Peak Rate Attenuation

- Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.
- Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
- Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge

- Soil Analysis provided.
- Required Recharge Volume calculation provided.
- Required Recharge volume reduced through use of the LID site Design Credits.
- Sizing the infiltration, BMPs is based on the following method: Check the method used.
 - Static
 - Simple Dynamic
 - Dynamic Field¹
- Runoff from all impervious areas at the site discharging to the infiltration BMP.
- Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:
 - Site is comprised solely of C and D soils and/or bedrock at the land surface
 - M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
 - Solid Waste Landfill pursuant to 310 CMR 19.000
 - Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
- Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
- Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

¹ 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



Checklist for Stormwater Report

Checklist (continued)

Standard 3: Recharge (continued)

- The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
- Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
 - Provisions for storing materials and waste products inside or under cover;
 - Vehicle washing controls;
 - Requirements for routine inspections and maintenance of stormwater BMPs;
 - Spill prevention and response plans;
 - Provisions for maintenance of lawns, gardens, and other landscaped areas;
 - Requirements for storage and use of fertilizers, herbicides, and pesticides;
 - Pet waste management provisions;
 - Provisions for operation and management of septic systems;
 - Provisions for solid waste management;
 - Snow disposal and plowing plans relative to Wetland Resource Areas;
 - Winter Road Salt and/or Sand Use and Storage restrictions;
 - Street sweeping schedules;
 - Provisions for prevention of illicit discharges to the stormwater management system;
 - Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
 - Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
 - List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.
- A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.
 - Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:
 - is within the Zone II or Interim Wellhead Protection Area
 - is near or to other critical areas
 - is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
 - involves runoff from land uses with higher potential pollutant loads.
 - The Required Water Quality Volume is reduced through use of the LID site Design Credits.
 - Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.



Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

- The BMP is sized (and calculations provided) based on:
 - The ½" or 1" Water Quality Volume or
 - The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
- The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
- A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)

- The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.
- The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted **prior to** the discharge of stormwater to the post-construction stormwater BMPs.
- The NPDES Multi-Sector General Permit does **not** cover the land use.
- LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.
- All exposure has been eliminated.
- All exposure has **not** been eliminated and all BMPs selected are on MassDEP LUHPPL list.
- The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas

- The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
- Critical areas and BMPs are identified in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

- The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
 - Limited Project
 - Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
 - Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
 - Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
 - Bike Path and/or Foot Path
- Redevelopment Project
- Redevelopment portion of mix of new and redevelopment.
- Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.
- The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
 - Construction Period Operation and Maintenance Plan;
 - Names of Persons or Entity Responsible for Plan Compliance;
 - Construction Period Pollution Prevention Measures;
 - Erosion and Sedimentation Control Plan Drawings;
 - Detail drawings and specifications for erosion control BMPs, including sizing calculations;
 - Vegetation Planning;
 - Site Development Plan;
 - Construction Sequencing Plan;
 - Sequencing of Erosion and Sedimentation Controls;
 - Operation and Maintenance of Erosion and Sedimentation Controls;
 - Inspection Schedule;
 - Maintenance Schedule;
 - Inspection and Maintenance Log Form.
- A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

