



Boyle Associates, Environmental Consultants
Mailing Address:
25 Dundee Rd.
Gorham, ME 04038
Phone: 207.591.5220
www.boyleassociates.net

Transmittal

To: Jay Clement (USACE), Bill Bullard (MDEP)

CC: Dwight Anderson (Deluca-Hoffman), Ken Grondin (Grondin), Rich Jordan (Boyle Associates)

From: David Brenneman (Boyle Associates) on behalf of Grondin Aggregates/Larrabee Farms Wetland Mitigation Site

Date: 1/7/2011

Re: **Portland International Jetport Wetland Mitigation Project at Larrabee Farms Wetland Mitigation Site – YEAR ONE (2010) MONITORING REPORT**

Corps Permit No.: NAE-2008-00053

Maine DEP NRPA Project Number: L-13760-AN-A/TG-AO-N

Attached, please find the first year (2010) wetland mitigation project monitoring report for the above-mentioned project. A portion of the wetland compensation for this project took place at the Larrabee Farms Wetland Mitigation Site in Scarborough, Maine. Post inspection, and just prior to submission of this report, Grondin performed some remediation work at the site (described below) which will be further described in the 2011 monitoring report, next year.

On January 6th, 2011, site work was conducted at the scrub-shrub and emergent wetland creation areas at Larrabee Farms in Scarborough, Maine. These wetlands were originally constructed as a part of compensation for wetlands impacted by the expansion of the Portland International Jetport. The site work performed consisted of the placement of additional coarse woody debris within the wetland basin and the reinforcement and extension of the fill-slope berm in the southwestern corner of the site.

Based on the suggestion from the U.S. Army Corps of Engineers Project Manager, additional coarse woody debris was placed with the creation basin mimicking natural wetland conditions. A large, deceased eastern hemlock (*Tsuga canadensis*) approximately thirty feet in height was partially buried in a vertical position along the central western edge of the basin. Also, several dead eastern hemlock trees were cut from the adjacent uplands and placed within the central portion of the scrub-shrub creation area. One seven to eight foot tall, live clump of American beech (*Fagus grandifolia*) was planted along the edge of the scrub-shrub creation basin along with a similar-sized live clump of eastern hemlock. The addition of coarse woody debris will add to the structural diversity and habitat of the creation area. Please see the photolog below for representative photos of site work.

In June of 2009, a major rainfall event caused one of the berms on the southwestern corner of the creation area to experience failure, resulting in slumpage and loss of hydrology. Following the rain event, Grondin rebuilt and compacted the berm using clay backfill. Grondin also conducted work within the

January 7, 2011

creation area and redirected the majority of surface flow towards the main outlet on the southeastern side of the site. Since that work, no major erosion events or washouts have been noted. Based on suggestions from the U.S. Army Corps of Engineers Project Manager, in January of 2011 Grondin performed additional remediation work on the southwestern berm, which included adding soil materials in order to reduce the slope steepness around the creation area. The new slope created is approximately 6:1, which improves access and egress options for amphibians and further reinforces the embankment from erosion. The extended berm area incorporated a plateau at the top to allow for future equipment access, if necessary. Please see the photolog below, further depicting berm construction.

If you have any questions or would like to conduct a site visit, please contact Ken Grondin (207-854-1147) or Richard Jordan (207-671-2760).

Thank you,

A handwritten signature in black ink, appearing to read 'David Brenneman', with a stylized flourish extending to the right.

David Brenneman, Environmental Scientist
dbrenneman@boyleassociates.net

PHOTOLOG – all taken by D. Brenneman, January 6th, 2011



Photo 1 – Facing east at newly placed coarse woody debris.



Photo 2 – Facing east at additional coarse woody debris and planted eastern hemlock clump.



Photo 3 – Facing northwest at berm extension and access to other wetland creation areas.



Photo 4 – Facing west at berm reinforcement and extension construction.

MITIGATION REPORT
TRANSMITTAL AND SELF-CERTIFICATION

DEPARTMENT OF THE ARMY PERMIT NUMBER: NAE-2008-00053

PROJECT TITLE: Portland International Jetport (PWM) – Terminal Area, Cargo Area Taxiway, Runway 11-29 Safety and Runway 18-36 Improvements (Herein referred to as “Jetport Project”)

PERMITTEE: Portland International Jetport (PWM)

MAILING ADDRESS: 1001 Westbrook Street Portland, Maine 04102

AUTHORIZED AGENT: Grondin Aggregates, LLC

MAILING ADDRESS:

Ken Grondin

11 Bartlett Road

Gorham, Maine 04038

TELEPHONE: 207.854.1147

ATTACHED MITIGATION REPORT TITLE: Portland International Jetport: Year 1 Wetland Mitigation Monitoring Report

PREPARERS: Boyle Associates (207.591.5220)

DATE: December 22, 2010

CERTIFICATION OF COMPLIANCE: I certify that the attached report is accurate and discloses that the mitigation required by the Department of the Army Permit [is] **(is not)** in full compliance with the terms and conditions of that permit.

CORRECTIVE ACTION: A need for corrective action **(is) [is not]** identified in the attached report.

CONSULTATION: I [do] **(do not)** request consultation with the Corps of Engineers to discuss a corrective strategy or permit modification.

CERTIFIED: _____
Signature on file
(Signature of permittee) Date

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<p><u>Appendix A</u> -- An as-built plan showing topography to 1-foot contours, any inlet/outlet structures and the location and extent of the designed plant community types (e.g., shrub swamp). Within each community type the plan shall show the species planted—but it is not necessary to illustrate the precise location of each individual plant. There should also be a soil profile description and the actual measured organic content of the topsoil. This should be included in the first monitoring report unless there are grading or soil modifications or additional plantings of different species in subsequent years.</p>	
<p><u>Appendix B</u> -- A vegetative species list of volunteers in each plant community type. The volunteer species list should, at a minimum, include those that cover at least 5% of their vegetative layer.</p>	
<p><u>Appendix C</u> -- Representative photos of each mitigation site taken from the same locations for each monitoring event. Photos should be dated and clearly labeled with the direction from which the photo was taken. The photo sites must also be identified on the appropriate maps.</p>	
<p><u>Appendix D – Tables</u></p> <ul style="list-style-type: none"> • <u>Tables 1 – 4: Soils Data</u> • <u>Table 6: Fauna List</u> • <u>Table 7: PSS Creation Area Plot Data</u> • <u>Table 8: Herbaceous Vegetation Cover List</u> 	
<p><u>Appendix E – Copy of Permits</u></p> <ul style="list-style-type: none"> • <u>MDEP NRPA Permit</u> • <u>ACOE DOA Permit</u> 	
<p><u>Appendix F – Army Corps Memorandum</u></p> <ul style="list-style-type: none"> • <u>RE: Site Visit</u> 	

Project Overview Form

Corps Permit No.: NAE-2008-00053 **Maine DEP NRPA Project Number: L-13760-AN-A/TG-AO-N**

Mitigation Site Name(s): Larrabee Farms Wetland Mitigation Site: Portland International Jetport (Jetport)

Monitoring Report: Year 1 of 10 years

Name and Contact Information for Permittee (left) and Agent (right):

Portland International Jetport c/o Arthur Sewall 1001 Westbrook Street Portland, Maine 04102	Grondin Aggregates, LLC Ken Grondin #207.854.1147 11 Bartlett Road Gorham, ME 04038
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Name of Party Conducting the Monitoring: Boyle Associates (Heather Ward #207.591.5220)

Date(s) of Inspection(s) (Specific to Monitoring): October 28th, 2010

Project Summary:

First year monitoring procedures were conducted at the herbaceous and scrub-shrub wetland creation areas at the Larrabee Farms Wetland Mitigation Site on October 28th, 2010. These wetland areas were created as compensation for wetland functions and values impacted by improvements and expansions constructed at the Portland International Jetport. Construction of the project impacted approximately 11.58 acres of freshwater wetland (0.64 acres of emergent wetland, 3.85 acres of mixed forested/shrub/emergent wetlands, 2.2 acres of emergent wetland, 1.61 of which were NRPA regulated wetlands of special significance). Wetland compensation took place at Maine Wetlands Bank and Grondin Aggregate's Larrabee Farms Wetland Mitigation Site, a multi-user mitigation project site. Wetland compensation at Larrabee Farms includes protection of 100 acres which consists of 3.5 acres of wetland creation (1 acre PEM and 2.5 acres PSS), preservation of 58.5 acres of existing upland and preservation of 38 acres of existing wetland including approximately 7,000 lineal feet of the Nonesuch River.

Location of and Directions to Mitigation Site:

The Larrabee Farms Wetland Mitigation Site is located in the town of Scarborough, approximately 1 mile southeast of the corner of Route 114 and Beech Ridge Road.

Start and Completion Dates for Mitigation:

Conservation easement recorded - Cumberland County Registry of Deeds	March 2010
Final wetland grading began	March 2009
Final wetland grading completed	May 2009
Hydroseeding with wetland herbaceous seed mix completed	July 2009
Installation of woody vegetation completed	

Performance Standards are/are not being met:

The success standards for hydrology, invasive species, and slope and soils stabilization are being met. The success standard for aerial cover by hydrophytes and shrub density and diversity are not yet being met.

Dates of Corrective or Maintenance Activities Conducted Since Last Report:

- This is the first monitoring report.

Recommendations for Additional Remedial Actions:

- Continue on-going inventory and removal of purple loosestrife.
- Begin broadleaf cattail reduction program in 2011 growing season (see page 7 for description).
- Reduce slope on berm along southwestern corner of the creation area.

Requirements

Performance Standards

The wetland creation areas will be assessed once annually during the growing season (May-October) for at least 10 years. Monitoring will take place twice per season during the first through fifth years following planting. One visit will take place in the spring, and will include a general site walk and assessment of general site health, an assessment of any winter damage and in order to determine any corrective needs. A second site visit will take place between June and October to assess plant mortality/vitality and to gather data for the annual monitoring reports. The data gathering and reporting procedure will then take place once during the first through fifth years, and during the 7th and 10th years, if necessary, following construction.

Success Standards:

1. Hydrology <ul style="list-style-type: none"> • Adequate to support the designed wetland type: • Proposed hydrology being met: • Percentage of site meeting proposed hydrology: • Too wet/dry areas identified and corrective measures proposed: 	Yes Yes 100% N.A.
2. Proposed vegetation diversity and/or density goals for woody plants from the plan met:	No
3. Aerial cover <ul style="list-style-type: none"> a. Each mitigation site has at least 80% aerial cover, by noninvasive species: b. Emergent areas have at least 80% cover by noninvasive hydrophytes: c. Scrub-shrub and forested cover types have at least 60% cover by noninvasive hydrophytes, of which at least 15% are woody species: 	Yes No No
4. Common reed (<i>Phragmites australis</i>), Purple loosestrife (<i>Lythrum salicaria</i>), Russian and Autumn olive (<i>Elaeagnus</i> spp.), Buckthorn (<i>Rhamnus</i> spp.), Japanese knotweed (<i>Polygonum cuspidatum</i>), and/or Multiflora rose (<i>Rosa multiflora</i>) plants at the mitigation site(s) are being controlled:	Yes
5. All slopes, soils, substrates, and constructed features within and adjacent to the mitigation site(s) are stable:	Yes

In general, the mitigation area is doing well in its first full growing season. It is successfully providing wetland functions and values similar to those provided by wetlands impacted by the construction improvements at the Jetport. Wetland functions and values being provided across the site include wildlife habitat, groundwater recharge/discharge, floodflow alteration, educational and scientific value, production export, and recreational value. There is a dominance of hydrophytic vegetation, presence of hydric soils and evidence of prolonged saturation in the upper part of the soil profile.

The woody plant density goal is not being met within the PSS creation area on the site. See section two below for additional description and discussion.

Summary Data

Describe the monitoring inspections, and provide their dates, that occurred since the last report.

Wetland Creation Monitoring

Site walks were conducted throughout winter, spring and summer of 2010 to assess general site health and to determine if any winter damage occurred that would warrant correction measures. Some girdling by small mammals was observed; however, no significant damage was noted, and no corrective measures are recommended.

During spring site visits, amphibian breeding surveys were conducted within the ephemeral pool in the southerly end of the site. This feature was inadvertently created during grading, but has been left in place because monitors noted that it provides amphibian breeding habitat. Overall, the pool appears to be functioning successfully. Wood frog and spotted salamander egg masses were observed and complete draw-down of the pool was noted during the summer. Please see wildlife section for further details of pool characteristics and level of breeding activity found.

In-depth plant monitoring within the wetland creation area occurred in October 2010. The 1 acre of combined emergent wetland creation areas were sampled over their entirety. Round monitoring plots with radii of 30 feet were used to provide a sample size of 0.5 acres of the scrub-shrub creation area. Plots centers were chosen randomly by dropping a pencil onto the site plan and then adjusting the center and plot size so that the plot would fit within the nearest mitigation area to the pencil point. Plot centers were staked, flagged and GPS-located. As plot locations were located and staked in the field, monitors noted that the plots did not appear to completely represent the overall site. Shrub species were planted in a clustered fashion rather than even spacing, and the methodology chosen for sampling (*i.e.* round plots) may not be reflective of the woody plant density. Since this is the first year of monitoring, monitors decided to leave the plots locations as-is. In future monitoring efforts a different type of sampling protocol, such as transects or quadrats, may be utilized to sample a similar size area.

It was also noted by monitors that several planted woody species were found within the southern emergent area. Some of these individuals may be moved during the growing season of 2011 into sparsely planted scrub-shrub locations. Please see the remediation section for further details.

Success Standards

1) Hydrology

Is the proposed hydrology met at the site?

Yes.

Most of the wetland creation site is meeting the projected hydrology levels as evidenced by the presence of reducing conditions within the soil profile, ponded water within the designed pits throughout the site, and signs of drainage through the rip rap overflow spillways. As anticipated, the primary source of hydrology in the wetland creation areas comes from groundwater discharge from the slope cuts and surface runoff from the adjacent quarry area. Further hydrologic input is provided by precipitation. General hydrology across the wetland mitigation area varies from seasonally saturated to semi-permanently flooded. Indicators of hydrology include pockets of standing water (up to 6 inches deep at time of survey), water-stained leaves, and evidence of reducing conditions within the soil profiles. Furthermore, most of the wetland species found in the creation area at the time of survey are alive and growing, indicating an adequate hydrologic regime.

What percentage of the site is meeting projected hydrology levels?

95-100%

Areas that are too wet or too dry should be identified along with suggested corrective measures.

Some of the wetter swales, designed pits and PEM creation areas are remaining partially flooded through the year and providing habitat for cattails (*Typha latifolia*). Future monitoring data may indicate a need for altering hydrology on the site by lowering the outlet structures or some other means.

2) The proposed vegetation diversity and density goals for woody plants from the plan are met.

No.

The diversity of planted woody species does not meet the permitted goal of four different species of at least 50 plants per acre. Currently, there is only one species (speckled alder (*Alnus incana*)) that has a density greater than 50 plants per acre and two other species are close to 50 plants per acre (redosier dogwood (*Cornus sericea*) and pussy willow (*Salix discolor*)). Monitors noted some volunteer species present within plots, but no individuals tall enough (*i.e.* 18 inches) to be counted.

The planted densities for the scrub-shrub creation areas were 600 shrubs/acre. The planted density *goal*, as described in the Corps checklist, is 500 shrubs per acre. Based on the 2010 plot data, the average density of shrubs is approximately 291 shrubs per acre. For additional details on the shrub and tree plantings, please see Table 7 in Appendix B.

As noted in the introduction, it appears that the randomly chosen monitoring plots do not represent well the entire site. A different sampling procedure will be chosen for the 2011 monitoring session. Data will be compared to 2010 to see if a correlation can be drawn as to the way the site was planted or if there is some other reason for the low density of planted woody species. If future monitoring do not produce a positive correlation, corrective action, such as adding woody plants, will be recommended.

3) a. Each mitigation site has at least 80% aerial cover, excluding planned open water areas or planned bare soil areas (such as for turtle nesting), by noninvasive species.

Yes.

Based on plot data, average aerial cover by non-invasive species was approximately 82% throughout the wetland creation site. The transect areas did not include some planned non-vegetated areas such as sand mounds (turtle nesting islands), coarse woody debris, and planned pool areas excavated during the initial construction (see Table 8 in App. D).

3) b. Planned emergent areas on each mitigation site have at least 80% cover by noninvasive hydrophytes.

No.

The average aerial percent cover of noninvasive hydrophytes within the two PEM creation areas is 59%. The difference between total cover by hydrophytes and cover by non-invasive hydrophytes is due to the prevalence of cattails. A proposed control strategy for cattails is outlined below.

3) c. Planned scrub-shrub cover types have at least 60% cover by noninvasive hydrophytes, of which at least 15% are woody species.

No.

Monitors observed 88% aerial cover by non-invasive hydrophytes in the scrub-shrub creation area (herbaceous vegetation *and* woody vegetation) but only six percent of the cover is provided by woody species. As shrubs numbers increase and plants grow, this number should increase.

4) Common reed (*Phragmites australis*), Purple loosestrife (*Lythrum salicaria*), Russian and Autumn olive (*Elaeagnus spp.*), Buckthorn (*Rhamnus spp.*), Japanese knotweed (*Polygonum cuspidatum*), and/or Multiflora rose (*Rosa multiflora*) plants at the mitigation site(s) are being controlled.

Yes.

None of these species were observed on the site. The only invasive and noxious species observed within the creation area were purple loosestrife (*Lythrum salicaria*), broad-leaf cattail (*Typha latifolia*), narrow-leaf cattail (*Typha angustifolia*), and reed-canary grass (*Phalaris arundinacea*). Reed-canary grass was observed in very low numbers. Purple loosestrife was found within the site shortly after construction and a remediation plan was immediately enacted. An inventory of loosestrife was conducted post construction during the 2009 growing season and an aggressive mechanical control strategy began. Loosestrife plants were hand-removed twice in 2009 and three times in 2010. As can be seen in the aerial cover amounts (see table 8) control of loosestrife has been fairly effective. Yearly inventory and control of the site should continue. If loosestrife density increases in future years, biological or chemical control might be necessary.

Cattails also have heavily colonized the wetter areas of the site. As noted above, one course of action for controlling cattails within the site may be changing the grade to decrease hydrology to the wetter portions of the site.

Two other control strategies for cattails include chemical control and plant removal and cover. The first method of control involves pesticide application. Within the PSS creation areas, cattail areas can be sprayed with a foliar application of glyphosate or similar herbicide. After a sufficient lag time (as determined by the pesticide applicator,) the areas should be replanted with a mix of native shrubs. Shrubs should be surrounded with a thick ring of woody mulch in order to reduce the threat of competition from herbaceous species. The other potential method for cattail reduction includes cutting the cattails and covering them with a combination of dead and dying debris, and installing larger living tree species within the cattail populations. The debris will add structural diversity and habitat to the site while filling habitat for cattails, and the addition of larger trees will help shade out and compete with the cattails for resources.

5) All slopes, soils, substrates, and constructed features within and adjacent to the mitigation site(s) are stable.

Yes.

All slopes, soils, substrates and constructed features within and adjacent to the mitigation site are stable.

Soils data:

Four soil profiles were investigated within the wetland creation site (two in PEM areas and two in PSS areas). Soils observed consisted of dark and very dark A horizons underlain by gray to grayish-brown horizons with redoximorphic features. Three of the four profiles keyed as hydric following the Field Indicators of Hydric Soils in the United States, Version 7 (HSUS7). The fourth profile keyed as hydric following the Field Indicators for Identifying Hydric Soils in New England, Version 3 (HSNE3).

Please see Tables 1 through 4 in Appendix D for representative soil profile descriptions for each creation type. The HSUS7 and HSNE3 hydric soil indicator reference is indicated in parentheses after the wetland creation type.

Remediation:

An invasive control program for cattail species should be undertaken during the growing season (detailed and discussed above). Additionally, efforts to control purple loosestrife should continue.

During the 2011 growing season, planted woody plants found within the emergent areas should be moved to more sparsely-planted portions of the scrub-shrub creation sites.

If woody plant densities are not shown to increase, additional shrubs may need to be installed following subsequent monitoring sessions.

The slope on the berm around the southwestern corner of the creation site should be reduced; this reflects a comment made by Jay Clement of the US Army Corps of Engineers during a site visit in May 2010.

Erosion Control Measures:

No erosion problems were observed onsite. Temporary measures, such as silt fence, were removed upon completion of the project in 2009. Erosion control mulch remains in place around the perimeter of the wetland creation site and will be left to degrade in place. The permanent rip rap spillways are functioning as planned.

Visual Estimate of Percent Cover of Non-invasive and Invasive Species:

The average percent vegetative cover by non-invasive plants at the mitigation site is approximately 88%. The average percent cover of invasive species is approximately 33% (primarily by *Typha species*).

Fish and Wildlife Use at the Site:

Please see table 6 for a list of species found to be using the site.

During the amphibian breeding season of 2010, surveys for evidence of breeding activity were conducted across the site, but mainly focused on the southern ephemeral pool. Three site visits were conducted during the

breeding season on March 31st, April 6th, and April 13th. On March 31st forty-one (41) wood frog egg masses (*Rana sylvatica*) and two spotted salamander (*Ambystoma maculatum*) egg masses were found within the southern ephemeral pool. On April 6th the same number of wood frog egg masses and 13 spotted salamander egg masses were found. On the final visit, two remaining hatched egg masses were found on a branch in the pool and 30 spotted salamander egg masses were found. Also on the final visit, 10 spotted salamander egg masses were found within swale areas on the north end of the site.

During the three spring site visits, the ephemeral pool exhibited appropriate hydrology to sustain amphibian breeding activity. During initial visits, the water level of the pool was very deep and slowly decreased with each successive visit. At the time of in-depth monitoring in October the ephemeral pool was found to be saturated to the soil surface, but had no standing water.

General health and vigor of the surviving plants, prognosis for their future survival, and a diagnosis of the cause(s) of morbidity or mortality:

Overall, planted shrub species (*Alnus incana*, *Aronia melanocarpa*, *Cornus sericea*, *Ilex verticillata*, *Salix discolor*, and *Vaccinium corymbosum*) appear to be healthy and growing. Hydrology appears adequate for these plants and there is limited evidence of death from herbivory, flooding, or desiccation. Some small woody plants may be having trouble competing with the robust herbaceous vegetation within the site; in fact, it is possible that dead or malnourished plants were not observed due to the thick layer of cattails present in some of the wetter swales.