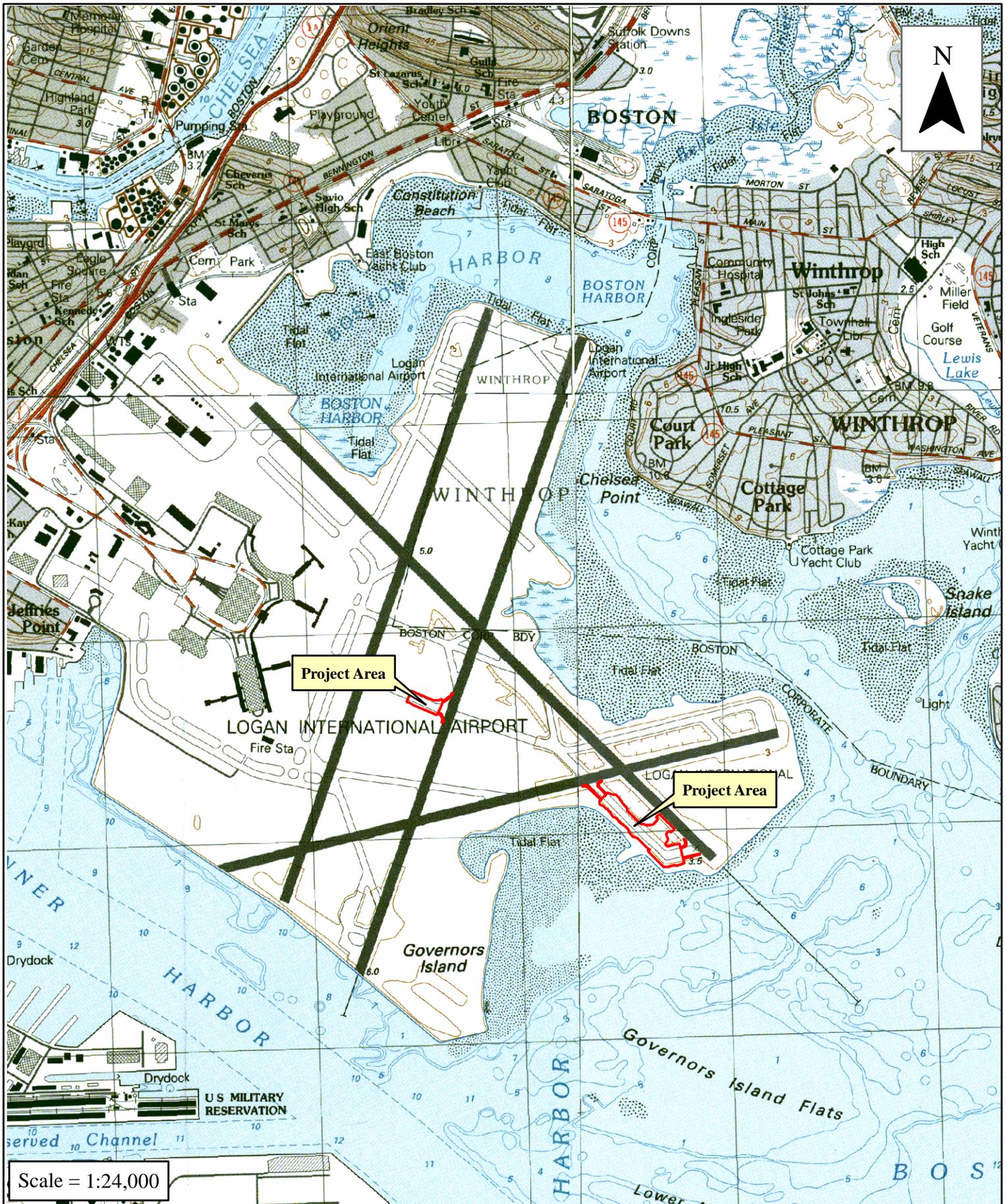
- The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has **not** been included in the Stormwater Report but will be submitted **before** land disturbance begins.
- The project is **not** covered by a NPDES Construction General Permit.
- The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.
- The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

Standard 9: Operation and Maintenance Plan

- The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
 - Name of the stormwater management system owners;
 - Party responsible for operation and maintenance;
 - Schedule for implementation of routine and non-routine maintenance tasks;
 - Plan showing the location of all stormwater BMPs maintenance access areas;
 - Description and delineation of public safety features;
 - Estimated operation and maintenance budget; and
 - Operation and Maintenance Log Form.
- The responsible party is **not** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:
 - A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
 - A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges

- The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
- An Illicit Discharge Compliance Statement is attached;
- NO Illicit Discharge Compliance Statement is attached but will be submitted **prior to** the discharge of any stormwater to post-construction BMPs.



Rehabilitate a Portion of Taxiway C
and Construct a New Stub Taxiway
Logan International Airport
East Boston, MA

USGS Map

The Smart Associates
Environmental Consultants, Inc.



Project Area

Project Area

Scale = 1:12,000

Rehabilitate a Portion of Taxiway C
and Construct a New Stub Taxiway
Logan International Airport
East Boston, MA

Aerial Photograph

The Smart Associates
Environmental Consultants, Inc.

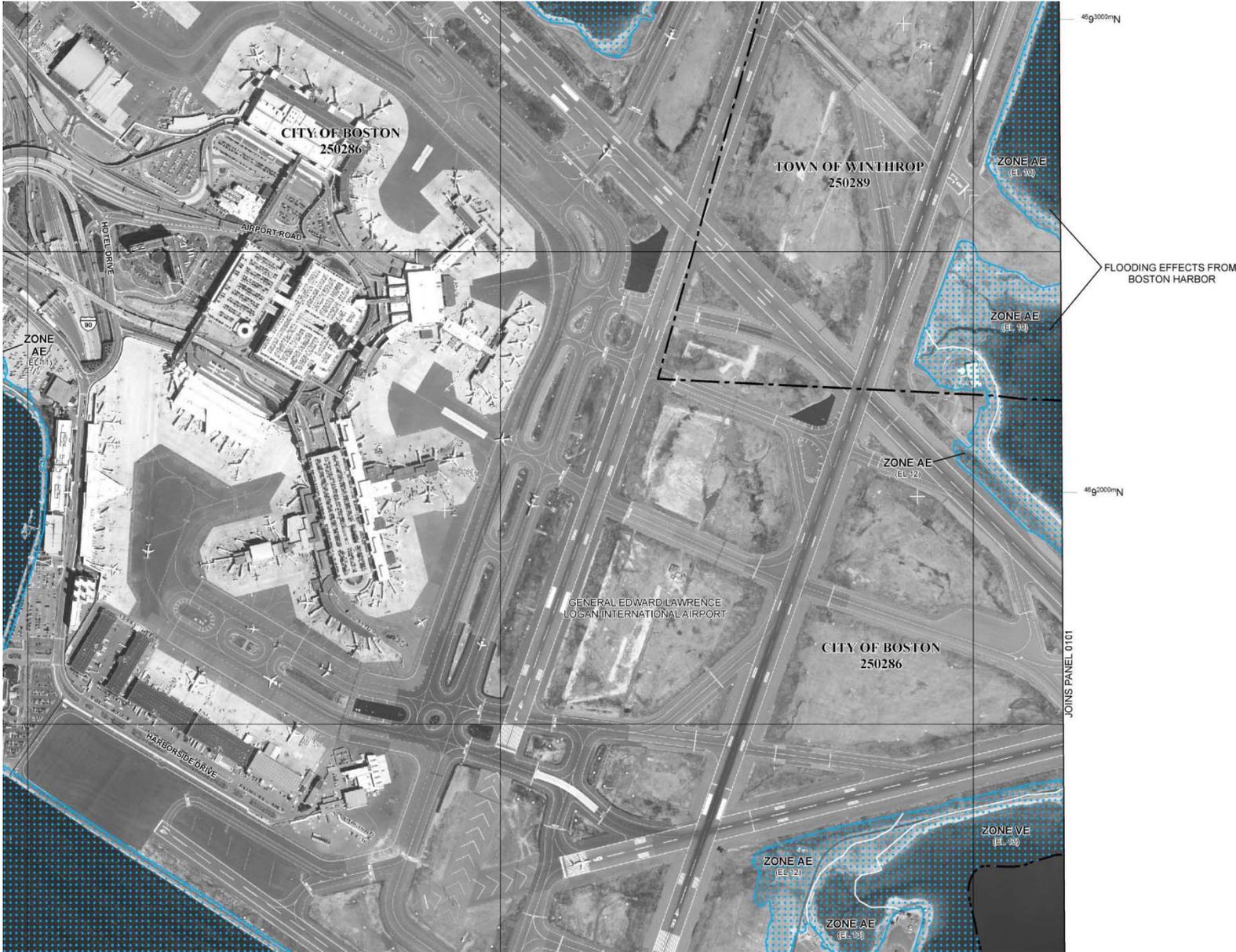


Rehabilitate a Portion of Taxiway C
and Construct a New Stub Taxiway
Logan International Airport
East Boston, MA