Maps

Maps must be provided to show the location of the compensatory mitigation site relative to other landscape features, habitat types, locations of photographic reference points, transects, sampling data points, and/or other features pertinent to the mitigation plan. In addition, the submitted maps must clearly delineate the mitigation site boundaries to assist in proper locations for subsequent site visits. Each map or diagram must fit on a standard 8 ½ x 11” piece of paper and include a legend and the location of any photos submitted for review.

PLEASE SEE FIGURE 1 ON NEXT PAGE (10) FOR A CLOSEUP OF MITIGATION PLOT LOCATIONS AND AS BUILT CONDITIONS (additional maps can be available by request)

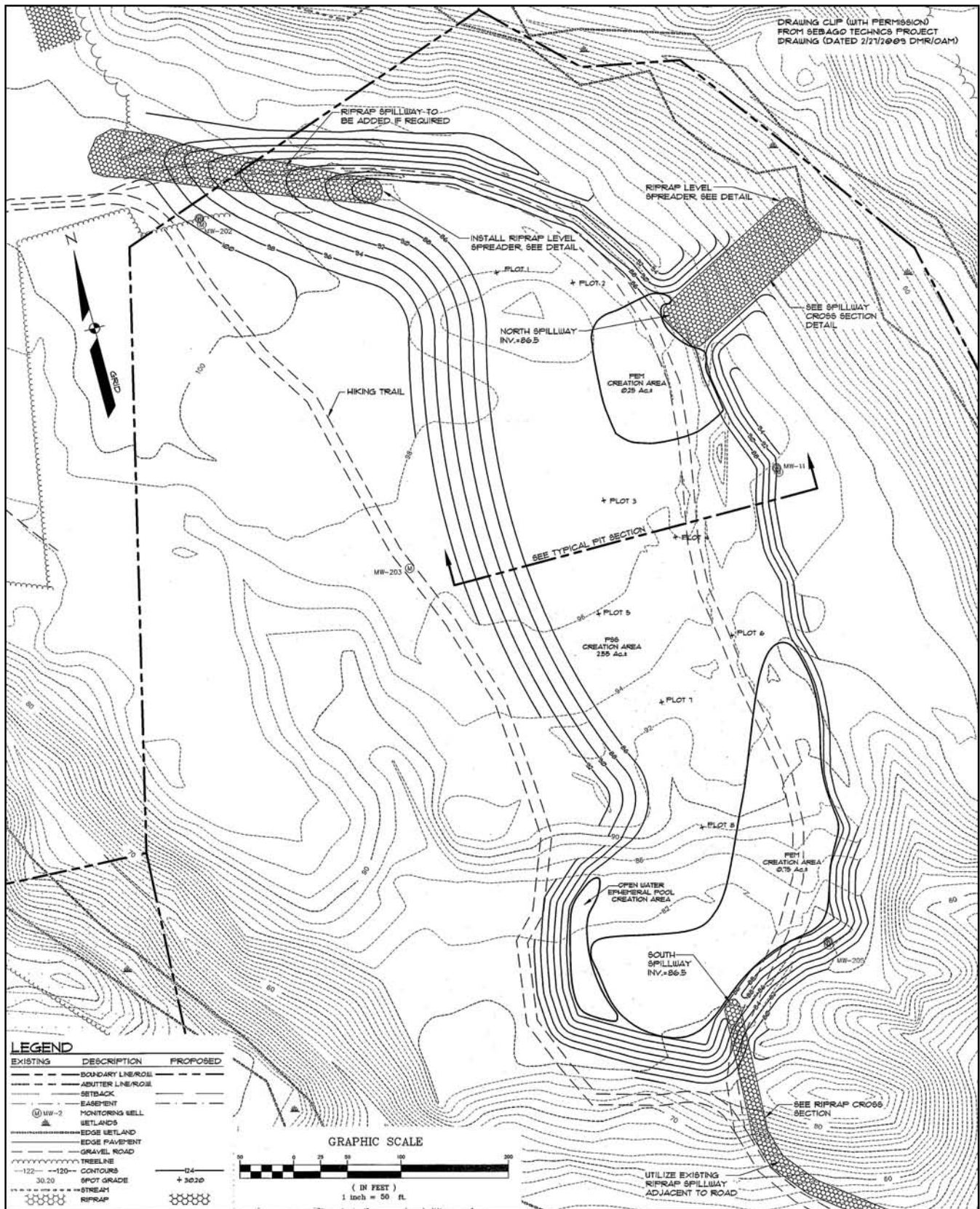


Figure 1. As-built conditions of site showing plot location centers

Conclusions (1 page)

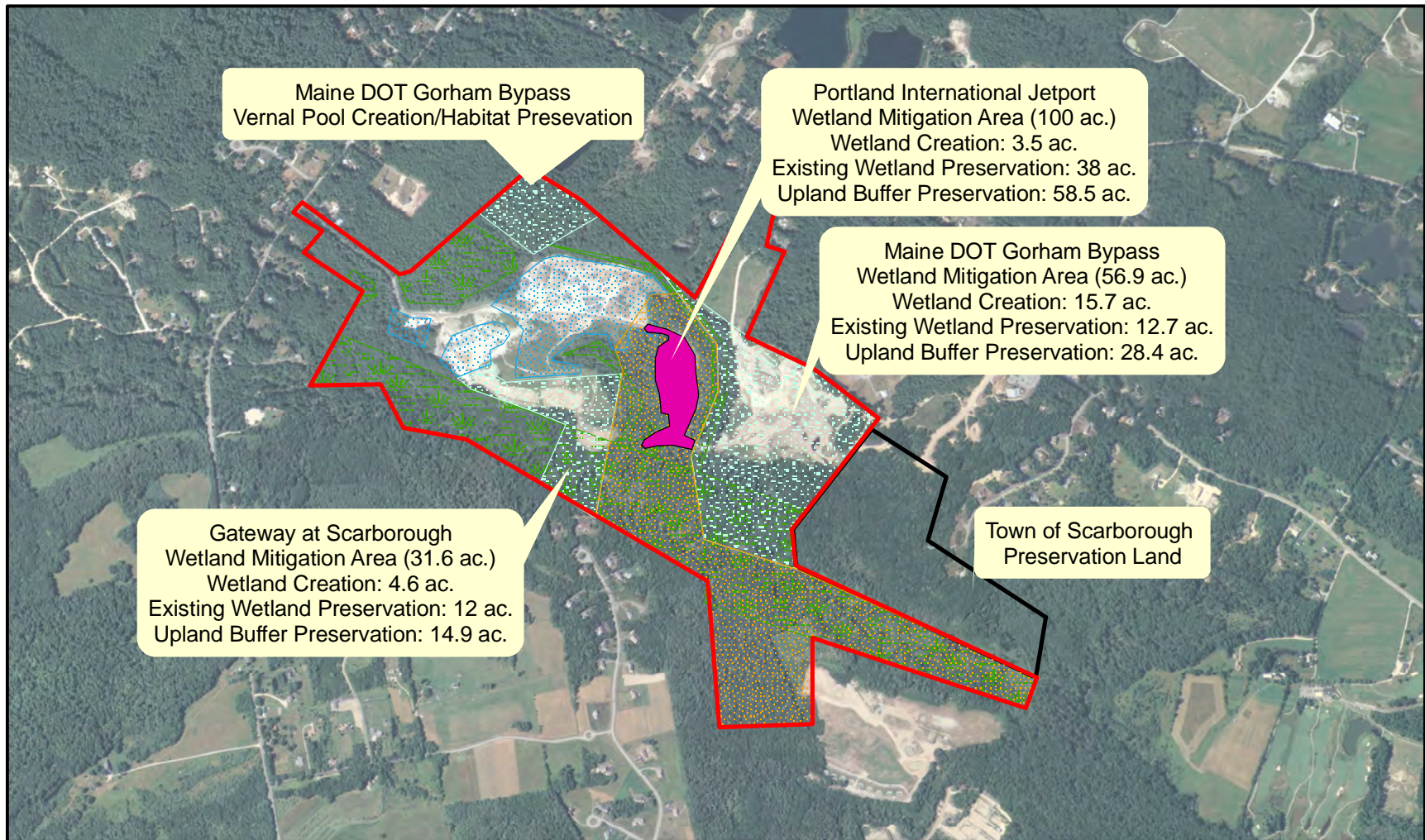
In general, and as can be noted from the photographs and data, the Jetport Project wetland creation area is responding well after one year of growth. In the wetland creation area, hydrology appears to be adequate to achieve wetland conditions. Pockets of standing water were observed within the creation area and there is evidence of reducing conditions in the soil profiles. Planted woody vegetation is growing well, and herbaceous cover is very robust after the first, full growing season. Wildlife usage within the wetland creation site and surrounding habitat preservation areas are abundant year-round. The ephemeral pool has shown to be providing good breeding habitat for amphibians.

Even though the site does appear to have a good start to providing replacement functionality for wetlands impacted by the Jetport expansion, it does have a few minor problem that will continue to be monitored. As outlined in the “Remediation” section above, invasive species and woody plant densities will be addressed if they are determined to be reducing the site’s ability to provide functional replacement of the wetland functions and values impacted by the Jetport project.

Appendix A -- An as-built plan showing topography to 1-foot contours, any inlet/outlet structures and the location and extent of the designed plant community types (e.g., shrub swamp). Within each community, type the plan shall show the species planted—but it is not necessary to illustrate the precise location of each individual plant. There should also be a soil profile description and the actual measured organic content of the topsoil. This should be included in the first monitoring report unless there are grading or soil modifications or additional plantings of different species in subsequent years.

- Please see Figure 1 on page 10 of this report for a close-up site map.
- Soil Profile Descriptions are included in Tables 1 through 4 in Appendix D.
- A site map showing the Jetport location in comparison to the overall Larrabee Farms site is attached in this appendix.

Larrabee Farms Wetland Mitigation Project Site



LEGEND

- Portland Jetport Preservation Area
- Areas for future Projects
- Existing Wetland Areas
- Portland Jetport Creation Project



0 0.125 0.25 0.5 Miles

Project: 299 PWM Expansion Project

Client: Portland International Jetport

Prepared by: DRB

Date: 24 February 2009

Projection Data: 2007 1m Aerial Image
Scarborough, Maine
UTM NAD 1983

Source(s): NAIP



Mailing Address:
25 Dundee Road
Gorham, Maine 04038

Phone: 207.591.5220
www.boyleassociates.net

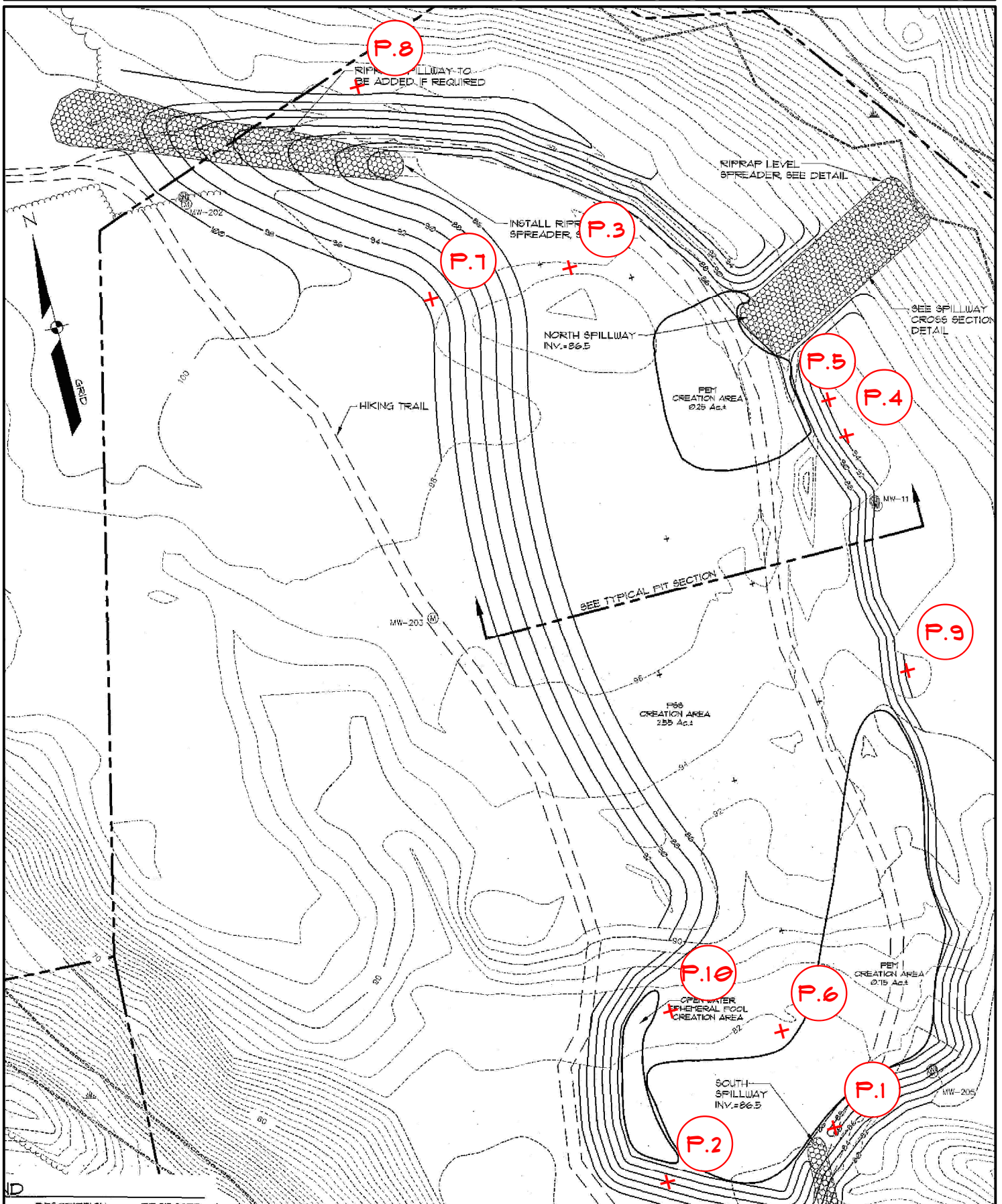
Appendix B – A vegetative species list of volunteers in each plant community type. The volunteer species list should, at a minimum, include those that cover at least 5% of their vegetative layer*.

Volunteer Species

<u>Scientific Name</u>	<u>Common Name</u>	<u>Indicator Status</u>	<u>Percent Aerial Cover (On average across creation area)</u>
<i>Agrostis alba</i>	Redtop	FACW	47
<i>Bidens frondosa</i>	Devil's begger-ticks	FACW	1
<i>Euthamia graminifolia</i>	Grass-leaved goldenrod	FAC	4
<i>Lythrum salicaria</i>	Purple loosestrife	FACW	1
<i>Phalaris arundinacea</i>	Reed canary grass	FACW	1
<i>Polygonum pennsylvanicum</i>	Pennsylvania smartweed	FACW	1
<i>Typha angustifolia</i>	Narrow-leaf cattail	OBL	1
<i>Typha latifolia</i>	Broad-leaf cattail	OBL	31

*Being that this is the first year of monitoring, percent aerial cover by volunteer species is low. Therefore, all volunteer species with 1% aerial cover or greater (within the area of the mitigation site surveyed) are included in the volunteer species table. For additional species observed, please see Table 8 in Appendix D.

Appendix C -- Representative photos of each mitigation site taken from the same locations for each monitoring event. Photos should be dated and clearly labeled with the direction from which the photo was taken. The photo sites must also be identified on the appropriate maps.



Project: # 299
Prepared by: DRB
Drawing Date: 2 Dec 2010

Notes:
Drawing Clip (with permission)
Sebago Technics Project
(Dated 2/29/2010)

Larrabee Farms: Portland International Jetport Creation Area - PHOTO LOCATIONS

0 50 100 200
Feet



Mailing Address:
25 Dundee Road
Gorham, Maine 04038
Phone 207.591.5220
www.boyleassociates.net



Photo 1 (construction). Facing north towards emergent and scrub-shrub creation area after planting, 06-July-2009.



Photo 1 (Year 1). Facing north towards emergent and scrub-shrub wetland creation areas, 09-September-2010.



Photo 2 (post-construction). Facing east across newly created emergent area, 4-August-2009.



Photo 2 (Year 1). Facing northeast across newly created emergent area, 9-September-2010.



Photo 3 (Year 1). Facing south across scrub-shrub creation area, 9-September-2010.



Photo 4 (Year 1). Facing southwest across scrub-shrub creation area, 9-September-2010.



Photo 5 (Year 1). Facing northwest across scrub-shrub creation area, 9-September, 2010.



Photo 6 (Year 1). Facing northeast across emergent and scrub-shrub creation areas, 9-September-2010.



Photo 7 (construction). Facing southeast across newly constructed scrub-shrub areas, 23-June-2009.



Photo 7 (Year 1). Facing southeast across scrub-shrub creation area from berm, 9-September-2010.



Photo 8 (construction). Facing south at newly constructed spillway and scrub-shrub wetland, 7-July-2009.



Photo 8 (Year 1) Facing south at scrub-shrub creation area, 9-September-2010.



Photo 9 (construction). Facing northwest during planting of basin. Evidence of micro-topography and hydrology are apparent, 5-June-2009.



Photo 9 (Year 1). Facing west across scrub-shrub creation area, 9-September-2010.



Photo 10 (Year 1). Facing south at ephemeral pool, 13-April-2010.

Appendix D. Tables

Table 1. Soil profile 1 in southern PEM creation area (HSUS7 Indicator F6).

Depth	Horizon	Matrix	Redox	Texture
0-10	A	10YR3/2	10YR 6/6 – 8%	fSL
10-17	B ₁	2.5Y6/3	10YR 6/1 – 40% 10YR 5/6 – 35%	SiL
17-20+	B ₂	5Y 5/2	10YR 5/5 – 10% 10YR 5/1 – 10%	SiL

Table 2. Soil profile 2 in southern part of PSS creation area (HSUS7 Indicator A11).

Depth	Horizon	Matrix	Redox	Texture
0-6	A	10YR 3/1	2.5Y 5/2 – 2% 7.5YR 4/6 – 8%	fSL
6-20+	B	2.5Y 6/2	10YR 6/6 - 20%	S

Table 3. Soil profile 3 in northeastern PEM creation area (HSUS7 Indicator A11).

Depth	Horizon	Matrix	Redox	Texture
0-9	A	10YR3/2	None observed	SL
9-12	B ₁	10YR 4/1	10Y5/1 – 30% 10YR 6/6 – 20%	SCL
12-20+	B ₂	10Y 6/1	2.5Y 6/6 – 20%	SiC

Table 4. Soil profile 4 in northern part of PSS creation area (HSNE3 Indicator VII¹).

Depth	Horizon	Matrix	Redox	Texture
0-8	A ₁	10YR 3/1	None observed	SL
8-16	A ₂	10YR 3/2	7.5 YR 5/6	SL
16-20+	B	5G 5/1	7.5Y 4/6	SiL

¹ Total depth of layers A₁ and A₂ combined meets the thickness requirement of this indicator.