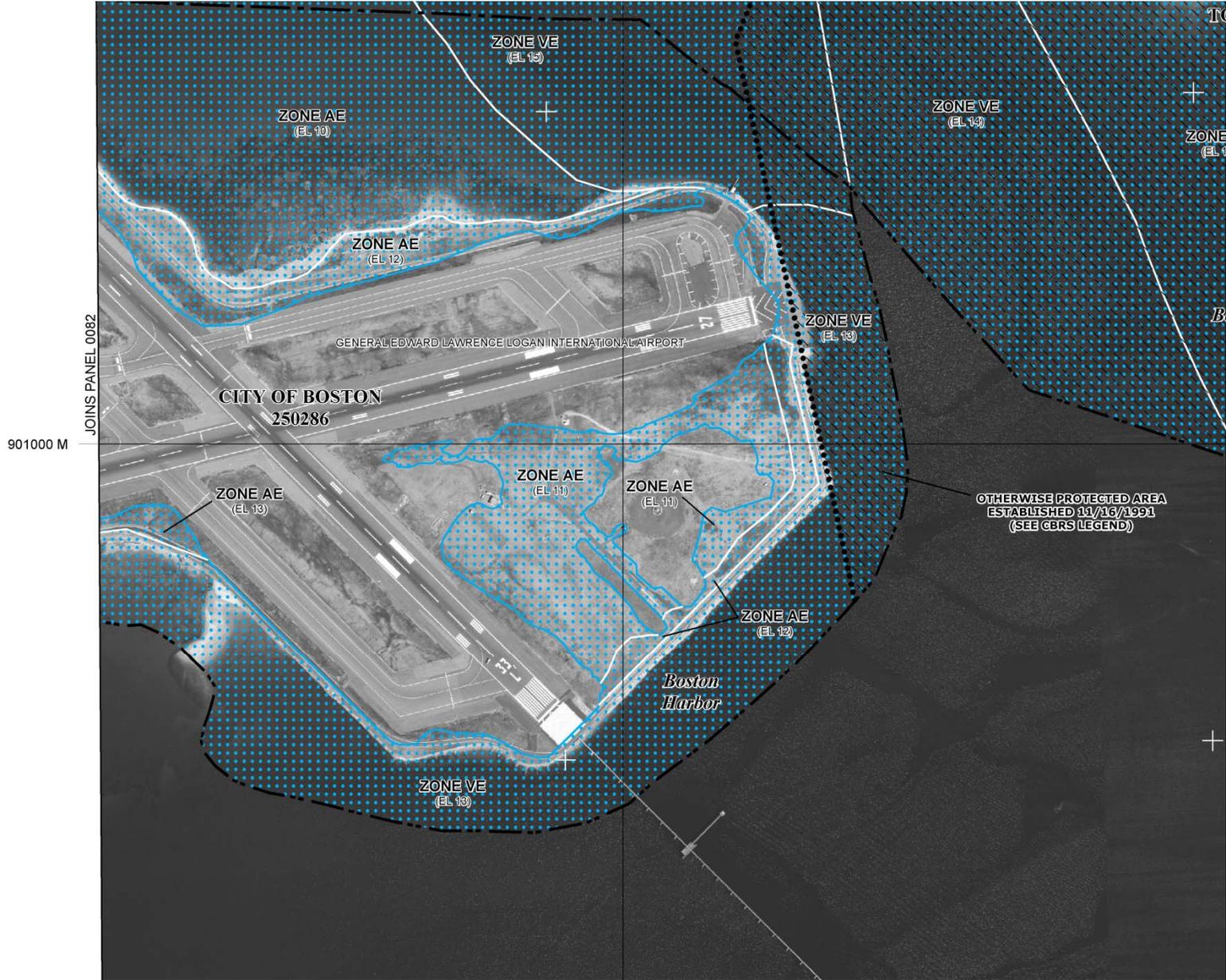
NHESP Estimated
and Priority Habitats

The Smart Associates
Environmental Consultants, Inc.

FEMA Flood Insurance Rate Map
Map No. 25025C0082J, Revised 3/16/2016



FEMA Flood Insurance Rate Map
Map No. 25025C0101J, Revised 3/16/2016





ATC Associates, Inc.

40 Strafello Drive, Unit G, Avon, MA 02322

Phone: (508) 588-0886 Fax: (508) 588-2414

PROJECT:

DATE:

CLIENT:

ATC PROJECT No.