Table 6: Fauna Species List April through September 2010 (wetland creation area)

Common Name	Scientific Name	Field ID Methodology	Use
Birds:			
Black-capped chickadee	<i>Parus atricapillus</i>	visual	feeding, nesting
American goldfinch	<i>Carduelis tristis</i>	visual	feeding, nesting
Red-tailed hawk	<i>Buteo jamaicensis</i>	visual	feeding
American crow	<i>Corvus brachyrhynchos</i>	visual	feeding, roosting
Mallard	<i>Anas platyrhynchos</i>	visual	feeding, nesting
Wild turkey	<i>Meleagris gallopavo</i>	visual	feeding
Blue jay	<i>Cyanocitta cristata</i>	visual	feeding
Pileated woodpecker	<i>Dryocopus pileatus</i>	visual	feeding
Northern flicker	<i>Colaptes auratus</i>	song	feeding
White-breasted nuthatch	<i>Sitta carolinensis</i>	visual	feeding
Red-breasted Nuthatch	<i>Sitta canadensis</i>	visual	feeding
American woodcock	<i>Scolopax minor</i>	visual	feeding
Eastern bluebird	<i>Sialia sialis</i>	visual	feeding
Barn Swallows	<i>Hirundo rustica</i>	visual	feeding
Tree Swallows	<i>Tachycineta bicolor</i>	visual	feeding
Eastern Phoebe	<i>Sayornis phoebe</i>	visual	feeding
Mammals:			
Fox	<i>Vulpes vulpes</i>	visual	feeding
Raccoon	<i>Procyon lotor</i>	tracks	feeding
Coyote	<i>Canis latrans</i>	tracks	feeding
Amphibians:			
American toad	<i>Bufo americanus</i>	heard	feeding, breeding
Green frog	<i>Rana clamitans</i>	visual	feeding, breeding
Wood frog	<i>Rana sylvatica</i>	visual	feeding, breeding
Spotted salamander	<i>Ambystoma maculatum</i>	visual	breeding
Gray tree frog	<i>Hyla versicolor</i>	visual	feeding
Spring Peeper	<i>Hyla crucifer</i>	heard	feeding, breeding
Turtle species	Order Testudines	tracks	feeding, roosting

Table 7. Jetport Wetland Mitigation Year One Monitoring Results - 2010
Scrub/Shrub Wetland Areas

Plot # Mitigation Type (Date Surveyed)	Radius (ft)	Area (plot acreage) ¹	Plants	Number of Plants	Tree & Shrub Species/Acre
1	30	0.062	Alin	49	786
PSS Creation			Arme	0	
(10/29/2010)			Cose	0	
			Ilve	0	
			Sadi	0	
			Vaco	0	
			Total	49	
2	30	0.062	Alin	12	193
PSS Creation			Arme	0	
(10/29/2010)			Cose	0	
			Ilve	0	
			Sadi	0	
			Vaco	0	
			Total	12	
3	30	0.062	Alin	1	80
PSS Creation			Arme	2	
(10/29/2010)			Cose	1	
			Ilve	0	
			Sadi	1	
			Vaco	0	
			Total	5	
4	30	0.062	Alin	0	0
PSS Creation			Arme	0	
(10/29/2010)			Cose	0	
			Ilve	0	
			Sadi	0	
			Vaco	0	
			Total	0	
5	30	0.062	Alin	0	257
PSS Creation			Arme	3	
(10/29/2010)			Cose	4	
			Ilve	3	
			Sadi	2	
			Vaco	4	
			Total	16	
6	30	0.062	Alin	1	193
PSS Creation			Arme	0	
(10/29/2010)			Cose	2	
			Ilve	2	
			Sadi	6	
			Vaco	1	
			Total	12	
7	30	0.062	Alin	0	385
PSS Creation			Arme	1	
(10/29/2010)			Cose	7	
			Ilve	6	
			Sadi	7	
			Vaco	3	
			Total	24	
8	30	0.062	Alin	4	433
PSS Creation			Arme	3	
(10/29/2010)			Cose	6	
			Ilve	7	
			Sadi	6	
			Vaco	1	
			Total	27	
PSS Creation Area Average Plants/Acre				291	
Total acreage surveyed (ac):				0.50	
Percentage of total planted area* (2.45 acre) surveyed:				20.3%	

*Calculated plot area excludes "planned non-planted areas" or approximately 4% (e.g. ephemeral pools, nesting areas, course woody debris)

PLANT CODE TABLE		
Plant Code	Plant Name (scientific)	Common Name
Alin	<i>Alnus incana (v. rugosa)</i>	Speckled Alder
Arme	<i>Aronia melanocarpa</i>	Black Chokeberry
Cose	<i>Cornus sericea</i>	Red Osier Dogwood
Ilve	<i>Ilex verticillata</i>	Winterberry Holly
Sadi	<i>Salix discolor</i>	Pussy Willow
Vaco	<i>Vaccinium corymbosum</i>	Highbush Blueberry

Table 8: Jetport Wetland Creation Area Year One Herbaceous Vegetation (Plot Data) - 2010

Scientific Name	Common Name	Indicator Status	1	2	3	4	5	6	7	8	N PEM	S PEM
<i>Agrostis alba</i>	Redtop	FACW	20	30	40	40	90	40	80	90		40
<i>Alisma plantago-aquatica*</i>	European mud plaitain	OBL	5					2	2		2	
<i>Ambrosia</i> sp	Ragweed	NI							2			
<i>Bidens frondosa</i>	Devil's beggar-ticks	FACW	2		5	1		2				
<i>Carex crinita*</i>	Fringed sedge	OBL									2	2
<i>Carex lurida*</i>	Shallow sedge	OBL	2		2	2		1				
<i>Carex scoparia*</i>	Broom sedge	FACW						1				
<i>Chicorium intybus</i>	Chicory	NI							2			
<i>Epilobium strictum</i>	Downy willowherb	OBL				1						
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod	FAC			10	2	5	5	5	3		5
<i>Juncus effusus*</i>	Soft rush	FACW	20	30	15	45	2	10	10	15	40	20
<i>Lythrum salicaria</i>	Purple loosestrife	FACW			2	2	1	1			2	
<i>Mimulus ringens*</i>	Allegheny monkeyflower	OBL				2		1	2			
<i>Phalaris arundinacea</i>	Reed canary grass	FACW			2		2	1	2			
<i>Polygonum pennsylvanicum</i>	Pennsylvania smartweed	FACW								2		5
<i>Rumex patientia</i>	Patience dock	NI					2					
<i>Scirpus cyperinus*</i>	Woolgrass	FACW	2	2	2			1			2	
<i>Typha angustifolia</i>	Narrow-leaf cattail	OBL				5						
<i>Typha latifolia</i>	Broad-Leaf cattail	OBL	40	45	10			40	15	5	70	80
<i>Verbena hastata*</i>	Blue vervain	FACW			2							
Average % cover by herbaceous plants			91	107	90	100	102	105	120	115	118	152
Average % cover by woody plants			20	10	3	0	2	2	5	3	0	0
Average % cover by invasive plants			40	45	14	7	3	42	17	5	72	80
Average % cover by non-invasive herbaceous plant			51	62	76	93	99	63	103	110	46	72
Average % cover by all hydrophytes			71	72	79	93	101	65	108	113	46	72
Av. % cover of non-invasive veg over 20% of site surveyed												82
Av. % cover of non-invasive hydrophytes												78
Av. % cover of invasives												33
Av. % cover of planned emergent areas												59

Red plants are considered invasive or noxious.

Green plants are hydrophytes.

*in seed mix

Appendix E: Permits



STATE OF MAINE
Department of Environmental Protection

JOHN ELIAS BALDACCI
GOVERNOR

David P. Littell
COMMISSIONER

January, 2010

City of Portland – Portland Int'l Jetport
c/o Arthur Sewall
1001 Westbrook St.
Portland, ME 04012

RE: Site Location of Development Act/ NRPA Applications, Portland, #L-13760-AN-A/TG-AO-N

Dear Mr. Sewall:

Please find enclosed a signed copy of your Department of Environmental Protection land use permit. You will note that the permit includes a description of your project, findings of fact that relate to the approval criteria the Department used in evaluating your project, and conditions that are based on those findings and the particulars of your project. Please take several moments to read your permit carefully, paying particular attention to the conditions of the approval. The Department reviews every application thoroughly and strives to formulate reasonable conditions of approval within the context of the Department's environmental laws. You will also find attached some materials that describe the Department's appeal procedures for your information.

If you have any questions about the permit or thoughts on how the Department processed this application please get in touch with me directly. I can be reached at 822-6380 or at Bill.Bullard@maine.gov.

Yours sincerely,

A handwritten signature in blue ink that reads "Bill Bullard".

Bill Bullard, Project Manager
Division of Land Resource Regulation
Bureau of Land & Water Quality

pc: File

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 624-6550 FAX: (207) 624-6024
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-6477 FAX: (207) 764-1507



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION
AUGUSTA, ME 04333

DEPARTMENT ORDER

IN THE MATTER OF

CITY OF PORTLAND) SITE LOCATION OF DEVELOPMENT ACT
Portland and South Portland,) NATURAL RESOURCES PROTECTION ACT
Cumberland County) SIGNIFICANT WILDLIFE HABITAT
JETPORT IMPROVEMENTS) WATER QUALITY CERTIFICATION
L-13760-18-AN-A (approval)) AMENDMENT
L-13760-TG-AO-N) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. Sections 481 et seq. and 480-A et seq., and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection has considered the application of the CITY OF PORTLAND with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. History of Project: First used as a private flying field in the 1920's by Dr. Clifford Strange, the jetport site has been incrementally expanded and improved since its acquisition by the City of Portland in 1936. In Department Order #L-13760-18-A-N, dated October 9, 1987, the Department approved existing post-1970 improvements at the Portland International Jetport as described in Finding 1 of that Order, as well as a 19-lot commercial subdivision on a 763 acre parcel of land between Congress Street and Johnson Road in the City of Portland. The Department has approved a number of amendments and modifications to the Jetport in subsequent Orders, including a five year improvement program described in Department Order #L-13760-18-R-A, dated February 16, 2001. Most recently, Department Order #L-13760-18-AP-B, dated June 29, 2009, granted approval for the permanent addition of a former temporary remote parking lot located on outer Congress Street. The Jetport is situated partially within the Cities of Portland, South Portland and Westbrook.

B. Summary: The applicant proposes to implement a Master Plan developed in 2007 that includes the construction of additional airline terminal facilities, enhancements to operational safety by providing an adequate runway safety area (RSA) for Runway 18-36, a new taxiway to reduce runway incursion potential and additional runway length for Runway 11-29. Details of the proposal include:

- Terminal Area Improvements -A long-term study of the passenger terminal building concluded that deficiencies in existing capacity and circulation cannot be resolved without expanding the facility. To address these deficiencies, the applicant proposes to:

- Extend the departure concourse to the west and to add four additional aircraft contact gates.
- Add a new core structure west of the existing building including a second story addition to accommodate new ticketing, baggage, screening and concession areas.

- Construct new terminal employee parking northwest of the existing surface parking to replace parking space lost from the proposed terminal building expansion.
- Construct landscaping, lighting, stormwater, roadway and utility improvements associated with the proposed terminal area upgrades.
- Construct a deicing fluid collection and recycling system near the terminal apron area.

- Taxiway and Perimeter Road Improvements

A new taxiway between Taxiway G and Taxiway A is proposed to provide access to Runway 29 and to reduce the number of runway crossings. The perimeter road will be moved in a number of locations to accommodate the taxiway and perimeter road improvements.

- Runway 18-36 Improvements

The applicant proposes to upgrade Runway 18-36 to more effectively serve as a back-up to Runway 11-29. The proposed upgrades include a 1,100 linear foot extension on the southerly end with wider and longer RSAs at each end to meet Federal Aviation Administration (FAA) standards. An existing farm pond used in the stormwater management system will be reconfigured to accommodate the lengthened runway. Fifteen foot-wide snow shoulders are planned on each side of the runway.

- Runway 11-29 Improvements

The applicant proposes to extend this existing 6,800 foot-long runway to provide 7,200 linear feet of departure and landing distance in each direction. This will be done in conjunction with the Wildlife Hazard Management Plan (WHMP) activity and the Incidental Take Plan (ITP) described below.

- Airport Perimeter Roads

Perimeter roads will be reconfigured to accommodate the expanded footprint of the proposed runway improvements.

Construction of the proposed improvements will create 31.4 acres of new impervious area.

- Wetland Impacts from the proposed construction

The applicant is also seeking approval under the Natural Resources Protection Act to fill 11.58 acres of freshwater wetland to construct the proposed improvements.

- Implementation of Wildlife Hazard Management Plan Recommendations

In cooperation with the U.S. Department of Agriculture Wildlife Hazard Group, the applicant recently developed a Wildlife Hazard Management Plan (WHMP) for the jetport. As part of the WHMP, the applicant proposes to cut vegetation and to fill 4.89 acres of scrub-shrub wetland at the end of Runway 11-29. This wetland contains cattails, common reed (*phragmites*), alders and other vegetation which attracts large flocks of blackbirds and European starlings, species that pose an aircraft safety hazard because of the potential for the birds to be ingested into jet engines. Near the southerly end of Runway 18-36, the applicant proposes to install a net over an existing stormwater detention pond to deter waterfowl and wading bird activity in the vicinity of the runway.

- Incidental Take Plan (ITP) associated with impacts to New England Cottontail (Significant Wildlife Habitat)

Implementation of the WMHP, which will require vegetation removal near the end of Runway 11-29, will result in loss of habitat for state-endangered New England Cottontail rabbits (NEC) that were discovered in a 13-acre shrub thicket located between the perimeter access road and the security fence.

C. Current Use of Site: The site of the proposed project is currently developed with the existing jetport runways, terminal buildings, parking areas and supporting facilities. The proposed Runway 18-36 expansion area is currently an open field with shrub thickets and woodland located near Long Creek.

2. FINANCIAL CAPACITY:

The total cost of the project is estimated to be \$120,344,764. RSA improvements are funded by the FAA at 95% through their Airport Improvement Program (AIP) grants, by the State of Maine at 2.5% through a general obligation bond and by the City at 2.5% through operating expenses. The terminal building improvements and associated impacts will be funded through a Transportation Security Administration (TSA) grant and through Passenger Facility Charges (PFCs) as authorized by Title 14 of the Code of Federal Regulations, Part 158. PFCs are used to fund eligible projects and will be used in combination with bonds secured by the City to fund the terminal building expansion and improvements.

The Department finds that the applicant has demonstrated adequate financial capacity to comply with Department standards.

3. TECHNICAL ABILITY:

The applicant provided resume information for key persons involved with the project and a list of projects successfully constructed by the applicant. The applicant also retained the services of Deluca-Hoffman Associates, OEST Associates, Coffman Associates, and TRC Solutions, professional engineering and environmental consulting firms, to assist in the design and engineering of the project.

The Department finds that the applicant has demonstrated adequate technical ability to comply with Department standards.

4. NOISE:

The primary sound emissions from the proposed project relate to aircraft operations at the airport. Noise from aircraft operations is subject to federal noise regulations and as such is exempt from regulation under Chapter 375(10)(5). FAA specifies that noise impacts should be examined for a period of five years following project implementation. To this end, the applicant completed a forecast of noise levels for 2017, five years subsequent to the anticipated project completion date of 2012. This study concluded that implementation of the proposed improvements would not result in a significant noise impact as defined by the FAA.

The Department finds that no regulated sources of noise have been identified and that the proposed project will not have a significant impact under the applicable federal regulations.

5. SCENIC CHARACTER:

The applicant submitted a visual assessment conducted in the Area of Potential Effects (APE) for the proposed project. The study focused on project impacts visible from the adjacent Brick Hill and Stroudwater districts, the residential areas nearest to the proposed construction. The primary off-site

effect of the proposed lengthening of the southerly end Runway 18-36 will be shifting of takeoffs and landings to the south, further from the Stroudwater neighborhood and closer to Brick Hill. Visual impacts to that neighborhood will be primarily increased visibility resulting from an extension of the existing runway. Visibility of the proposed building and parking improvements in the terminal area will be limited by their distance from adjacent residential areas.

Based on the project's location and design, the Department finds that the proposed project will not have an unreasonable adverse effect on the scenic character of the surrounding area.

6. WILDLIFE AND FISHERIES:

The Maine Department of Inland Fisheries & Wildlife (MDIFW) reviewed the separate components of the proposed project and their potential impacts on wildlife populations at the site. In its comments, MDIFW stated that the terminal building construction, extension of Runway 18-36, associated taxiway and RSA improvements and displaced landing thresholds is not anticipated to have negative impacts on existing wildlife populations.

An existing manmade farm/detention pond approximately 1.8 acres in size is located partially within the proposed Runway 18-36 extension area. Live-trapping of fish in the pond was conducted in August, 2008. Fish and minnows captured were limited to small warm water species. A portion of the pond will be deepened behind a sheet piling barrier to provide enhanced stormwater management functions. Segregation of the pond by the sheet piling during dredging will protect the water quality of Long Creek and Casco Bay. In order to deter waterfowl and wading birds attracted to the small prey fish present, the pond will be covered with low, wide spaced, aerally-suspended netting as part of the wildlife hazard management plan. No other fisheries concerns were identified.

Upland Sandpipers (*Bartamia longicauda*), listed as threatened under Maine's Endangered Species Act, have been observed at the project site. Airports typically provide the large field and open shortgrass habitat areas preferred by the species. The applicant will continue to coordinate with MDIFW staff to identify and implement conservation measures to ensure that the life cycle of the upland sandpiper is not adversely affected.

Based on records of New England Cottontail (*Sylvilagus transitionalis*) sightings in old field and shrubby habitats near the development, the applicant conducted winter track surveys from 2007 to 2008 to determine if NEC were present in any of the proposed work areas. Tracks measured as being of a size consistent with that of NEC were found inside the fenced area located at the southeasterly end of Runway 11-29. Subsequent fecal pellet analysis indicated that the pellets were from five different male eastern cottontails. The 13-acre thicket where NEC signs were found is dominated by speckled alder, bayberry, willows, honeysuckle and white birch with a high stem density preferred by the species. NEC are state endangered species and MDIFW stated that this project, which will eliminate the 13 acres of habitat, has the potential to result in the "take" of an endangered species. The applicant worked with MDIFW and the FAA to develop an Incidental Take Plan which was finalized in a document dated October 26, 2009. Under the provisions of the ITP, the commissioner of MDIFW may permit the taking of any endangered species or threatened species if:

- (1) Such taking is incidental to, and not the purpose of, carrying out an otherwise lawful activity;
- (2) The taking will not impair the recovery of any endangered species or threatened species; and
- (3) The person develops and implements an incidental take plan approved by the commissioner to take an endangered species or threatened species.

The plan includes measures the applicant will undertake to prevent, minimize and mitigate the individual and cumulative effects and any provisions that are necessary to prevent, minimize and mitigate circumstances that are likely to impair the recovery of the NEC as well as procedures for monitoring the effectiveness of the recovery measures in the plan.

The anticipated costs of implementing the plan and the availability of necessary funding for the applicant to implement the plan are also addressed in the plan.

The final ITP involves trapping the NEC on the property and relocating them to a new location on state, federal, or privately owned land, as long as that land is permanently protected for conservation and the landowner agrees to manage its property for NEC. The trapping and relocation project is considered avoidance and minimization of impacts. Because the 13 acres of habitat will be cleared, the ITP will also include compensation for the loss of habitat. To compensate for the unavoidable loss of NEC habitat at the project site, the applicant will contribute, by and through the ITP, an amount not to exceed \$1,000,000 to secure and permanently protect core NEC habitat patches that are greater than 25 acres in size. In conjunction with the USFWS, MDIFW has signed a purchase option on a locally available parcel that is near an existing NEC population and that would be appropriate for habitat preservation. Should acquisition of this parcel be unsuccessful, the funds transferred to MDIFW by the applicant will be used to secure and permanently protect other potential NEC habitat as deemed appropriate by MDIFW.

Under the ITP, MDIFW staff will supervise contractors and volunteers to capture and transfer NEC from the project site. Trapping will occur in two sessions, currently scheduled with one session in February 2010 with a second session occurring approximately four weeks prior to land clearing to ensure all NECs are removed from the habitat. Rabbits will be transferred to Stage Island in Kennebunkport or to another preserved habitat area deemed to be suitable by MDIFW.

Based on the approved ITP and MDIFW's review comments, the Department finds that the applicant has made adequate provision for the protection of wildlife and fisheries provided all of the requirements of the ITP are met by the applicant.

7. BUFFER STRIPS:

The applicant is not proposing to utilize any formal buffer strips for the proposed project.

8. SOILS:

The applicant submitted a soil survey map and report and a geotechnical report based on the soils found at the project site. This report was prepared by a registered professional engineer and reviewed by staff from the Division of Environmental Assessment (DEA) of the Bureau of Land and Water Quality (BLWQ). DEA also commented that a Blasting Plan should be submitted by the applicant outlining the proposed procedures for removing bedrock should that become necessary during construction. If a rock crusher is being utilized on site, the applicant must insure that the crusher is licensed by the Department's Bureau of Air Quality and is being operated in accordance with that license.

The Department finds that, based on this report and DEA's review, the soils on the project site present no limitations to the proposed project that cannot be overcome through standard engineering practices provided that a site-specific Blasting Plan is submitted for review and approval prior to conducting blasting at the site.

9. STORMWATER MANAGEMENT:

The proposed project includes approximately 31.4 acres of new impervious area and 90 acres of new developed area. With completion of the project, the site will contain 238 acres of impervious area and 590 acres of developed area. The areas of the proposed improvements are located within the watershed of the Fore River. The applicant submitted a Natural Resources Protection Act Permit by Rule Notification (PBR #47263) to repair several stormwater outfall pipes that discharge to the river. Other sections of the jetport are located in the tidal section of Long Creek, an urban impaired stream. The applicant submitted a stormwater management plan based on the basic, general and flooding standards contained in Department Rules, Chapter 500. The proposed stormwater management system consists of subsurface collection and distribution piping with underdrained vegetated soil filters and a wet pond located as shown on a plan sheet entitled “WTQ4 – Overall Airfield Water Quality Treatment Summary”, prepared by Deluca-Hoffman Associates and dated March 3, 2009.

A. Basic Standards:

(1) Erosion and Sedimentation Control: The applicant submitted an Erosion and Sedimentation Control Plan that is based on the performance standards contained in Appendix A of Chapter 500 and the Best Management Practices outlined in the Maine Erosion and Sediment Control BMPs, which were developed by the Department. This plan and plan sheets containing erosion control details were reviewed by, and revised in response to the comments of the Division of Watershed Management (DWM) of the BLWQ.

Erosion control details will be included on the final construction plans and the erosion control narrative will be included in the project specifications to be provided to the construction contractor. Prior the start of construction, the applicant must conduct a pre-construction meeting to discuss the construction schedule and the erosion and sediment control plan with the appropriate parties. This meeting must be attended by the applicant's representative, Department staff, the design engineer, the contractor, and the third-party inspector. Given the size and nature of the project site, the applicant must retain the services of a third party inspector in accordance with the Special Condition for Third Party Inspection Program, which is attached to this Order.

(2) Inspection and Maintenance: The applicant submitted a maintenance plan that addresses both short and long-term maintenance requirements. This plan was reviewed by, and revised in response to the comments of DWM. The maintenance plan is based on the standards contained in Appendix B of Chapter 500. The applicant will be responsible for the maintenance of all common facilities including the stormwater management system.

Storm sewer grit and sediment materials removed from stormwater control structures during maintenance activities must be disposed of in compliance with the Department's Solid Waste Management Rules.

(3) Housekeeping: The proposed project will comply with the performance standards outlined in Appendix C of Chapter 500.

Based on DWM's review of the erosion and sedimentation control plan and the maintenance plan, the Department finds that the proposed project meets the Basic Standards contained in Chapter 500(4)(A).

B. General Standards: The applicant's stormwater management plan includes general treatment measures that will mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential temperature impacts. This mitigation is being achieved by using Best Management Practices (BMP) that will control runoff from 90-94% of the new non-linear impervious area no less than 80% of the developed area. Portions of the impervious area are designed to treat 1.25 inches of runoff in accordance with the requirements of Chapter 500(4) (B) (2).

The stormwater management system proposed by the applicant was reviewed by, and revised in response to, comments from DWM. After a final review, DWM commented that, considering the additional depth of captured runoff described above, the proposed stormwater management system is designed in accordance with the Chapter 500 General Standards. DWM recommended that the applicant retain the services of a professional engineer to inspect the installation of the underdrained vegetated soil filters and the reconfiguration of the wet pond. Inspections must consist of weekly visits to the site to inspect the subgrade preparation at the soil filters and the pond expansion area, embankment construction, pipe bedding placement, underdrain pipe installation, soil filter placement, overflow installation and soil filter stabilization from initial ground disturbance to final stabilization. Upon completion of the installation, the applicant must notify the Department in writing within 30 days to state that the system had been installed. Accompanying the notification must be a log of the engineering inspection giving the date of each inspection and the items inspected on each date.

Based on the stormwater system's design and DWM's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500, General Standards provided that the construction inspections are performed as outlined above.

C. Flooding Standard: The applicant is not proposing a formal stormwater management system to detain stormwater from 24-hour storms of 2-, 10-, and 25-year frequency. Instead, since the project site is located adjacent to the Fore River, the applicant requested a waiver from the flooding standard pursuant to Department Rules, Chapter 500(4)(E)(2)(a).

DWM recommended that flooding waiver be granted based on the project's location adjacent to the Fore River.

Based on the system's design and DWM's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500, Flooding Standard for peak flow from the project site, and channel limits and runoff areas.

10. GROUNDWATER:

The project site is not located over a mapped sand and gravel aquifer. The proposed project does not propose any withdrawal from, or discharge to, the groundwater. In response to DEA staff comments, the applicant proposes to incorporate revisions to the facility's Stormwater Pollution Prevention Plan into the annual update of its Spill Prevention Control and Countermeasure Plan (SPCC). DEA staff also reviewed the applicant's plan to collect, treat, store and dispose of spent deicing fluid. Details of the plan are further described in Finding 12.

Based on the information submitted in the application and DEA's review, the Department finds that the proposed project will not have an unreasonable adverse effect on ground water quality provided that the SPCC plan is updated by December, 31, 2010 to incorporate the revised Stormwater Pollution Prevention Plan.

11. WATER SUPPLY:

Water usage is anticipated to increase by approximately 15,000 gallons per day with the proposed terminal area expansion and deicing facility building.

Water will be supplied by the Portland Water District. The applicant submitted a letter from the District, dated November 10, 2008 indicating that it will be capable of servicing this project.

The Department finds that the applicant has made adequate provision for securing and maintaining a sufficient and healthful water supply.

12. WASTEWATER DISPOSAL:

Construction of the proposed project will result in increased wastewater flows from the terminal expansion and from the deicing facility. When completed, the net increase from the proposed terminal expansion is anticipated to be 11,260 gallons of wastewater per day to the Portland Water District's wastewater treatment facility. The applicant submitted a letter dated January 13, 2009 from the District stating that it will accept these flows.

Two types of deicing fluid are used at the jetport. Type I fluid is typically mixed with water at a 50/50 ratio and Type IV fluid is applied as 100% glycol. The proposed deicing facility includes an underground storage tank that will be used to store used glycol deicing fluid prior to its pretreatment and discharge to the District's wastewater treatment facility. Historical data submitted by the applicant indicates that annual use of glycol for the period 2004-2007 averaged 56,000 gallons. Because deicing often occurs during inclement weather, the fluid collected is typically diluted by rain and snowmelt. Based on testing at other airports, the collected fluid typically contains 1-2% glycol. From December to July of each year, the applicant proposes to discharge up to 20,000 gallons per day of distillate with a Biological Oxygen Demand not to exceed 170 pounds per day.

The proposed project was reviewed by the Division of Water Quality Management (DWQM), which commented that the Portland Water District's East End Wastewater Treatment Facility has the capacity to treat these flows and is operating in compliance with the water quality laws of the State of Maine. DWQM cautioned that wet weather conditions may exacerbate compliance issues at the plant. The District operations manager requested that no distillate be discharged when the treatment plant is in a wet weather bypass mode. In these situations, the applicant proposes to retain distillate in the storage tank for subsequent discharge during dry conditions.

Based on DWQM's comments, the Department finds that the applicant has made adequate provision for wastewater disposal at a facility that has the capacity to ensure satisfactory treatment provided that deicing facility discharge to the treatment facility is restricted as specified above.

13. SOLID WASTE:

When completed, the proposed terminal expansion is anticipated to generate 604 tons of general office solid waste per year. All general solid wastes from the proposed project will be hauled by Waste Management for disposal of at Ecomaine, which is currently in substantial compliance with the Solid Waste Management Regulations of the State of Maine.

The proposed project will generate approximately 2,400 cubic yards of stumps and grubblings. All stumps and grubblings generated will be chipped and used on site for erosion control or hauled for disposal to a licensed facility which is operating in compliance with the Solid Waste Management Regulations of the State of Maine.

Terminal building and parking construction is expected to produce approximately 60,000 cubic yards of soils, tarmac and concrete. A portion of the soils may be reused as fill onsite. Excess material will be hauled by the selected contractor to Commercial Recycling in Scarborough or to another facility which is currently in substantial compliance with the Solid Waste Management Regulations of the State of Maine.

The proposed terminal building expansion will generate approximately 500 cubic yards or 90 tons, of construction debris and demolition debris. All construction and demolition debris generated will be disposed of at Riverside Recycling in Portland or to another facility which is currently in substantial compliance with the Solid Waste Management Regulations of the State of Maine.

Based on the above information, the Department finds that the applicant has made adequate provision for solid waste disposal.

14. FLOODING:

The proposed project is not located within the 100-year floodway of any river or stream.

The Department finds that the proposed project is unlikely to cause or increase flooding or cause an unreasonable flood hazard to any structure.

15. WETLAND IMPACTS:

With the implementation of the five-year Capital Improvement Plan and the Wildlife Hazard Management Plan, the applicant proposes to fill 11.58 acres of freshwater wetland in four general areas as follows:

- For the proposed terminal expansion, the applicant proposes to fill 3.85 acres of forested, scrub shrub and emergent wetland on the westerly side of the existing terminal.
- For the proposed taxiway improvements along Runway 18-36, the applicant proposes to fill 0.64 acres of emergent wetland in an isolated drainage ditch.
- At the southerly end of that runway, the applicant proposes to fill 2.20 acres of wetland including 1.61 acres of emergent wetland which meets the definition of a Wetland of Special Significance described in the Department's Wetlands and Waterbodies Protection Rules (Rules) Chapter 310(4)(A)(5).

- At the easterly end of Runway 11-29, the applicant proposes to fill 4.89 acres of emergent and scrub shrub wetland to implement the Wildlife Hazard Management Plan described below.

Chapter 310 of the Rules requires the applicant to meet the following standards:

A. Avoidance. No activity may be permitted if there is a practicable alternative to the project that would be less damaging to the environment. Each application for a Tier III Wetland Alteration Permit must provide an analysis of alternatives in order to demonstrate that a practicable alternative does not exist. The applicant submitted an alternative analysis for the proposed project with consideration given to each area of proposed impact:

The Wildlife Hazard Management Plan involves filling 4.89 acres of emergent and scrub-shrub wetland at the easterly end of Runway 11-29 to eliminate a community of wetland plants dominated by shrubs and a stand of *phragmites*, both of which attract flocks of birds considered potentially hazardous to aircraft operations. The alternative of flight schedule modification to restrict take offs and landings during sunrise and sunset periods when birds are most active was eliminated as being impractical for commercial traffic at the jetport. A vegetation management only approach was eliminated based on input from the US Department of Agriculture Wildlife Services staff who stated that remaining standing fresh water would also constitute a wildlife attractant. Other alternatives considered were exclusion techniques such as grid wires, repellents and harassment and wildlife removal. While the grid wires were selected for use over the detention pond near the runway to discourage larger waterfowl and wading birds, starlings and blackbirds would not be deterred by wire grids. Based on experience at other airport facilities and the wetland's proximity to the Fore River, poisons and chemical repellents were eliminated from consideration.

Three terminal area expansion alternatives were considered. Each was constrained by the location of the existing facilities including the traffic control tower, rescue and firefighting station, and the general aviation facilities located north of the existing terminal.

Alternatives to the taxiway improvements proposed to reduce the number of crossings of Runway 18-36 by air cargo and general aviation aircraft were limited by the location of the existing runway.

Two alternatives were considered for the proposed improvements to Runway 18-36 which are focused on meeting FAA runway safety area design standards and to lengthen the runway to more fully serve as a backup to Runway 11-29. After a site visit by Department staff to review the potential for reduction of wetland impacts, the applicant relocated the perimeter road location from the outside to the inside the object free area, resulting in a reduction of wetland impact from 3.15 acres to 2.18 acres.

B. Minimal Alteration. The amount of wetland to be altered must be kept to the minimum amount necessary for meeting the overall purpose of the project. Federal airport runway and safety area requirements dictated the footprint area of the proposed improvements of those features.

C. Compensation. Compensation is required to achieve the goal of no net loss of wetland functions and values. The applicant completed a functional assessment in which the wetlands to be impacted by the proposed project were rated on 13 functions and values commonly attributed to wetlands. The analysis concluded that sediment/toxicant retention and wildlife habitat were the principal wetland functions and values that would be lost by the construction of the project. After reviewing an inventory of over 50 potential compensation sites in the greater Portland area, the applicant, in conjunction with

state and federal reviewing agencies, selected two off-site locations that had been utilized previously as wetland compensation sites. In order to compensate for the project's lost functions and values, the applicant proposes to restore, enhance and preserve existing wetlands at the Maine Wetlands Bank in Westbrook and to create wetlands and preserve wetlands and uplands at the Larrabee Farms compensation site in Scarborough.

The Maine Wetlands Bank, located near the intersection of Spring Street and County Road in Westbrook, has been utilized as a wetland compensation site for a number of previous wetland fill projects including several located at the Portland Jetport. The applicant proposes to restore 1.7 acres of wetland by removing fill, enhancing 2.3 acres of wetland, and preserving four additional acres of wetland and upland in the adjacent Glassworld Industrial Park. Details of the proposal are shown in a revision of application Attachment 13 prepared by TRC Companies Inc. and dated March 2009. The applicant submitted acceptable draft deed restriction language for the 10 acre preserved parcel consisting of Lots 14-17 and a portion of an adjacent stormwater management basin in the Glassworld Industrial Park. The applicant must submit a copy of the executed deed restriction to the BLWQ within 90 days of the start of project construction. Implementation of this plan will conclude wetland compensation opportunities at Maine Wetlands Bank in Westbrook and will encumber the last developable lots at the Glassworld Industrial Park.

The Larrabee Farms Wetland Mitigation Project is located near the corner of Route 114 and Beech Ridge Road, approximately 4 miles from the project site. The Larrabee site, approximately 330 acres in total size, consists of forested and cleared uplands and wetlands, former agriculture fields, sand and gravel extraction areas. It is bordered on the southerly side by the Nonesuch River and its associated floodplain. Previous wetland compensation efforts at the site resulted in the creation of approximately 10 acres of wetland and 100 acres of preserved wetland and upland. The Larrabee Farms portion of the applicant's wetland mitigation plan was developed by Boyle Associates and is detailed in a March 11, 2009 revision to Attachment 13 of the application. The plan includes creation of 2.5 acres of scrub-shrub wetland, creation of one acre of emergent wetland, and preservation of 38 acres of existing wetland and 58.5 acres of existing upland. The land to be preserved abuts other lands previously preserved as compensation for the Gorham Bypass and the Gateway at Scarborough projects. The land to be preserved includes 1,400 feet of intermittent stream channel and 4,500 linear feet (tie distance) of frontage on the Nonesuch River. The intermittent stream channel and a narrow strip of woodland separate the proposed wetland creation area from the existing 16-acre Gorham Bypass wetland creation site to the east.

The applicant proposes to begin implementing the compensation plan no less than 90 days after the start of project construction. Compensation shall be completed within 90 days of the completion of project's wetland impacts. A minimum of 85% of the compensation area must successfully replace the altered wetlands' functions after a period of three years. If the wetland goals are not achieved, or if evidence exists that the compensation site is becoming less effective, the Department may require additional monitoring and corrective action. The applicant proposes to submit reports of annual post-construction monitoring and maintenance for five consecutive years and after the 7th and 10th full growing seasons in accordance with the monitoring plan described in Sections M-P of the revised Attachment 13 of the application. The monitoring and maintenance plans are designed in accordance with the requirements of Chapter 310(6)(D) and (E).

The applicant submitted a draft conservation easement for the Larrabee Farms wetland preservation areas. The draft language meets the requirements of Department Rules, Chapter 310(6)(F). The

applicant must submit a copy of the executed deed restriction to the BLWQ within 90 days of the start of project construction.

The proposed wetland mitigation plans for the Maine Wetlands Bank/Glassworld Industrial Park and for the Larrabee Farms Wetland Mitigation site will adequately compensate for the wetland functions and values lost by construction of the proposed airfield and terminal area improvements described above. No additional future wetland mitigation credit is granted, assumed or implied with this approval.

The Department finds that the applicant has avoided and minimized wetland impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project provided that the applicant carries out the wetland mitigation plan detailed above and submits copies of the final preservation area deed restrictions to the BLWQ for review within 90 days of the start of project construction.

16. ALL OTHER:

All other Findings of Fact, Conclusions and Conditions remain as approved in Department Order #L-13760-18-A-N, and subsequent orders.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act:

- A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses.
- B. The proposed activity will not cause unreasonable erosion of soil or sediment.
- C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life provided that the applicant complies with the requirements of the ITP and completes the wetland compensation plan as described in Finding 15.
- E. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- F. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.
- G. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- H. The proposed activity is not on or adjacent to a sand dune.
- I. The proposed activity is not on an outstanding river segment as noted in 38 M.R.S.A. Section 480-P.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 481 et seq.:

- A. The applicant has provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards.
- B. The applicant has made adequate provision for fitting the development harmoniously into the existing natural environment and the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities provided any rock crusher used on the site is licensed by the Department's Bureau of Air Quality and is being operated in accordance with that license.
- C. The proposed development will be built on soil types which are suitable to the nature of the undertaking and will not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil provided that the applicant submits a site-specific blast plan to the BLWQ for review and approval prior to conducting any blasting on the site.
- D. The proposed development meets the standards for storm water management in Section 420-D and the standard for erosion and sedimentation control in Section 420-C provided that storm grit materials removed from stormwater control structures during maintenance activities are disposed of in compliance with the Department's Solid Waste Management Rules, and provided that the applicant retains a third party inspector, holds a preconstruction meeting, and the construction inspections of the stormwater management structures are completed as outlined in Finding 9.
- E. The proposed development will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur provided that the applicant submits a copy of the updated SPCC plan to the BLWQ for review by December, 31, 2010.
- F. The applicant has made adequate provision of utilities, including water supplies, sewerage facilities, solid waste disposal and roadways required for the development and the development will not have an unreasonable adverse effect on the existing or proposed utilities and roadways in the municipality or area served by those services provided that discharges from the proposed deicing facility are restricted as outlined in Finding 13.
- G. The activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure

THEREFORE, the Department APPROVES the application of the CITY OF PORTLAND to construct runway and terminal area improvements and the Wildlife Hazard Management plan as described above , SUBJECT TO THE FOLLOWING CONDITIONS and all applicable standards and regulations:

- 1. The Standard Conditions of Approval, a copy attached.
- 2. In addition to any specific erosion control measures described in this or previous orders, the applicant shall take all necessary actions to ensure that its activities or those of its agents do not result in noticeable erosion of soils or fugitive dust emissions on the site during the construction and operation of the project covered by this approval.

3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.
4. The applicant or other responsible party shall, within three months of the expiration of each five-year interval from the date of this Order, submit a report certifying that the items listed in Department Rules, Chapter 500, Appendix B(4) have been completed in accordance with the approved plans.
5. The applicant shall retain the services of a third party inspector in accordance with the Special Condition for Third Party Inspection Program, which is attached to this Order
6. Storm sewer grit and sediment materials removed from stormwater control structures during maintenance activities shall be disposed of in compliance with the Department's Solid Waste Management Rules.
7. Prior the start of construction, the applicant shall conduct a pre-construction meeting. This meeting shall be attended by the applicant's representative, Department staff, the design engineer, the contractor and the third-party inspector.
8. The applicant shall conduct construction inspections of the stormwater management system as outlined in Finding 9 and upon completion of the installation, the applicant shall notify the Department in writing within 30 days to state that the system has been installed in accordance with the approved plans.
9. The applicant shall execute and record all wetland mitigation area deed restrictions within 90 days of the date of the start of project construction and shall submit a copy of the recorded deed restrictions to the BLWQ within 60 days of the recordings.
10. The applicant shall comply with all requirements of the ITP as described in Finding 6.
11. The applicant shall limit wastewater discharge from the proposed deicing facility to 20,000 gallons per day of distillate with a Biological Oxygen Demand not to exceed 170 pounds per day unless an alternative discharge plan is submitted to the BLQW for prior review and approval.
12. Prior to conducting blasting at the site, a site-specific Blast Plan shall be submitted to the BLWQ for review and approval.
13. If a rock crusher is being utilized on site, the applicant shall insure that the crusher is licensed by the Department's Bureau of Air Quality and is being operated in accordance with that license.
14. The applicant shall submit an updated SPCC plan incorporating the revised Stormwater Pollution and Prevention Plan to the BLWQ for review by December, 31, 2010.

15. All other Findings of Fact, Conclusions and Conditions remain as approved in Department Order #L-13760-18-A-N, and subsequent orders, and are incorporated herein.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES...

[wb/l#13760anaaon/ats#69043&69044](#)

Department of Environmental Protection
SITE LOCATION OF DEVELOPMENT (SITE)
STANDARD CONDITIONS

**STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL
IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL.**

1. This approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from the plans, proposals and supporting documents is subject to the review and approval of the Board prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited, without prior approval by the Board of Environmental Protection, and the applicant shall include deed restrictions to this effect.
2. The applicant shall secure and comply with all applicable Federal, State and local licenses, permits, authorizations, conditions, agreements, and orders, prior to or during construction and operation as appropriate.
3. The applicant shall submit all reports and information requested by the Board or Department demonstrating that the applicant has complied or will comply with all conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
4. Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.
5. Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.
6. If the construction or operation of the activity is not begun within two years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. Reapplications for approval shall state the reasons why the development was not begun within two years from the granting of the initial approval and the reasons why the applicant will be able to begin the activity within two years from the granting of a new approval, if granted. Reapplications for approval may include information submitted in the initial application by reference.
7. If the approved development is not completed within five years from the date of the granting of approval, the Board may reexamine its approval and impose additional terms or conditions or prescribe other necessary corrective action to respond to significant changes in circumstances which may have occurred during the five-year period.
8. A copy of this approval must be included in or attached to all contract bid specifications for the development.
9. Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.

(2/81)/Revised November 1, 1979



NATURAL RESOURCE PROTECTION ACT (NRPA) STANDARD CONDITIONS

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCE PROTECTION ACT, TITLE 38, M.R.S.A. SECTION 480-A ET.SEQ. UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

- A. **Approval of Variations From Plans.** The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.
- B. **Compliance With All Applicable Laws.** The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. **Erosion Control.** The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soils on the site during the construction and operation of the project covered by this Approval.
- D. **Compliance With Conditions.** Should the project be found, at any time, not to be in compliance with any of the Conditions of this Approval, or should the applicant construct or operate this development in any way other the specified in the Application or Supporting Documents, as modified by the Conditions of this Approval, then the terms of this Approval shall be considered to have been violated.
- E. **Initiation of Activity Within Two Years.** If construction or operation of the activity is not begun within two years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits shall state the reasons why the applicant will be able to begin the activity within two years form the granting of a new permit, if so granted. Reapplications for permits may include information submitted in the initial application by reference.
- F. **Reexamination After Five Years.** If the approved activity is not completed within five years from the date of the granting of a permit, the Board may reexamine its permit approval and impose additional terms or conditions to respond to significant changes in circumstances which may have occurred during the five-year period.
- G. **No Construction Equipment Below High Water.** No construction equipment used in the undertaking of an approved activity is allowed below the mean high water line unless otherwise specified by this permit.
- H. **Permit Included In Contract Bids.** A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.
- I. **Permit Shown To Contractor.** Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

Revised (4/92)

DEP

LW0428

STORMWATER MANAGEMENT LAW STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL

Standard conditions of approval. Unless otherwise specifically stated in the approval, a department approval is subject to the following standard conditions pursuant to Chapter 500 Stormwater Management Law.

- (1) Approval of variations from plans. The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents must be reviewed and approved by the department prior to implementation. Any variation undertaken without approval of the department is in violation of 38 M.R.S.A. § 420-D(8) and is subject to penalties under 38 M.R.S.A. § 349.
- (2) Compliance with all terms and conditions of approval. The applicant shall submit all reports and information requested by the department demonstrating that the applicant has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
- (3) Advertising. Advertising relating to matters included in this application may not refer to this approval unless it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.
- (4) Transfer of project. Unless otherwise provided in this approval, the applicant may not sell, lease, assign, or otherwise transfer the project or any portion thereof without written approval by the department where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval may only be granted if the applicant or transferee demonstrates to the department that the transferee agrees to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant. Approval of a transfer of the permit must be applied for no later than two weeks after any transfer of property subject to the license.
- (5) Initiation of project within two years. If the construction or operation of the activity is not begun within two years, this approval shall lapse and the applicant shall reapply to the department for a new approval. The applicant may not begin construction or operation of the project until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference.
- (6) Reexamination after five years. If the project is not completed within five years from the date of the granting of approval, the department may reexamine its approval and impose additional terms or conditions or prescribe other necessary corrective action to respond to significant changes in circumstances or requirements which may have occurred during the five-year period.
- (7) Certification. Contracts must specify that "all work is to comply with the conditions of the Stormwater Permit." Work done by a contractor or subcontractor pursuant to this approval may not

begin before the contractor and any subcontractors have been shown a copy of this approval with the conditions by the developer, and the owner and each contractor and subcontractor has certified, on a form provided by the department, that the approval and conditions have been received and read, and that the work will be carried out in accordance with the approval and conditions. Completed certification forms must be forwarded to the department.

- (8) Maintenance. The components of the stormwater management system must be adequately maintained to ensure that the system operates as designed, and as approved by the department.
- (9) Recertification requirement. Within three months of the expiration of each five-year interval from the date of issuance of the permit, the permittee shall certify the following to the department.
 - (a) All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
 - (b) All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the facilities.
 - (c) The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the department, and the maintenance log is being maintained

November 16, 2005

Special Condition
for
Third Party Inspection Program

THIRD-PARTY INSPECTION PROGRAM

1.0 THE PURPOSE OF THE THIRD-PARTY INSPECTION

As a condition of this permit, the Maine Department of Environmental Protection (MDEP) requires the permit applicant to retain the services of a third-party inspector to monitor compliance with MDEP permit conditions during construction. The objectives of this condition are as follows:

- 1) to ensure that all construction and stabilization activities comply with the permit conditions and the MDEP-approved drawings and specifications,
- 2) to ensure that field decisions regarding erosion control implementation, stormwater system installation, and natural resource protection are based on sound engineering and environmental considerations, and
- 3) to ensure communication between the contractor and MDEP regarding any changes to the development's erosion control plan, stormwater management plan, or final stabilization plan.

This document establishes the inspection program and outlines the responsibilities of the permit applicant, the MDEP, and the inspector.