Logan Airport Taxiway Relocation by 15R-33L

December 19, 2011

HNTB Corporation

025.05652.0065

WEATHER:

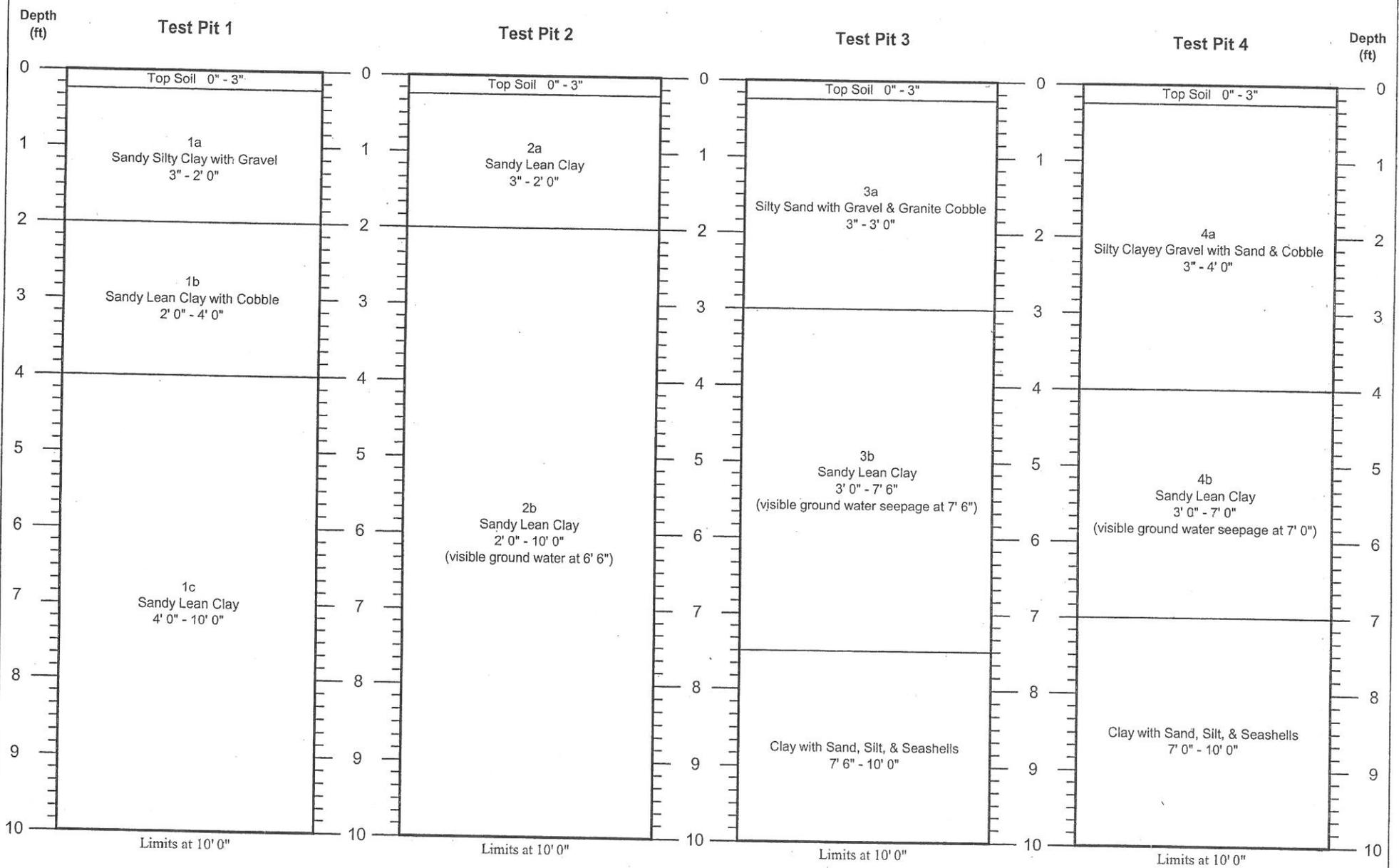
Clear 30's

ATC INSPECTOR:

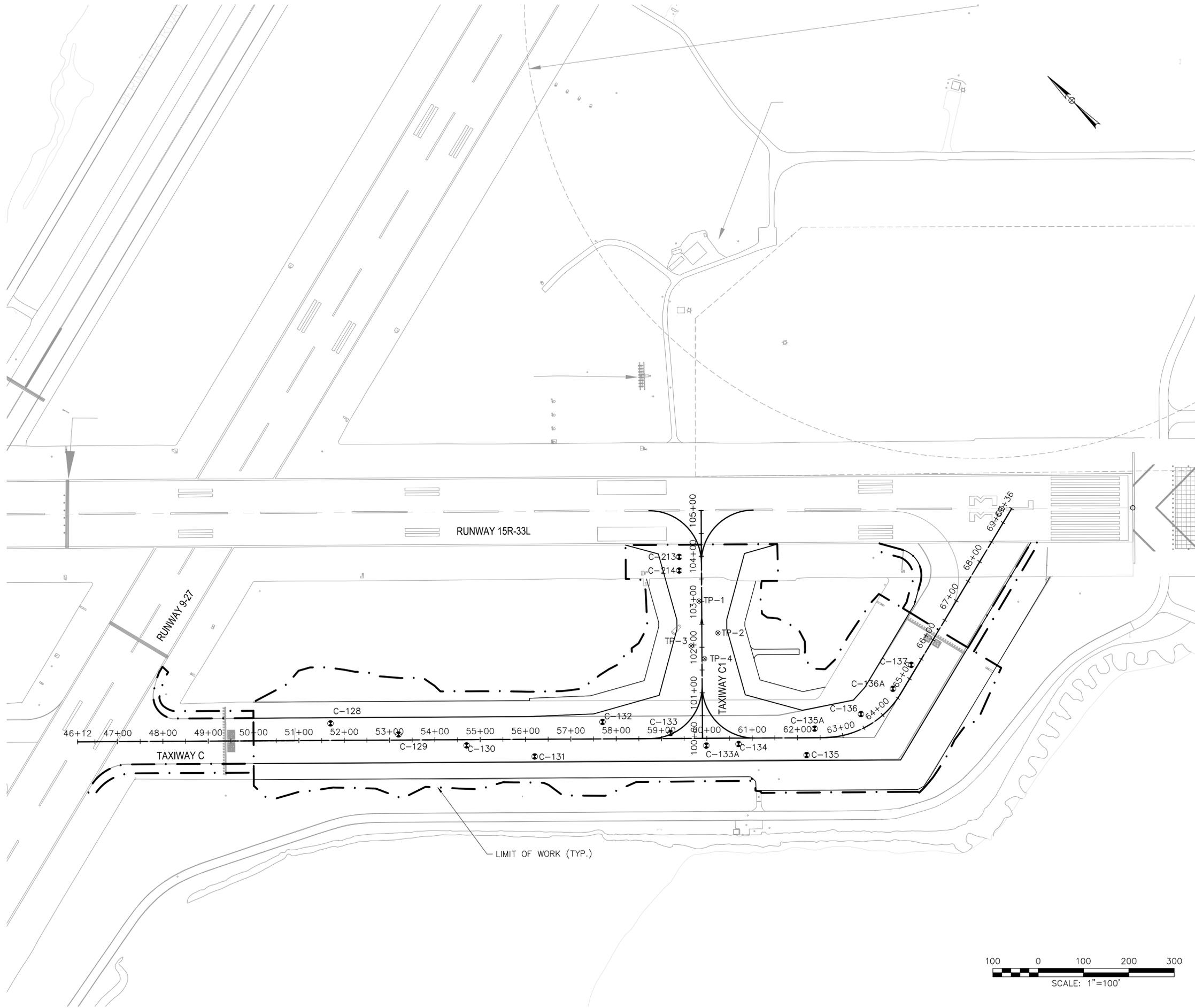
Antonio Rodrigues

LOG PREPARED BY:

Antonio Rodrigues



Remarks:



LEGEND:

C-XXX	CORING LOCATION	●
TESTPIT		⊕

- NOTES:**
- PAVEMENT CORES AND TEST PITS WERE TAKEN IN DECEMBER, 2011 AND OCTOBER 2017 BY ATC ASSOCIATES INC.
 - REFER TO TECHNICAL SPECIFICATION SECTION P-152, APPENDIX A, FOR CORE INFORMATION.
 - THE SUBSURFACE INFORMATION SHOWN ON THIS DRAWING WAS OBTAINED FOR DESIGN PURPOSES AND MAY NOT BE AN ADEQUATE REPRESENTATION OF ACTUAL CONDITIONS FOR PROJECT CONSTRUCTION. INFORMATION SHOWN, INCLUDING WATER LEVELS, REPRESENTS EXISTING CONDITIONS AT THE SPECIFIC BORING LOCATIONS AT THE TIME THE BORINGS WERE TAKEN. ALL THE RISKS FROM THE USE OR INTERPRETATION OF THE SUBSURFACE DATA SHALL BE BORNE BY THE CONTRACTOR.