2.0 SELECTING THE INSPECTOR

At least 30 days prior to starting any construction activity on the site, the applicant will submit the names of at least two inspector candidates to the MDEP. Each candidate must meet the minimum qualifications listed under section 3.0. The candidates may not be employees, partners, or contracted consultants involved with the permitting of the project or otherwise employed by the same company or agency except that the MDEP may accept subcontractors who worked for the project's primary consultant on some aspect of the project such as, but not limited to, completing wetland delineations, identifying significant wildlife habitats, or conducting geotechnical investigations, but who were not directly employed by the applicant, as Third Party inspectors on a case by case basis. The MDEP will have 15 days from receiving the names to select one of the candidates as the inspector or to reject both candidates. If the MDEP rejects both candidates, then the MDEP shall state the particular reasons for the rejections. In this case, the applicant may either dispute the rejection to the Director of the Bureau of Land and Water Quality or start the selection process over by nominating two, new candidates.

3.0 THE INSPECTOR'S QUALIFICATIONS

Each inspector candidate nominated by the applicant shall have the following minimum qualifications:

- 1) a degree in an environmental science or civil engineering, or other demonstrated expertise,
- 2) a practical knowledge of erosion control practices and stormwater hydrology,
- 3) experience in management or supervision on large construction projects,
- 4) the ability to understand and articulate permit conditions to contractors concerning erosion control or stormwater management,
- 5) the ability to clearly document activities being inspected,
- 6) appropriate facilities and, if necessary, support staff to carry out the duties and responsibilities set forth in section 6.0 in a timely manner, and
- 7) no ownership or financial interest in the development other than that created by being retained as the third-party inspector.

4.0 INITIATING THE INSPECTOR'S SERVICES

The applicant will not formally and finally engage for service any inspector under this permit condition prior to MDEP approval or waiver by omission under section 2.0. No clearing, grubbing, grading, filling, stockpiling, or other construction activity will take place on the development site until the applicant retains the MDEP-approved inspector for service.

5.0 TERMINATING THE INSPECTOR'S SERVICES

The applicant will not terminate the services of the MDEP-approved inspector at any time between commencing construction and completing final site stabilization without first getting written approval to do so from the MDEP.

6.0 THE INSPECTOR'S DUTIES AND RESPONSIBILITIES

The inspector's work shall consist of the duties and responsibilities outlined below.

- 1) Prior to construction, the inspector will become thoroughly familiar with the terms and conditions of the state-issued site permit, natural resources protection permit, or both.
- 2) Prior to construction, the inspector will become thoroughly familiar with the proposed construction schedule, including the timing for installing and removing erosion controls, the timing for constructing and stabilizing any basins or ponds, and the deadlines for completing stabilization of disturbed soils.
- 3) Prior to construction, the inspector will become thoroughly familiar with the project plans and specifications, including those for building detention basins, those for installing the erosion control measures to be used on the site, and those for temporarily or permanently stabilizing disturbed soils in a timely manner.
- 4) During construction, the inspector will monitor the contractor's installation and maintenance of the erosion control measures called for in the state permit(s) and any additional measures the inspector believes are necessary to prevent sediment discharge to off-site properties or natural resources. This direction will be based on the approved erosion control plan, field conditions at the time of construction, and the natural resources potentially impacted by construction activities.
- 5) During construction, the inspector will monitor the contractor's construction of the stormwater system, including the construction and stabilization of ditches, culverts, detention basins, water quality treatment measures, and storm sewers.
- 6) During construction, the inspector will monitor the contractor's installation of any stream or wetland crossings.
- 7) During construction, the inspector will monitor the contractor's final stabilization of the project site.
- 8) During construction, the inspector will keep logs recording any rain storms at the site, the contractor's activities on the site, discussions with the contractor(s), and possible violations of the permit conditions.
- 9) During construction, the inspector will inspect the project site at least once a week and before and after any significant rain event. The inspector will photograph all protected natural resources both before and after construction and will photograph all areas under construction. All photographs will be identified with, at a minimum the date the photo was taken, the location and the name of the individual taking the photograph.
Note: the frequency of these inspections as contained in this condition may be varied to best address particular project needs.
- 10) During construction, the inspector will prepare and submit weekly (*or other frequency*) inspection reports to the MDEP.
- 11) During construction, the inspector will notify the designated person at the MDEP immediately of any sediment-laden discharges to a protected natural resource or other significant issues such as the improper

construction of a stormwater control structure or the use of construction plans not approved by the MDEP.

7.0 INSPECTION REPORTS

The inspector will submit weekly written reports (*or at another designated frequency*), including photographs of areas that are under construction, on a form provided by the Department to the designated person at the MDEP. Each report will be due at the MDEP by the Friday (*or other designated day*) following the inspection week (Monday through Sunday).

The weekly report will summarize construction activities and events on the site for the previous week as outlined below.

- 1) The report will state the name of the development, its permit number(s), and the start and end dates for the inspection week (Monday through Sunday).
- 2) The report will state the date(s) and time(s) when the inspector was on the site making inspections.
- 3) The report will state the date(s) and approximate duration(s) of any rainfall events on the site for the week.
- 4) The report will identify and describe any erosion problems that resulted in sediment leaving the property or sediment being discharged into a wetland, brook, stream, river, lake, or public storm sewer system. The report will describe the contractor's actions to repair any damage to other properties or natural resources, actions to eliminate the erosion source, and actions to prevent future sediment discharges from the area.
- 5) The report will list the buildings, roads, parking lots, detention basins, stream crossings or other features open to construction for the week, including those features or areas actively worked and those left unworked (dormant).
- 6) For each area open to construction, the report will list the date of initial soil disturbance for the area.
- 7) For each area open to construction, the report will note which areas were actively worked that week and which were left dormant for the week. For those areas actively worked, the report will briefly state the work performed in the area that week and the progress toward final stabilization of the area -- e.g. "grubbing in progress", "grubbing complete", "rough grading in progress", "rough grading complete", "finish grading in progress", "finish grading complete", "permanent seeding completed", "area fully stable and temporary erosion controls removed", etc.
- 8) For each area open to construction, the report will list the erosion and sedimentation control measures installed, maintained, or removed during the week.
- 9) For each erosion control measure in-place, the report will note the condition of the measure and any maintenance performed to bring it to standard.

Third Party Inspection Form

This report is prepared by a Third Party Inspector to meet the requirements of the Third Party Inspector Condition attached as a Special Condition to the Department Order that was issued for the project identified below. The information in this report/form is not intended to serve as a determination of whether the project is in compliance with the Department permit or other applicable Department laws and rules. Only Department staff may make that determination.

TO: <i>PM, Maine DEP (@maine.gov)</i>	FROM:
PROJECT NAME/ LOCATION:	DEP #:
DATE OF INSPECTION:	DATE OF REPORT:
WEATHER:	CONDITIONS:

SITE CHARACTERISTICS:

# ACRES OPEN:	# ACRES ACTIVE:	# ACRES INACTIVE:
LOCATION OF OPEN LAND:	LOCATION OF ACTIVE LAND:	LOCATION OF INACTIVE LAND:
OPEN SINCE:	OPEN SINCE:	OPEN SINCE:

PROGRESS OF WORK:

INSPECTION OF:	Satisfactory	Minor Deviation (corrective action required)	Unsatisfactory (include photos)
STORMWATER CONTROL (VEGETATIVE & STRUCTURAL BMP'S)			
EROSION & SEDIMENTATION CONTROL (TEMPORARY & PERMANENT BMP'S)			
OTHER: (PERMIT CONDITIONS, ENGINEERING DESIGN, ETC.)			

COMMENTS/CORRECTIVE ACTIONS TAKEN (attach additional sheets as necessary):

Photos (must be labeled with date, photographer and location):

Cc:		
<i>Original and all copies were sent by email only.</i>		



DEP INFORMATION SHEET

Appealing a Commissioner's Licensing Decision

Dated: May 2004

Contact: (207) 287-2811

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner: (1) in an administrative process before the Board of Environmental Protection (Board); or (2) in a judicial process before Maine's Superior Court. This INFORMATION SHEET, in conjunction with consulting statutory and regulatory provisions referred to herein, can help aggrieved persons with understanding their rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

DEP's General Laws, 38 M.R.S.A. § 341-D(4), and its Rules Concerning the Processing of Applications and Other Administrative Matters (Chapter 2), 06-096 CMR 2.24 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written notice of appeal within 30 calendar days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner and the applicant a copy of the documents. All the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

The materials constituting an appeal must contain the following information at the time submitted:

1. *Aggrieved Status.* Standing to maintain an appeal requires the appellant to show they are particularly injured by the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.

5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.

6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.

7. *New or additional evidence to be offered.* The Board may allow new or additional evidence as part of an appeal only when the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or show that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2, Section 24(B)(5)

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license file is public information made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials.

There is a charge for copies or copying services.

2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.

3. *The filing of an appeal does not operate as a stay to any decision.* An applicant proceeding with a project pending the outcome of an appeal runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge initiation of the appeals procedure, including the name of the DEP project manager assigned to the specific appeal, within 15 days of receiving a timely filing. The notice of appeal, all materials accepted by the Board Chair as additional evidence, and any materials submitted in response to the appeal will be sent to Board members along with a briefing and recommendation from DEP staff. Parties filing appeals and interested persons are notified in advance of the final date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision. The Board will notify parties to an appeal and interested persons of its decision.

II APPEALS TO MAINE SUPERIOR COURT

Maine law allows aggrieved persons to appeal final Commissioner licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2.26; 5 M.R.S.A. § 11001; & MRCivP 80C. Parties to the licensing decision must file a petition for review within 30 days after receipt of notice of the Commissioner's written decision. A petition for review by any other person aggrieved must be filed within 40-days from the date the written decision is rendered. The laws cited in this paragraph and other legal procedures govern the contents and processing of a Superior Court appeal.

ADDITIONAL INFORMATION: If you have questions or need additional information on the appeal process, contact the DEP's Director of Procedures and Enforcement at (207) 287-2811.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.

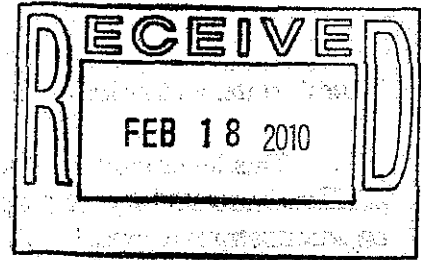


DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

REPLY TO
ATTENTION OF

Regulatory Division
CENAE-R-PEC
Permit Number: NAE-2008-00053

FEB 16 2010



Arthur Sewall
City of Portland
Portland International Jetport
1001 Westbrook Street
Portland, Maine 04102

Dear Mr. Sewall:

Enclosed are two copies of a Department of the Army permit authorizing the work described therein. Your signature is necessary to execute this permit. The authorized work cannot start until we receive a complete, signed copy of the permit. If the conditions are acceptable, please sign both copies and return one signed copy of the entire permit to "Regulatory Division" at the address above. No fee is required.

You are also required to complete and return these enclosed forms to this office:

- a. Work Start Notification Form at least two weeks before the work start date.
- b. Preliminary Jurisdictional Determination Form to be submitted along with your signed copy of the permit.
- c. Mitigation Work Start Notification Form at least two weeks before the mitigation work start date.
- d. Compliance Certification Form within one month following the completion of the authorized work.

This permit is a limited authorization containing a specific set of conditions. Please read the permit thoroughly to familiarize yourself with those conditions. If a contractor does the work for you, both you and the contractor are responsible for ensuring that the work is done in compliance with the permit's terms and conditions, as any violations could result in civil or criminal penalties. If you need to change the plans or construction methods (i.e., for work in our jurisdiction), please contact us immediately to discuss modifying your permit prior to undertaking these changes.

Our verification of this project's wetland delineation under the January 1987 Corps of Engineers Wetlands Delineation Manual is valid for a period of five years from the date of this letter unless new information warrants revision of the determination before the expiration date.

Please note that the Department of the Army permit process does not supersede any other federal, state, and/or local agency's jurisdiction.


This letter contains preliminary jurisdictional determination for your subject sites and a ~~proffered permit~~ for your proposed project. If you object to the permit decision, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. A combined Notification of Appeal Process ("NAP") and Request for Appeal ("RFA") form and flow chart explaining the appeals process and your options are enclosed with this letter. If you desire to appeal the permit decision, you must submit a completed RFA form along with any supporting or clarifying information to Michael G. Vissichelli, Administrative Appeals Review Officer, North Atlantic Division, Corps of Engineers, North Atlantic Fort Hamilton Military Community, Bldg. 301, General Lee Avenue, Brooklyn, NY 11252-6700 Telephone: (718) 765-7163, E-mail: Michael.G.Vissichelli@usace.army.mil

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR, Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at <http://per2.nwp.usace.army.mil/survey.html>

If you have any questions regarding this correspondence, please contact Jay Clement at 207-623-8367 at our Manchester, Maine Project Office.

Sincerely,


Jennifer L. McCarthy
Chief, Regulatory Division

Enclosures

NAAO-RFA Form (attached to this letter)
NAAO-RFA Form, Appendix C
JD Form

Copy furnished:
Dwight Anderson
DeLuca-Hoffman Associates, Inc.
778 Main Street, Suite 8
South Portland, Maine 04106

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: City of Portland/Portland International Jetport	File Number: NAE-2008-00053	Date:
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
X	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
	APPROVED JURISDICTIONAL DETERMINATION	D
X	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/cccw/reg> or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the District Engineer for final authorization in care of "Regulatory Division." If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the District Engineer, in care of the Chief, Regulatory Division, as specified in the last paragraph of the coverletter. Your objections must be received within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the District Engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the District Engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the District Engineer for final authorization in care of "Regulatory Division." If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the Division Engineer in care of: Michael G. Vissichelli, Administrative Appeals Review Officer, North Atlantic Division, Corps of Engineers, North Atlantic Fort Hamilton Military Community, Bldg. 301, General Lee Avenue, Brooklyn, NY 11252-6700 Telephone: (718) 765-7163, E-mail: Michael.G.Vissichelli@usace.army.mil. The Division Engineer must receive this form within 60 days of the date of this notice.

- **C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the Division Engineer in care of: Michael G. Vissichelli, Administrative Appeals Review Officer, North Atlantic Division, Corps of Engineers, North Atlantic Fort Hamilton Military Community, Bldg. 301, General Lee Avenue, Brooklyn, NY 11252-6700 Telephone: (718) 765-7163, E-mail: Michael.G.Vissichelli@usace.army.mil The Division Engineer must receive this form within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the Division Engineer in care of: Michael G. Vissichelli, Administrative Appeals Review Officer, North Atlantic Division, Corps of Engineers, North Atlantic Fort Hamilton Military Community, Bldg. 301, General Lee Avenue, Brooklyn, NY 11252-6700 Telephone: (718) 765-7163, E-mail: Michael.G.Vissichelli@usace.army.mil The Division Engineer must receive this form within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district at the address below for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

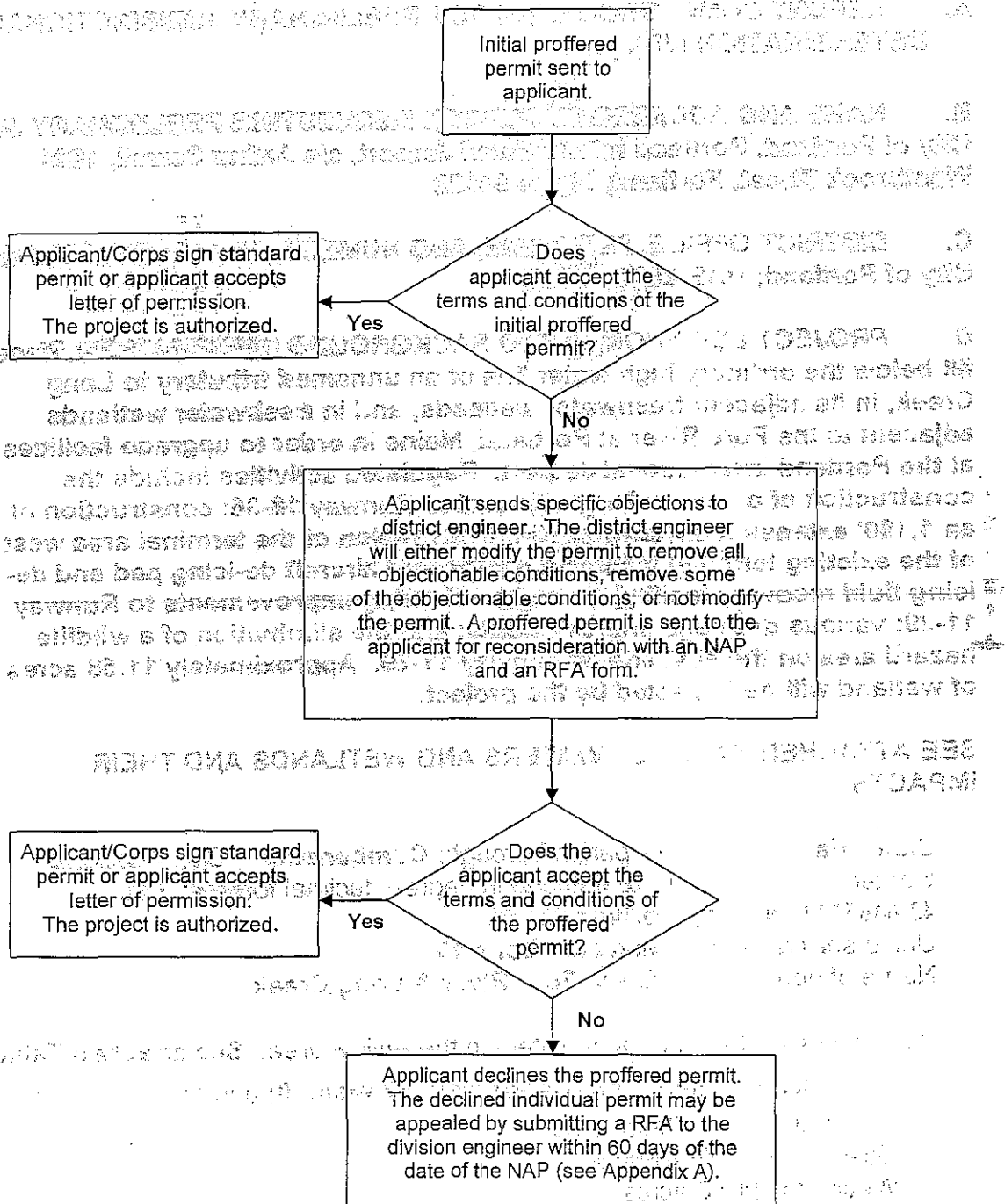
If you have questions regarding this decision and/or the appeal process you may contact Ms. Ruth Ladd at:

Chief, Policy Analysis/Technical Support Branch
Corps of Engineers
696 Virginia Road
Concord, MA 01742 or by calling (978) 318-8818

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.	Date:	Telephone number:
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Applicant Options with Initial/Proffered Permit



PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): 3/18/09
- B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:
City of Portland, Portland International Jetport, c/o Arthur Sewall, 1001
Westbrook Street, Portland, Maine 04102
- C. DISTRICT OFFICE, FILE NAME, AND NUMBER: New England District;
City of Portland; NAE-2008-00053
- D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: Place
fill below the ordinary high water line of an unnamed tributary to Long
Creek, in its adjacent freshwater wetlands, and in freshwater wetlands
adjacent to the Fore River at Portland, Maine in order to upgrade facilities
at the Portland International Jetport. Regulated activities include the
construction of a new taxiway adjacent to Runway 18-36; construction of
an 1,100' extension of Runway 18-36; expansion of the terminal area west
of the existing terminal facility; a designated aircraft de-icing pad and de-
icing fluid recovery facility; a number of safety improvements to Runway
11-29; various drainage improvements; and the elimination of a wildlife
hazard area on the east end of Runway 11-29. Approximately 11.58 acres
of wetland will be impacted by the project.

SEE ATTACHED TABLE OF WATERS AND WETLANDS AND THEIR IMPACTS

State: **Maine** County/parish/borough: **Cumberland** City: **Portland**
Center coordinates of site (lat/long in degree decimal format): Lat.
43.6465774° N, Long. **70.3098803° W**.
Universal Transverse Mercator: **Zone 19**
Name of nearest waterbody: **Fore River & Long Creek**

Identify (estimate) amount of waters in the review area: **See attached Table**

Non-wetland waters: **1000** linear feet: **2-3** width (ft) and/or acres.

Cowardin Class: **Palustrine**

Stream Flow: **Perennial**

Wetlands: **11.58** acres.

Cowardin Class: **Palustrine Forested, Scrub-Shrub, Emergent & Open
Water**

Name of any water bodies on the site that have been identified as Section 10 waters: **Fore River & Long Creek**

Tidal: **Same**

Non-Tidal: **Unnamed tributary to Long Creek**

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: **Multiple; earliest - 1999**

☒ Field Determination. Date(s): **Multiple; earliest - 1999**

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site.

Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization; and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement.

action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable. This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply

- checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: **Contained in administrative record.**

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☒ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps:

☒ Corps navigable waters' study: **Portland Harbor.**

☐ U.S. Geological Survey Hydrologic Atlas:

☐ USGS NHD data.

☒ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: **1:24,000: Portland West.**

☒ USDA Natural Resources Conservation Service Soil Survey. Citation **Cumberland County**

☒ National wetlands inventory map(s). Cite name: **Portland West**

☐ State/Local wetland inventory map(s):

☒ FEMA/FIRM maps: **Various as Mapped in the MEGIS database:**

☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): **MEGIS Ortho Rectified mapping of various dates; historic photos provided by applicant/agent.**

or ☒ Other (Name & Date): **Ground photos provided by applicant/agent.**

☒ Previous determination(s). File no. and date of response letter: **199902074.**

☐ Other information (please specify):

Table 1
Summary of Wetland Characteristics and Impacts, Portland International Jetport

Wetland	Photo	Delineation	Wetland Type ¹	Wetland Function/Value(s) ²	Impact Area/Type
A	1	October 1997 – Smart Associates ³	E2EM1 (Fore River)	FFA, FSH, PE, SS, WLH, R, A	No Impact
D	8	" " "	Mowed (airfield) PEM2	Surface water conveyance	No Impact
E		" " "	Mowed (airfield) PEM2 (isolated)		No Impact
F		" " "	Mowed (airfield) PEM2 (isolated)	ESH ?	No Impact
H	9	" " "	Drainage ditch PEM1	Surface water conveyance	0.64 acre PEM
L	2	" " "	PEM1 (wildlife hazard) / PSS1	WLH, ESH (PSS portion)	2.58 acres PEM / 2.31 acres PSS
N		" " "	PSS1	Surface water conveyance	No Impact
S	7	June 2007 – TRC	Mowed PEM2	WLH	0.54 acre PEM
T (B)		October 2006 – Smart Associates ⁴	PEM1	STPR, WLH	No Impact
V (D)	3	" " "	PEM1	STPR, NRRT, WLH	1.61 acres PEM
W (E)	4	" " "	POWh	STPR, NRRT, WLH, A	0.05 acre POW
X (F)	5	" " "	PEM1	STPR, NRRT, WLH, A	No Impact
Y (G)	6	" " "	E2EM1 (Long Creek)	FFA, FSH, PE, SS, WLH, R, A	No Impact
Z (H)		" " "	PSS1 (isolated)	WLH	No Impact
AC	11	October 1991 – Normandeau Associates ⁵	PEM1/PSS1	STPR, WLH	2.98 acres PSS ⁶
AE	10	" " "	PFO1 (now isolated)	WLH	0.87 acre PFO
Total Area of New Impact					11. 58 acres

¹ Wetland types from USFWS *Classification of Wetlands and Deepwater Habitats* (Cowardin et al, 1979) with net acreage of impact:

E2EM – Estuarine, inter-tidal, persistent emergent
0.05 acre – POWh – Palustrine, open water, diked/impounded
4.83 acre – PEM1 – Palustrine, persistent emergent
0.54 acre – PEM2 – Palustrine, non-persistent (mown) emergent
5.29 acre – PSS1 – Palustrine, broad-leaved deciduous scrub shrub
0.87 acre – PFO1 – Palustrine, broad-leaved deciduous forested

² Based on the September 1999 supplement to the New England Division of the Corps *Descriptive Approach* to assessing wetland functions and values described in *The Highway Methodology Workbook*. Functions and values present in wetlands at PWM include: FFA – floodflow alteration; F/SH – fish/shellfish habitat; STPR – sediment, toxicant, pollutant retention; NRRT – nutrient removal/retention/transformation; PE – production export; SS – sediment/shoreline stabilization; WLH – wildlife habitat; R – recreation; A – Visual quality/aesthetics; ESH – threatened/endangered species habitat. Wetland functions and values are described in greater detail in Attachment 12 of the NRPA application.

³ Part of: 1999 *Preferred Facilities Improvement Plan* Applications to the US Army Corps of Engineers and Maine Department of Environmental Protection.

⁴ Described in: 2006 *Wetlands Technical Report for Portland International Jetport* by The Smart Associates (Alphabetic wetland label has been changed from original in () to prevent duplicative labeling of previous delineations).

⁵ Contained in: 1991 *Draft Environmental Assessment/Regulatory Feasibility Study for Airport Access Road, Congress Street Parcel*.

⁶ 2.03 acres of impact to this wetland has been previously impacted and compensated for.



US Army Corps
of Engineers®
New England District

**INDIVIDUAL PERMIT
WORK-START NOTIFICATION FORM**
(Minimum Notice: Two weeks before work begins)

* MAIL TO: U.S. Army Corps of Engineers, New England District *
* Policy Analysis/Technical Support Branch *
* Regulatory Division *
* 696 Virginia Road *
* Concord, Massachusetts 01742-2751 *

Corps of Engineers Permit No. NAE-2008-00053 was issued to City of Portland/Portland International Jetport. This work is located in wetlands adjacent to Long Creek and the Fore River at Portland, Maine. The permit authorized the permittee to fill 11.58 acres of freshwater wetlands in order to implement a number of improvements at the Portland International Jetport.

The people (e.g., contractor) listed below will do the work, and they understand the permit's conditions and limitations.

PLEASE PRINT OR TYPE

Name of Person/Firm: _____

Business Address: _____

Telephone Numbers: () _____ () _____

Proposed Work Dates: Start: _____ Finish: _____

Permittee/Agent Signature: _____ Date: _____

Printed Name: _____ Title: _____

Date Permit Issued: _____ Date Permit Expires: _____

FOR USE BY THE CORPS OF ENGINEERS

PM: Clement Submittals Required: Yes

Inspection Recommendation: Inspection Recommended



US Army Corps
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New England District

INDIVIDUAL PERMIT
WORK-START NOTIFICATION FORM
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The people (e.g., contractor) listed below will do the work, and they understand the permit's conditions and limitations.

PLEASE PRINT OR TYPE

Name of Person/Firm: Sean Milligan / Sargent Corporation
Business Address: 378 Bennoch Road
Old Town, Maine 04468

Telephone Numbers: (207) 944-3602 Cell (207) 827-4435 Office

Proposed Work Dates: Start: February 2010 Finish: February 2011

Permittee/Agent Signature: [Signature] Date: 2/18/10

Printed Name: ARTHUR M. SEWAN Title: DEPUTY AIRPORT DIRECTOR - OPERATION

Date Permit Issued: _____ Date Permit Expires: _____

FOR USE BY THE CORPS OF ENGINEERS

PM: Clement Submittals Required: Yes

Inspection Recommendation: Inspection Recommended



US Army Corps
of Engineers®
New England District

MITIGATION
WORK-START NOTIFICATION FORM
(Minimum Notice: Two weeks before mitigation work begins)

* MAIL TO: U.S. Army Corps of Engineers, New England District *
* Policy Analysis/Technical Support Branch *
* Regulatory Division *
* 696 Virginia Road *
* Concord, Massachusetts 01742-2751 *

Corps of Engineers Permit No. NAE-2008-00053 was issued to City of Portland/Portland International Jetport. This work is located in wetlands adjacent to Long Creek and the Fore River at Portland, Maine. The permit authorized the filling of 11.58 acres of freshwater wetlands in order to implement a number of improvements to the Portland International Jetport.

The permit required compensatory mitigation consisting of wetland restoration, enhancement, and preservation at two pooled mitigation sites known as Maine Wetlands Bank and Larrabee Farms at Westbrook and Scarborough, Maine respectively. A total of 110.05 acres of compensatory mitigation will be provided at the two sites.

Those listed below will perform the mitigation, including monitoring and remediation if required. They understand the requirements of the permit and the mitigation and monitoring plan.

PLEASE PRINT OR TYPE

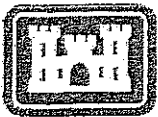
Environmental

Mitigation

Consultant/Scientist Contractor

Name of Person/Firm:	<u>Cole Peters / TRC Solutions</u>	<u>Mike White / White Brothers</u>
Business Address:	<u>400 Southborough Drive</u> <u>South Portland, Maine</u> <u>04106</u>	<u>Division of Lane Construction</u> <u>95 Warren Avenue</u> <u>Westbrook, Maine 04092</u>
Telephone Number:	<u>(207) 879-1930</u>	<u>(207) 854-9173</u>
Proposed Mitigation Work Dates:	Start <u>March 2010</u>	Finish <u>October 2010</u>
Permittee's Signature:	<u>Arthur M. Sewall</u>	Date: <u>2/18/10</u>
Printed Name:	<u>ARTHUR M. SEWALL</u>	Title: <u>Deputy District Director</u> <u>OPERATIONS</u>

Corps PM's: Clement/Minkin



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of Engineers®
New England District

MITIGATION
WORK-START NOTIFICATION FORM
(Minimum Notice: Two weeks before mitigation work begins)

* MAIL TO: U.S. Army Corps of Engineers, New England District *
* Policy Analysis/Technical Support Branch *
* Regulatory Division *
* 696 Virginia Road *
* Concord, Massachusetts 01742-2751 *

Corps of Engineers Permit No. NAE-2008-00053 was issued to City of Portland/Portland International Jetport: This work is located in wetlands adjacent to Long Creek and the Fore River at Portland, Maine. The permit authorized the filling of 11.58 acres of freshwater wetlands in order to implement a number of improvements to the Portland International Jetport.

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Those listed below will perform the mitigation, including monitoring and remediation if required. They understand the requirements of the permit and the mitigation and monitoring plan.

PLEASE PRINT OR TYPE

Environmental

Mitigation

Consultant/Scientist Contractor

Name of Person/Firm: Richard Jordan/Boyle Assoc. Ken Grandin/R.J. Grandin + Sons

Business Address: 1000 Riverside Street 11 Bartlett Road
Portland, Maine 04103 Gorham, Maine 04038

Telephone Number: (207) 671-2760 (207) 854-1147

Proposed Mitigation Work Dates: Start June 2009 * Finish January 2010 *

Permittee's Signature: Arthur M. Sewall Date: 2/18/10

Printed Name: ARTHUR M. SEWALL Title: DEPUTY AIRPORT DIRECTOR

* Part of an existing wetlands bank.

OPERATIONS

Corps PM's: Clement/Minkin



US Army Corps
of Engineers®
New England District

MITIGATION
WORK-START NOTIFICATION FORM

(Minimum Notice: Two weeks before mitigation work begins)

* MAIL TO: U.S. Army Corps of Engineers, New England District *
* Policy Analysis/Technical Support Branch *
* Regulatory Division *
* 696 Virginia Road *
* Concord, Massachusetts 01742-2751 *

Corps of Engineers Permit No. NAE-2008-00053 was issued to City of Portland/Portland International Jetport. This work is located in wetlands adjacent to Long Creek and the Fore River at Portland, Maine. The permit authorized the filling of 11.58 acres of freshwater wetlands in order to implement a number of improvements to the Portland International Jetport.

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Those listed below will perform the mitigation, including monitoring and remediation if required. They understand the requirements of the permit and the mitigation and monitoring plan.

PLEASE PRINT OR TYPE: **Environmental Mitigation**

Consultant/Scientist/Contractor

Name of Person/Firm:

Business Address:

Telephone Number: ()

Proposed Mitigation Work Dates: Start

Finish

Permittee's Signature:

Date:

Printed Name:

Title:

Corps PM's: Clement/Minkin



US Army Corps
of Engineers®
New England District

(Minimum Notice: Permittee must sign and return notification
within one month of the completion of work.)

COMPLIANCE CERTIFICATION FORM

USACE Project Number: NAE-2008-00053

Name of Permittee: City of Portland/Portland International Jetport

Permit Issuance Date: _____

Please sign this certification and return it to the following address upon completion of the activity and any mitigation required by the permit. You must submit this after the mitigation is complete, but not the mitigation monitoring, which requires separate submittals.

* MAIL TO: U.S. Army Corps of Engineers, New England District *
* Policy Analysis/Technical Support Branch, ATTN: Marie Farese *
* Regulatory Division *
* 696 Virginia Road *
* Concord, Massachusetts 01742-2751 *

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit was completed in accordance with the terms and conditions of the above referenced permit, and any required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

Printed Name

Date of Work Completion

() _____

() _____

Telephone Number

Telephone Number

DEPARTMENT OF THE ARMY PERMIT

City of Portland, Portland International Jetport, 1001 Westbrook Street, Portland, Maine

Permittee 04102

Permit No. NAE-2008-00053

Issuing Office New England District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

Fill approximately 11.58 acres of freshwater wetlands adjacent to the Fore River, Long Creek, and a tributary to Long Creek at Portland and South Portland, Maine in order to implement a number of improvements at the Portland International Jetport described as follows:

Regulated activities include the construction of a new taxiway adjacent to Runway 18-36; construction of an 1,100' extension of Runway 18-36; expansion of the terminal area west of the existing terminal facility; a designated aircraft de-icing pad and de-icing fluid recovery facility; a

Project Description Continued on Page 4

Project Location:

In freshwater wetlands adjacent to Long Creek and the Fore River at Portland, Maine

Permit Conditions:

General Conditions:

December 31, 2015

1. The time limit for completing the work authorized ends on December 31, 2015. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. The permittee shall ensure that a copy of this permit is at the work site whenever work is being performed and that all personnel performing work at the site of the work authorized by this permit are fully aware of the terms and conditions of the permit. This permit, including its drawings and any appendices and other attachments, shall be made a part of any and all contracts and sub-contracts for work which affects areas of Corps of Engineers jurisdiction at the site of the work authorized by this permit. This shall be done by including the entire permit in the specifications for work.

Special Conditions continued on Page 4

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

☐ Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

☒ Section 404 of the Clean Water Act (33 U.S.C. 1344).

☐ Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1415).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

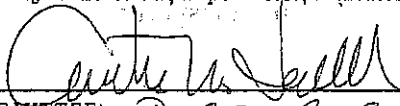
d. Design or construction deficiencies associated with the permitted work.

- e. Damage claims associated with any future modification, suspension, or revocation of this permit.
4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
- a. You fail to comply with the terms and conditions of this permit.
 - b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
 - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.


Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 326.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.


(PERMITTEE) DEPUTY AIRPORT DIRECTOR - 2/18/10
OPERATIONS (DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.


for (DISTRICT ENGINEER) 2/11/10
(DATE)

Philip T. Feir
Colonel, Corps of Engineers
District Commander

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFeree) (DATE)

Project Description Continued from Page 1

number of safety improvements to Runway 11-29; various drainage improvements; and the elimination of a wildlife hazard area on the east end of Runway 11-29.

This work is shown on the attached plans entitled "AIRPORT IMPROVEMENTS" in seventeen (17) sheets dated "12.12.08".

Special Conditions Continued from Page 2

If the permit is issued after the construction specifications but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. If the permit is issued after receipt of bids or quotes, the entire permit shall be included in the contract or sub-contract as a change order. The term "entire permit" includes permit amendments. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions of the entire permit, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps jurisdiction.

2. Adequate sedimentation and erosion control devices, such as geotextile silt fences or other devices capable of filtering the fines involved, shall be installed and properly maintained to minimize impacts during construction. These devices must be removed upon completion of work and stabilization of disturbed areas. The sediment collected by these devices must also be removed and placed upland, in a manner that will prevent its later erosion and transport to a waterway or wetland.

3. The permittee shall implement all terms and conditions contained in the attached water quality certification from the Maine Dept. of Environmental Protection dated "January 27, 2009". Copies of all required submittals shall also be provided to the Corps.

4. No temporary fill (e.g., access roads, cofferdams) may be placed in waters or wetlands unless specifically authorized by this permit. If temporary fill is used, it shall be disposed of at an upland site and suitably contained to prevent its subsequent erosion into a water of the U.S., and the area shall be restored to its original contours (but not higher) and character upon completion of the project. During use, such temporary fill must be stabilized to prevent erosion or, in the case of flowing water (rivers or streams), clean washed stone should be used.

5. The permittee shall complete and return the enclosed Compliance Certification Form within one month following the completion of the authorized work.

6. Except where stated otherwise, reports, drawings, correspondence and any other submittals required by this permit shall be marked with the words "Permit No. NAE-2008-00053" and shall be addressed to "Inspection Section, CENAE-R, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751." Documents which are not marked and addressed in this manner may not reach their intended destination and do not comply with the requirements of this permit.

Special Conditions Continued on Page 5

Special Conditions Continued from Page 4

7. Aquatic resource compensatory mitigation will take place at the Maine Wetlands Bank and Larrabee Farms pooled mitigation sites as shown on the attached plans entitled "Portland International Jetport (PWM), Maine Wetlands Bank, Offsite Wetland Compensation Plan for NRPA Application (#L-013760-18-AN-A) – Attachment 13 and Department of Army Individual Permit" and dated "March 2009"; and "WETLAND MITIGATION PLAN: Larrabee Farms Mitigation Project", dated "March 11, 2009". Mitigation at the Maine Wetlands Bank will consist of 1.7 acres of restoration of previously filled wetland to scrub-shrub and forested wetland; 2.3 acres of wetland and upland and stream corridor buffer enhancement; 4 acres of mixed upland and wetland forest and scrub-shrub community preservation; and 2 acres of scrub-shrub and emergent wetland enhancement within a former stormwater basin. Mitigation at Larrabee Farms will consist of 3.53 acres of scrub-shrub and emergent wetland creation (2.5 acres PSS; 1.0 acres PEM) and 96.48 acres of forested and scrub-shrub wetland and upland preservation (37.95a wetland, 58.53a upland buffer). The latter preservation includes 1,400 linear feet of intermittent stream channel and 7,000 linear feet along the Nonesuch River.

8. The mitigation sites shall be monitored for 10 years, with monitoring reports submitted for years 1, 2, 3, 5, 7, and 10.

9. The mitigation sites shall meet the following performance standards:

a. Hydrology: At a minimum, the sites shall meet the hydrology criteria for a wetland under the Corps of Engineers Wetland Delineation Manual and Northcentral & Northeastern Regional Supplement and have the necessary depth of hydrology, as demonstrated with well data collected at least weekly from mid April through the end of June or other substantial evidence, to support the designed wetland. Soils shall be saturated to within 12 inches of the surface for a minimum of 2 consecutive weeks during the growing season. A minimum of 90% of the site must meet the target hydroperiod specified in the mitigation plans, within two weeks at beginning and end (as long as minimum hydrology technical standard is met) of season. Areas that are too wet or too dry (i.e., seasonal high water tables are more than 3" above or below target levels) should be identified along with suggested corrective measures.

As the mitigation sites are intended to replace wetlands with normal seasonal hydrologic variation, the sites should typically (3 of 5 years) "dry out" (water table drops below 12" below soil surface) during the summer and fall months. Monitoring throughout the growing season may be necessary to determine when water levels decline and to ensure that the wetland hydrologic regime functions as and replicates those of the surrounding wetlands at the mitigation sites. Those areas designed to be forested wetlands should have hydrology with minimal to no inundation and "dry out" during the growing season. Scrub shrub and emergent areas may have some inundation of less than 6 inches, but should also "dry out" over the growing season.

b. Vegetation: The proposed vegetation diversity and/or density goals for woody plants from the plan are met. This should be at least 500 trees and shrubs per acre, of which at least 350 per acre are trees for proposed forested cover types that are healthy and vigorous. Until

Special Conditions Continued from Page 5

canopy coverage exceeds 30%, the average height of all woody stems of tree species, including volunteers in each site, must increase by not less than an average of 10% per year by the fifth (Year 5 following construction) and tenth (Year 10 following construction) monitoring years. The fifth year monitoring report (Year 5) and tenth year (Year 10) shall contain documentation that all vegetation within the mitigation areas is healthy and thriving and the average tree height of all established and surviving trees is at least 5 feet in height.

Native woody hydrophytes should cover 75% of each planned woody zone AND at least the following number of non-exotic species including planted and volunteer species. Volunteer species should support functions consistent with the design goals. To count a species, it should be well represented on the site (e.g., at least 50 individuals of that species per acre).

# species planted	minimum # species required (volunteer and planted)
2	2
3	3
4	3
5	4
6	4
7	5
8	5
9 or more	6

Vegetative zones consist of areas proposed for various types of wetlands (shrub swamp, forested swamp, etc.). The performance standards for density can be assessed using either total inventory or quadrat sampling methods, depending upon the size and complexity of the site.

c. Soils: In creation areas, soil has documented evidence of redoxymorphic features developing by the third year. In all creation, restoration, and enhancement areas, soil organic matter content, bulk density, and pH will be monitored and must remain within the target range established by appropriate reference site. Should acidification occur to the detriment of vegetation establishment, appropriate remedial measures must be taken.

d. Each mitigation site must have at least 80% areal cover, excluding planned open water areas or planned bare soil areas (such as for turtle nesting), by native species.

i. Planned emergent areas on each mitigation site have at least 80% cover by non-invasive hydrophytes.

ii. Planned scrub-shrub and forested cover types have at least 60% cover by non-invasive hydrophytes, of which at least 15% coverage is by woody species.

Special Conditions Continued on Page 7

Special Conditions Continued from Page 6

For the purpose of this performance standard, invasive species of hydrophytes are:

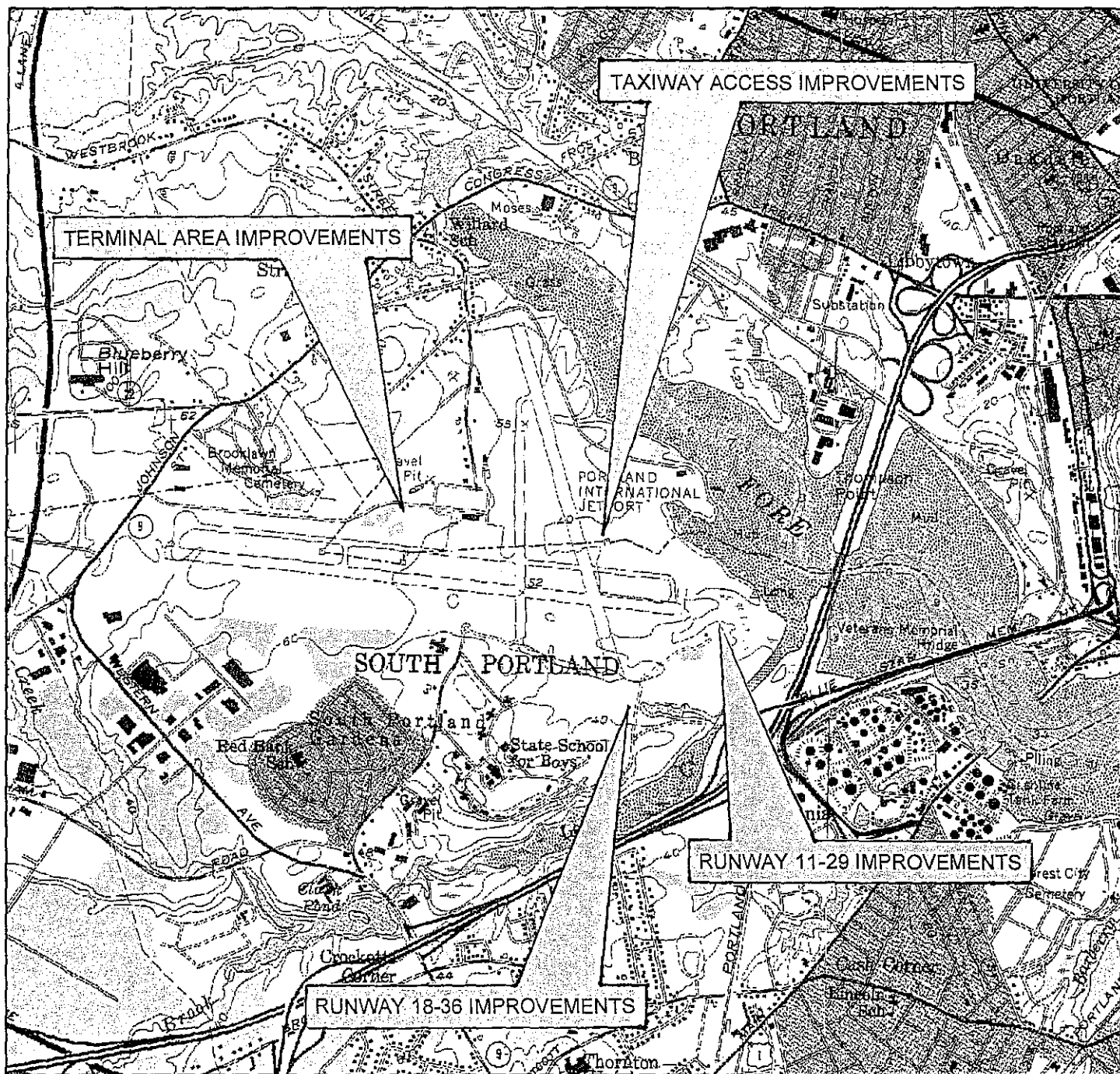
- Cattails -- *Typha latifolia*, *Typha angustifolia*, *Typha glauca*;
- Common Reed -- *Phragmites australis*;
- Purple Loosestrife -- *Lythrum salicaria*;
- Reed Canary Grass -- *Phalaris arundinacea*; and
- Glossy Buckthorn -- *Frangula alnus* (= *Rhamnus frangula*).

e. The following plants are being controlled at the site:

- Common reed (*Phragmites australis*)
- Purple loosestrife (*Lythrum salicaria*)
- Smooth and Common buckthorns (*Frangula alnus*, *Rhamnus cathartica*)
- Russian and Autumn olives (*Elaeagnus angustifolia* and *E. umbellata*)
- Multiflora rose (*Rosa multiflora*)
- Reed canary-grass (*Phalaris arundinacea*)
- Japanese knotweed (*Fallopia japonica*)

For this standard, small patches must be eliminated during the entire monitoring period. Large patches must be aggressively treated and the treatment documented.