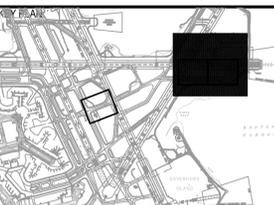
MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LOGAN INTERNATIONAL AIRPORT
EAST BOSTON, MASSACHUSETTS

MIPA CONTRACT NO.: L1303-C01
LOCATION CODE: 2640

PROJECT SUBMISSION PHASE:
100%

REGISTRATION STAMP:



REVISIONS:

REV NO.	DATE	DESCRIPTION	BY:



WSP USA
75 ARLINGTON STREET
BOSTON, MA 02116

CONSULTANT:

PROJECT NUMBER AND TITLE:
L1303-C1
REHABILITATE A PORTION OF TW C
AND CONSTRUCT NEW STUB
TAXIWAY

SHEET TITLE:
PAVEMENT CORING PLAN - 2

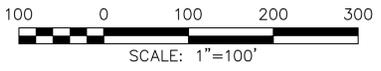
DISCIPLINE:
CIVIL

DRAWN BY: HJH	CHECKED BY: CBC	APPROVED BY: VSM
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SCALE: AS NOTED	DATE: 3/2/18
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DRAWING NUMBER: SHEET NO. 28 OF 69

C405



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MIPA - 2/28/2018 4:49:55 AM - T:\186629\W02-L1303-C1 Rehab a Portion of Taxiway C\L1303-C01_Design\DWG\L1303-C01-C405.dwg

Checklist for Filing a Notice of Intent with Boston Conservation Commission

In order for the Boston Conservation Commission to effectively process your Notice of Intent, BCC requests that you complete the checklist below and include it with your submission. If you should need assistance please contact Commission staff: 617-635-3850 (cc@boston.gov).

To the Conservation Commission:

- Eight copies (a signed original and 7 copies) of a completed Notice of Intent (WPA Form 3)
- Eight copies of plans (reduced to 11" X 17") in their final form with engineer's stamp affixed supporting calculations and other documentation necessary to completely describe the proposed work and mitigating measures. Plans must include existing conditions, the proposed project, erosion controls and mitigation measures, and all wetland resource areas and associated buffer zones.
- Eight copies of an 8 1/2" x 11" section of the USGS quadrangle map of the area, containing sufficient information for the Conservation Commission and the Department to locate the site of the work.
- (If applicable) Eight copies the Federal Emergency Management Agency Flood Insurance Rate Map for the project site. FEMA Flood Maps: <https://msc.fema.gov/portal>.
- Determination regarding the Natural Heritage and Endangered Species Program: Review Section C. Other Applicable Standards and Requirements of the Notice of Intent, page 4 of 8, pertaining to wildlife habitat. The Conservation Commission and the Natural Heritage & Endangered Species Program have the maps necessary to make this determination.
- (If applicable) Two hard copies and a digital copy of a Stormwater Report to document compliance with the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q), including associated drainage calculations for rooftops, parking lots, driveways, etc., for the required design storm events.
N/A - Stormwater Checklist and supporting narrative is enclosed
- Details of the stormwater management system, including: catch basins, oil separating tanks, detention basins, outfalls, sewer connections, etc.
- Any photographs related to the project representing the wetland resource areas.
Aerial photograph included
- A project narrative describing the following: a brief overview of the entire project, the work proposed within wetland resource areas and/or buffer zones; how the performance standards specific to the wetland resource areas will be met; construction equipment and material involved; and measures to protect wetland resource areas and mitigate impacts.
- Electronic copies. Documents may be submitted via email, or via an email link to downloadable documents.**
- Abutter Notification, filed concurrently with the Notice of Intent.
N/A - Project is located more than 100 feet from abutting properties.
- (If applicable) Completed BRA Climate Preparedness Questionnaire (for new buildings). This can be completed online at <http://www.bostonredevelopmentauthority.org/planning/planning-initiatives/climate-change-preparedness-and-resiliency>. Please print the pdf that you will receive via email after completion and include it in your submission.
N/A - No new buildings are proposed.



To minimize the use of non-recyclable materials ***please do not include vinyl or plastic binders, bindings, folders or covers with the filing.*** Staples and binder clips are good choices.