4) Your responsibility to complete the required compensatory mitigation as set forth in Special Condition 7 will not be considered fulfilled until you have demonstrated mitigation success and have received written verification from the Corps of Engineers. The term "mitigation success" means success as defined in the mitigation plan this permit requires you to implement. Demonstration of success under this permit shall consist of the required mitigation monitoring, corrective measures, submittal of mitigation monitoring reports, and a final wetland assessment.



USGS MAP
PORTLAND INTERNATIONAL JETPORT
PORTLAND - SOUTH PORTLAND, MAINE

SOURCE: MAINE OFFICE OF GIS

BOOK: REFER TO EXHIBIT A IN SLDA APPLICATION	PAGE: REFER TO EXHIBIT A IN SLDA APPLICATION	LOCATION: PORTLAND AND SOUTH PORTLAND, MAINE	PROPOSED ACTIVITY: AIRPORT IMPROVEMENTS	PROJECT APPLICANT: CITY OF PORTLAND
LEGAL DESCRIPTION: REFER TO PLANS IN SLDA APPLICATION	WATER BODY: FORE RIVER AND TIDAL PORTION OF LONG CREEK	ABUTTERS: SEE EXHIBIT 25 OF SLDA APPLICATION	SCALE: 1"=1200' DATUM: NGVD29 DATE: 12.12.08	Deluca-Hoffman Associates, Inc.

FIGURE

3-1

KEY MAP FOR
FIGURES 2-16

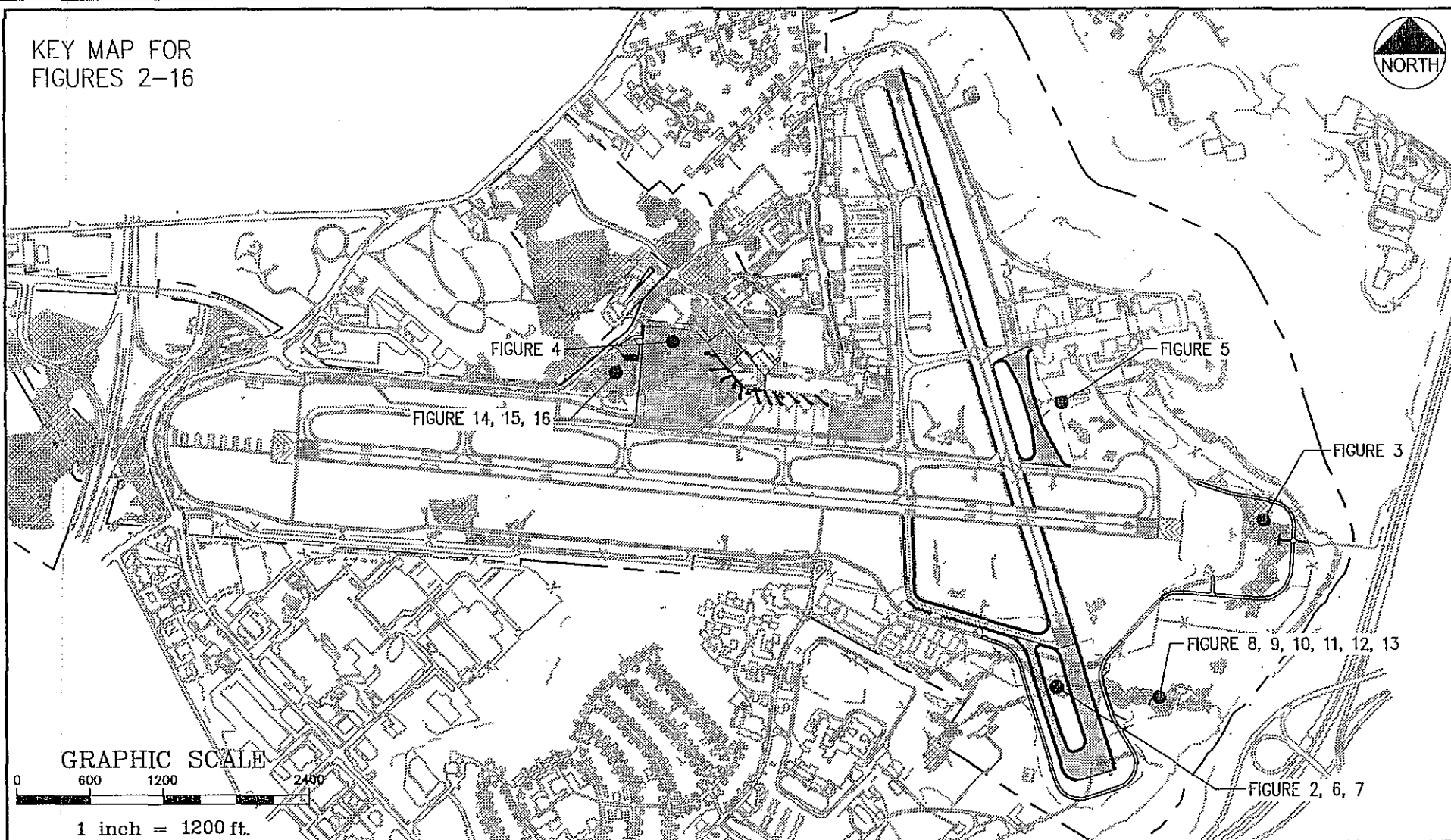


FIGURE:

1

BOOK: PAGE:
REFER TO EXHIBIT A IN
SLDA APPLICATION

LOCATION:
PORTLAND AND SOUTH
PORTLAND, MAINE

PROPOSED ACTIVITY:
AIRPORT IMPROVEMENTS

PROJECT APPLICANT:
CITY OF PORTLAND

LEGAL DESCRIPTION:
REFER TO PLANS IN
SLDA APPLICATION

WATER BODY:
FORE RIVER AND TIDAL
PORTION OF LONG CREEK

ABUTTERS:
SEE EXHIBIT 25 OF SLDA
APPLICATION

SCALE: 1"=1200'
DATUM: NGVD29

DATE: 12.12.08

Deluca-Hoffman
Associates, Inc.

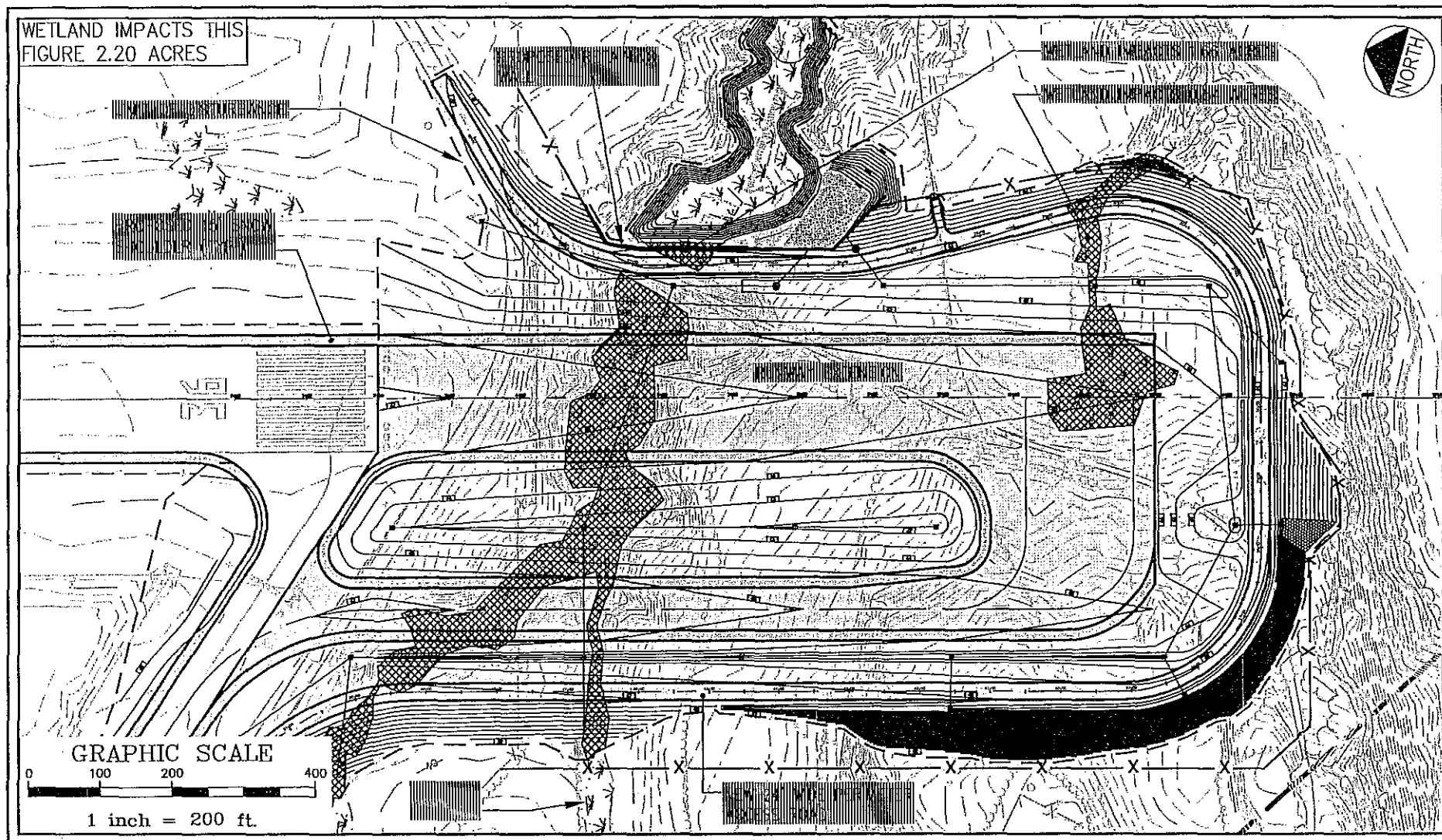


FIGURE:

2

BOOK: PAGE:
REFER TO EXHIBIT A IN
SLDA APPLICATION

LOCATION:
PORTLAND AND SOUTH
PORTLAND, MAINE

PROPOSED ACTIVITY:
RUNWAY 18-36 EXTENSION

PROJECT APPLICANT:
CITY OF PORTLAND

LEGAL DESCRIPTION:
REFER TO PLANS IN
SLDA APPLICATION

WATER BODY:
FORE RIVER AND TIDAL
PORTION OF LONG CREEK

ABUTTERS:
SEE EXHIBIT 25 OF SLDA
APPLICATION

SCALE: 1"=200'
DATUM: NGVD29

DATE: 12.12.08

Deluca-Hoffman
Associates, Inc.

WETLAND IMPACTS THIS
FIGURE 4.89 ACRES

WETLAND IMPACTS
4.89 ACRES



FORE RIVER

LIMIT OF DISTURBANCE

GRAPHIC SCALE



1 inch = 200 ft.

FIGURE:

3

BOOK: PAGE:
REFER TO EXHIBIT A IN
SLDA APPLICATION

LOCATION:
PORTLAND AND SOUTH
PORTLAND, MAINE

PROPOSED ACTIVITY:
RUNWAY 11-29 SAFETY AREA

PROJECT APPLICANT:
CITY OF PORTLAND

LEGAL DESCRIPTION:
REFER TO PLANS IN
SLDA APPLICATION

WATER BODY:
FORE RIVER AND TIDAL
PORTION OF LONG CREEK

ABUTTERS:
SEE EXHIBIT 25 OF SLDA
APPLICATION

SCALE: 1"=200'
DATUM: NGVD29

DATE: 12.12.08

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Associates, Inc.

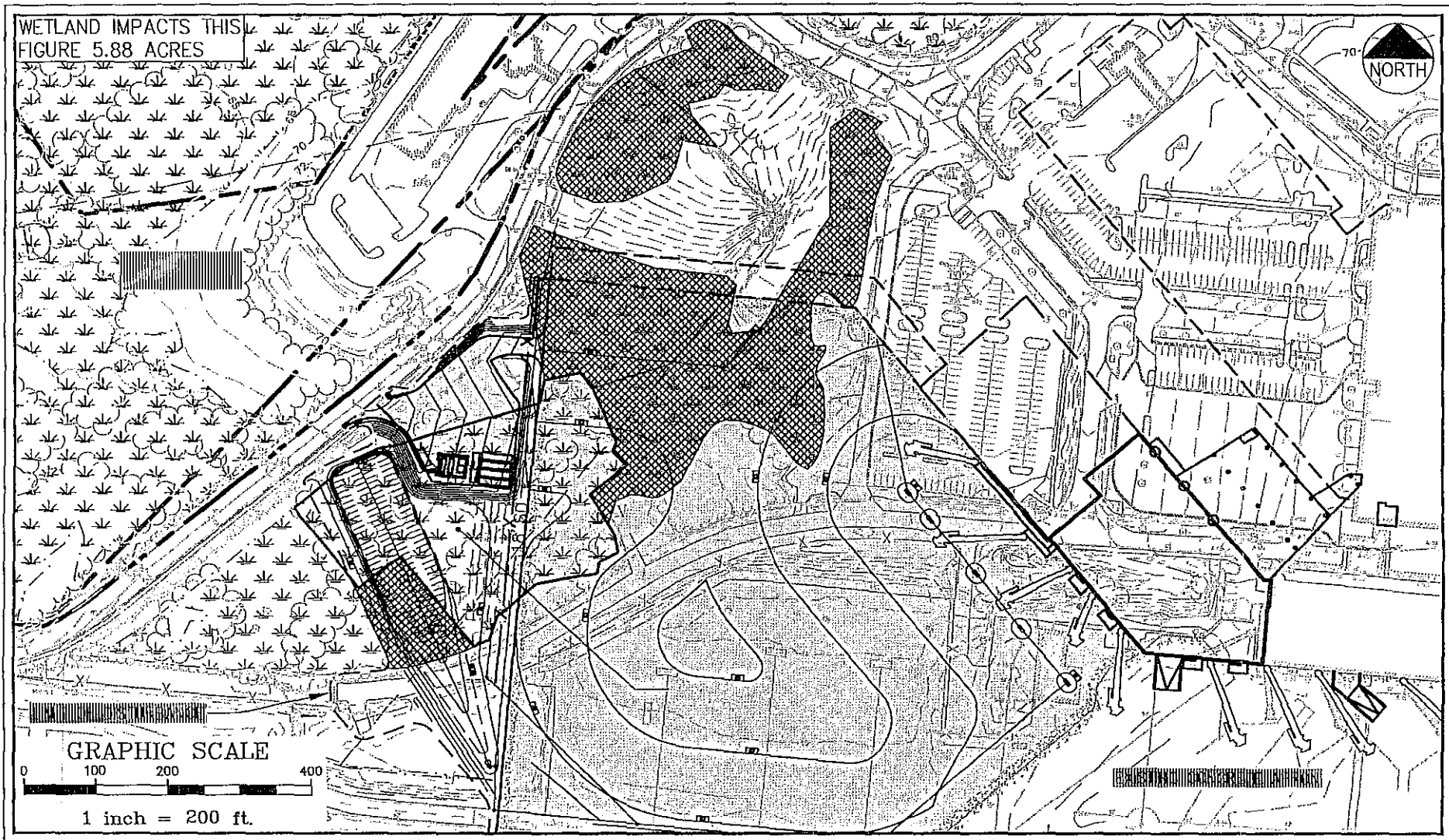


FIGURE: 4	BOOK: REFER TO EXHIBIT A IN SLDA APPLICATION	LOCATION: PORTLAND AND SOUTH PORTLAND, MAINE	PROPOSED ACTIVITY: TERMINAL AREA IMPACTS	PROJECT APPLICANT: CITY OF PORTLAND	
	LEGAL DESCRIPTION: REFER TO PLANS IN SLDA APPLICATION	WATER BODY: FORE RIVER AND TIDAL PORTION OF LONG CREEK	ABUTTERS: SEE EXHIBIT 25 OF SLDA APPLICATION	SCALE: 1"=200' DATUM: NGVD29	Deluca-Hoffman Associates, Inc.
				DATE: 12.12.08	

WETLAND IMPACTS THIS
FIGURE 0.64 ACRES

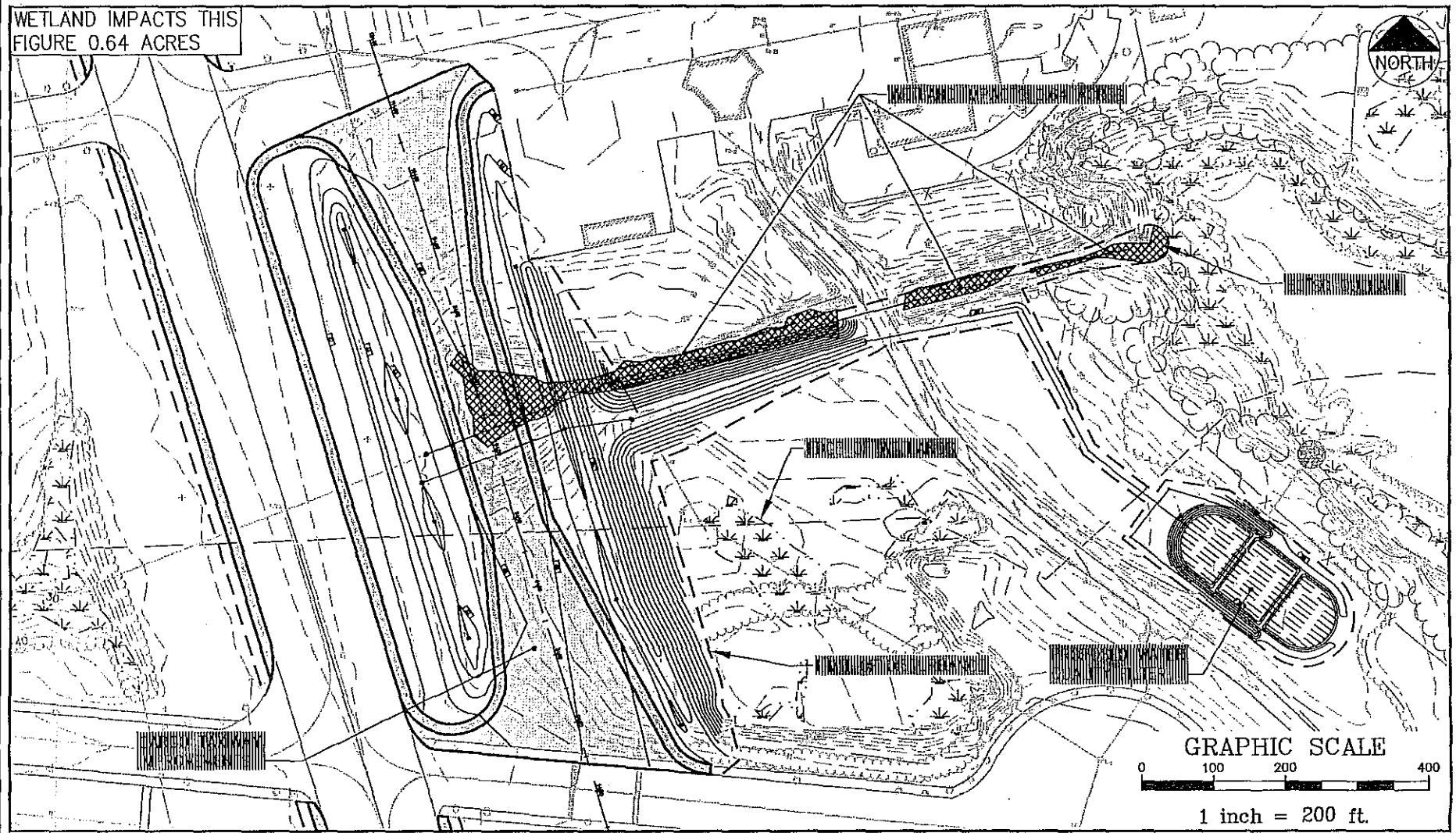


FIGURE:

5

BOOK: PAGE:
REFER TO EXHIBIT A IN
SLDA APPLICATION

LOCATION:
PORTLAND AND SOUTH
PORTLAND, MAINE

PROPOSED ACTIVITY:
CARGO AREA TAXIWAY AND STORM
DRAIN OUTFALL

PROJECT APPLICANT:
CITY OF PORTLAND

LEGAL DESCRIPTION:
REFER TO PLANS IN
SLDA APPLICATION

WATER BODY:
FORE RIVER AND TIDAL
PORTION OF LONG CREEK

ABUTTERS:
SEE EXHIBIT 25 OF SLDA
APPLICATION

SCALE: 1"=200'
DATUM: NGVD29

DATE: 12.12.08

Deluca-Hoffmann
Associates, Inc.

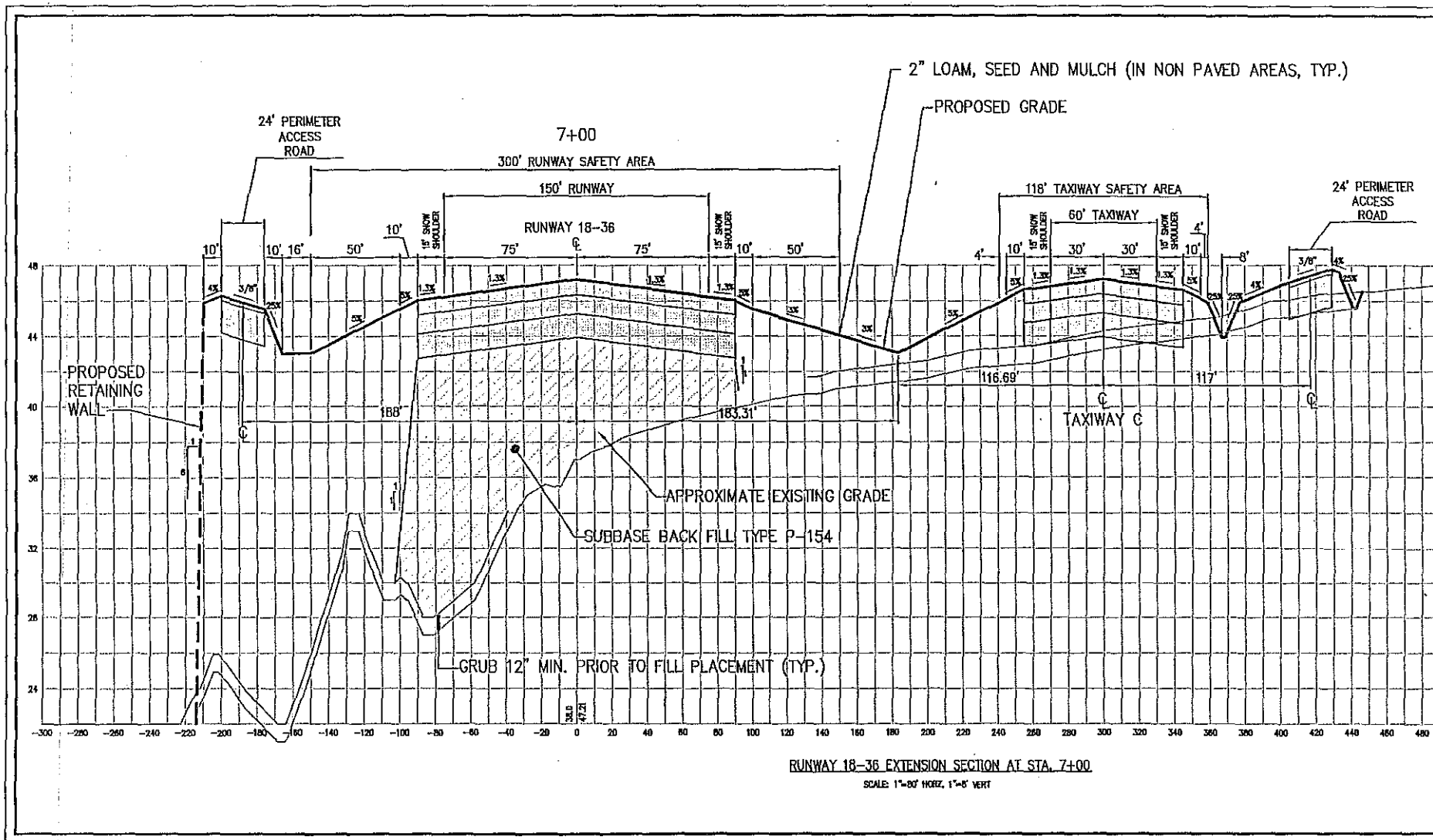


FIGURE:

6

BOOK: REFER TO EXHIBIT A IN SLDA APPLICATION

PAGE:

LOCATION: PORTLAND AND SOUTH PORTLAND, MAINE

PROPOSED ACTIVITY: RUNWAY 18-36 EXTENSION

PROJECT APPLICANT: CITY OF PORTLAND

LEGAL DESCRIPTION: REFER TO PLANS IN SLDA APPLICATION

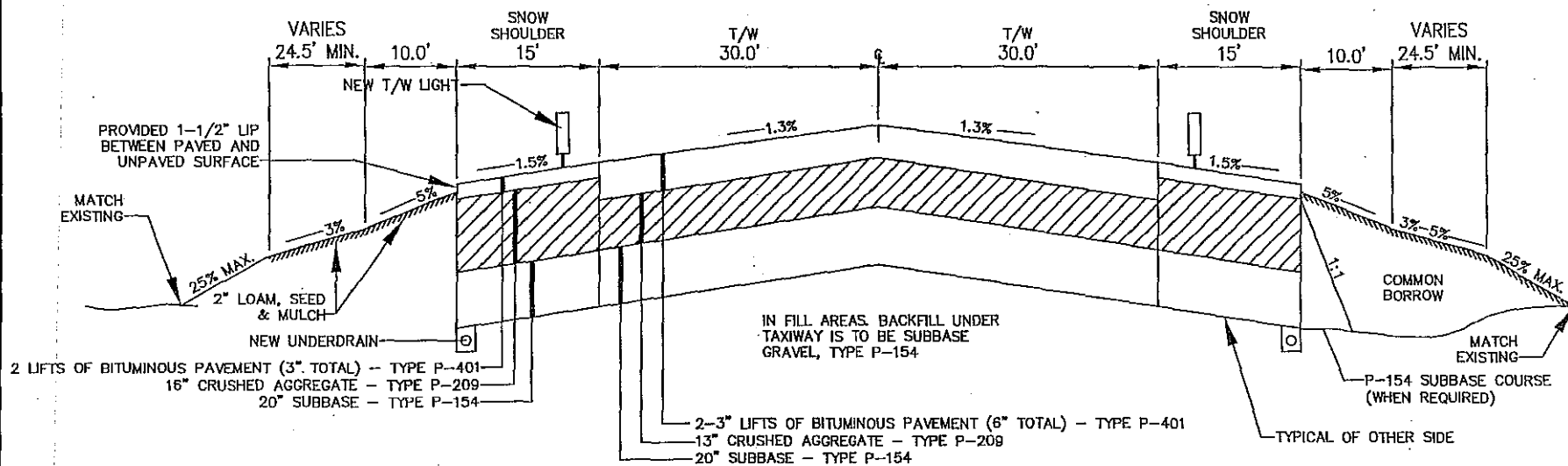
WATER BODY: FORE RIVER AND TIDAL PORTION OF LONG CREEK

ABUTTERS: SEE EXHIBIT 25 OF SLDA APPLICATION

SCALE: 1"=80'
DATUM: NGVD29

DATE: 12.12.08

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1. CONNECT EVERY OTHER LIGHT TO 6" UNDERDRAIN WITH A 2"x6"x6" TEE

A

TAXIWAY C- NEW PAVEMENT SECTION STA.--- TO STA.----

N.T.S.

FIGURE:

7

BOOK: PAGE:
REFER TO EXHIBIT A IN
SLDA APPLICATION

LOCATION:
PORTLAND AND SOUTH
PORTLAND, MAINE

PROPOSED ACTIVITY:
TAXIWAY C EXTENSION

PROJECT APPLICANT:
CITY OF PORTLAND

LEGAL DESCRIPTION:
REFER TO PLANS IN
SLDA APPLICATION

WATER BODY:
FORE RIVER AND TIDAL
PORTION OF LONG CREEK

ABUTTERS:
SEE EXHIBIT 25 OF SLDA
APPLICATION

SCALE: N.T.S.
DATUM: NGVD29
DATE: 12.12.08

Deluca-Hoffman
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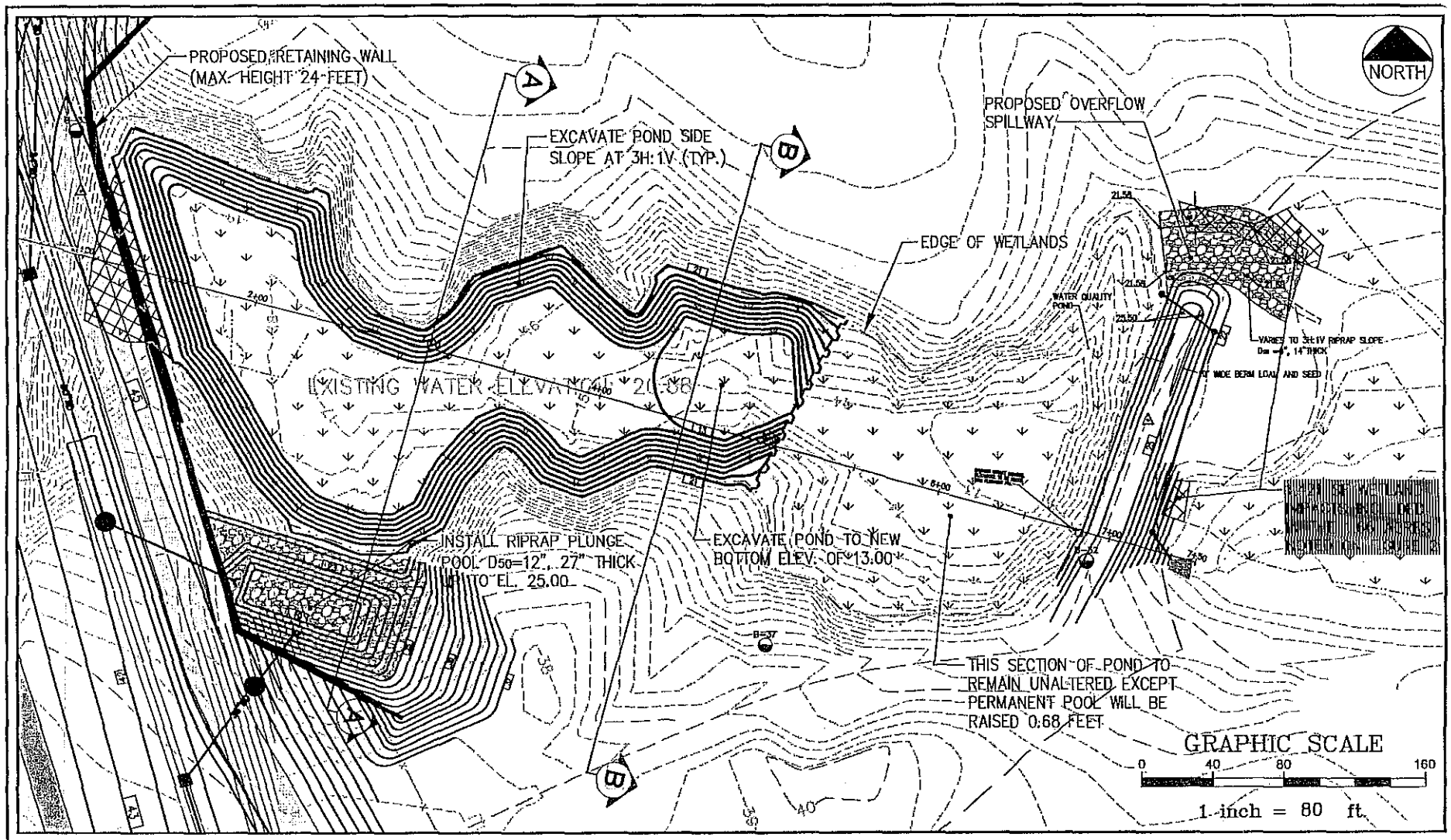


FIGURE:

8

BOOK: PAGE:
REFER TO EXHIBIT A IN
SLDA APPLICATION

LOCATION:
PORTLAND AND SOUTH
PORTLAND, MAINE

PROPOSED ACTIVITY:
WATER QUALITY POND
IMPROVEMENTS

PROJECT APPLICANT:
CITY OF PORTLAND

LEGAL DESCRIPTION:
REFER TO PLANS IN
SLDA APPLICATION

WATER BODY:
FORE RIVER AND TIDAL
PORTION OF LONG CREEK

ABUTTERS:
SEE EXHIBIT 25 OF SLDA
APPLICATION

SCALE: 1"=80'
DATUM: NGVD29

DATE: 12.12.08

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Associates, Inc.

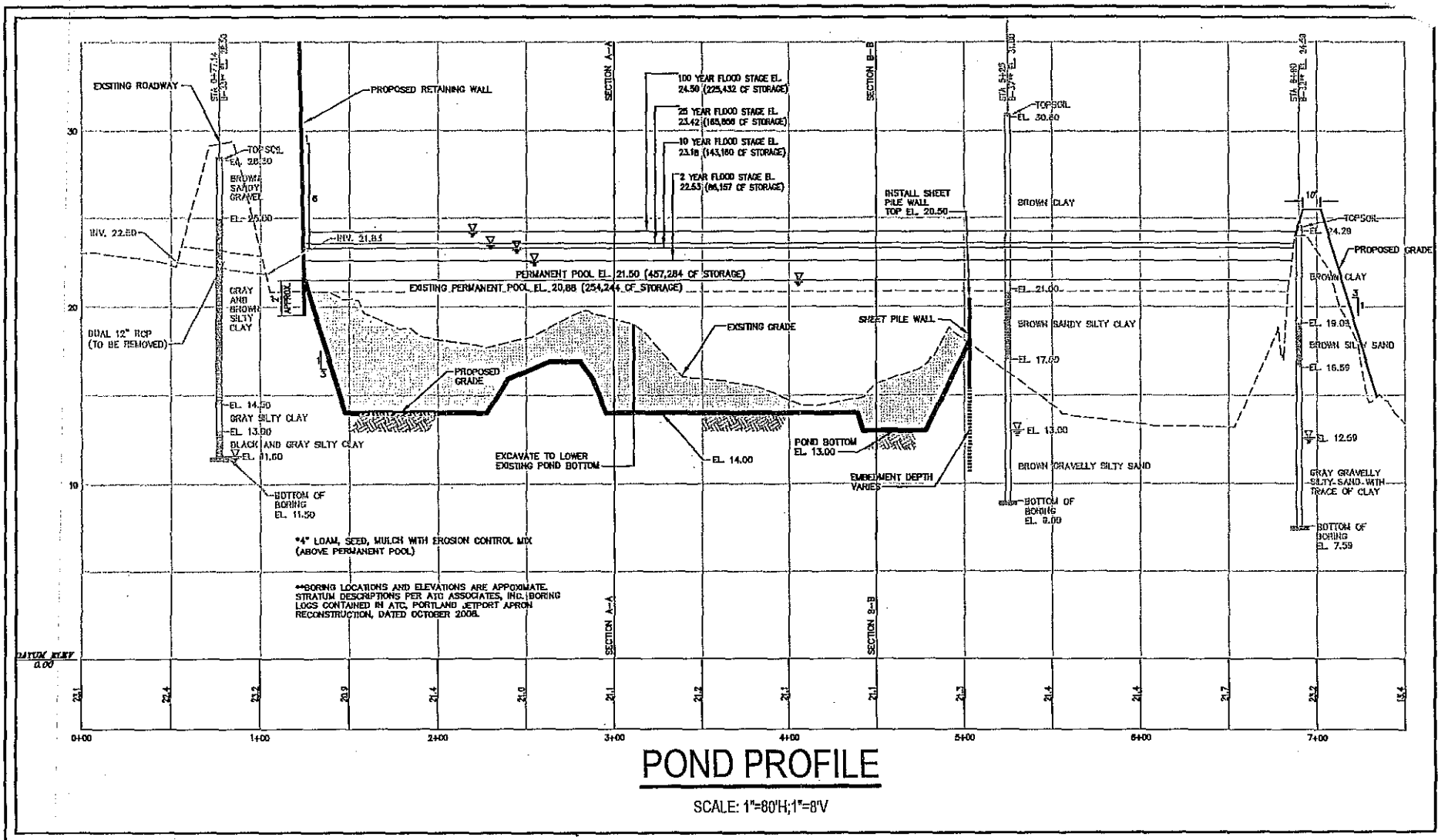


FIGURE:

9

BOOK: REFER TO EXHIBIT A IN SLDA APPLICATION

PAGE:

LOCATION: PORTLAND AND SOUTH PORTLAND, MAINE

PROPOSED ACTIVITY: WATER QUALITY POND IMPROVEMENTS

PROJECT APPLICANT: CITY OF PORTLAND

LEGAL DESCRIPTION: REFER TO PLANS IN SLDA APPLICATION

WATER BODY: FORE RIVER AND TIDAL PORTION OF LONG CREEK

ABUTTERS: SEE EXHIBIT 25 OF SLDA APPLICATION

SCALE: 1"=80'
DATUM: NGVD29

DATE: 12.12.08

Deluca-Hoffman Associates, Inc.

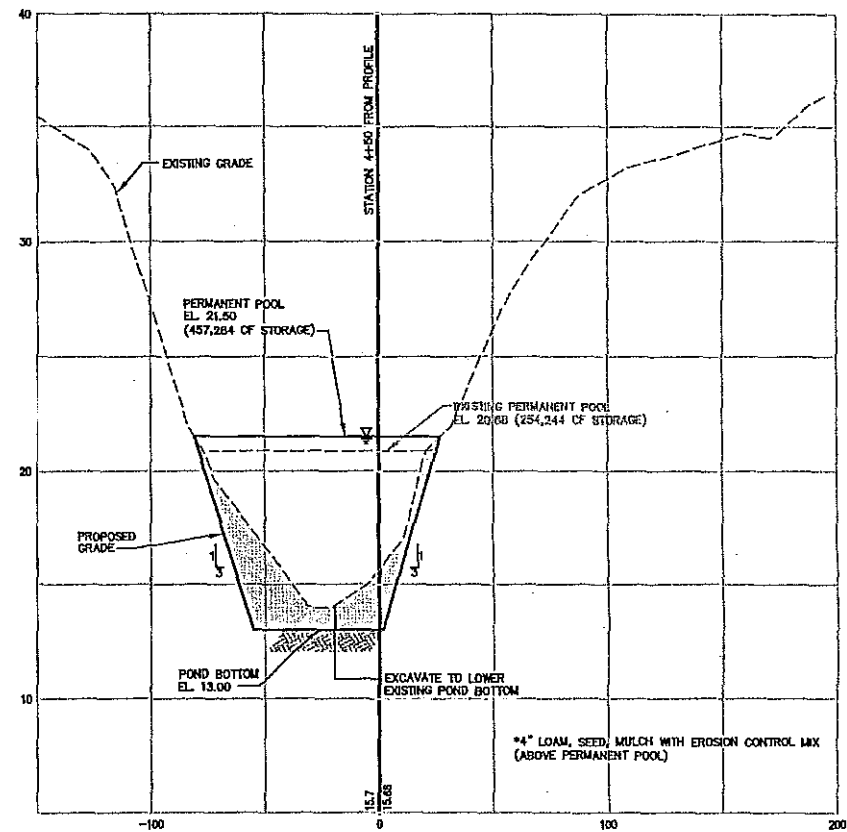
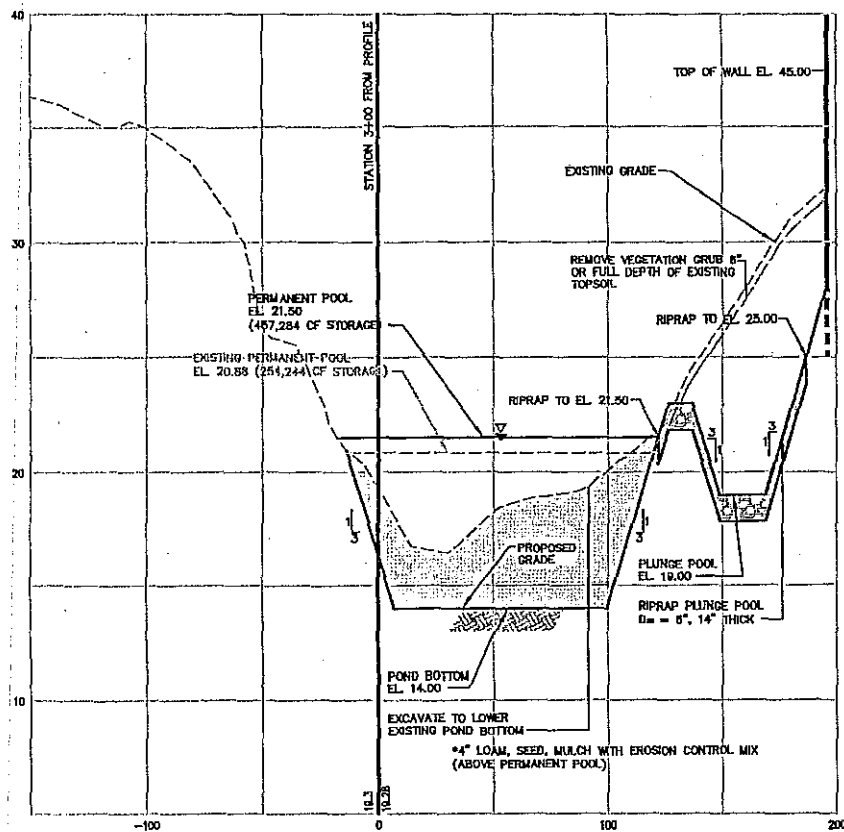


FIGURE:

10

BOOK: PAGE:
REFER TO EXHIBIT A IN
SLDA APPLICATION

LOCATION:
PORTLAND AND SOUTH
PORTLAND, MAINE

PROPOSED ACTIVITY:
WATER QUALITY POND
IMPROVEMENTS

PROJECT APPLICANT:
CITY OF PORTLAND

LEGAL DESCRIPTION:
REFER TO PLANS IN
SLDA APPLICATION

WATER BODY:
FORE RIVER AND TIDAL
PORTION OF LONG CREEK

ABUTTERS:
SEE EXHIBIT 25 OF SLDA
APPLICATION

SCALE: 1"=80'
DATUM: NGVD29

DATE: 12.12.08

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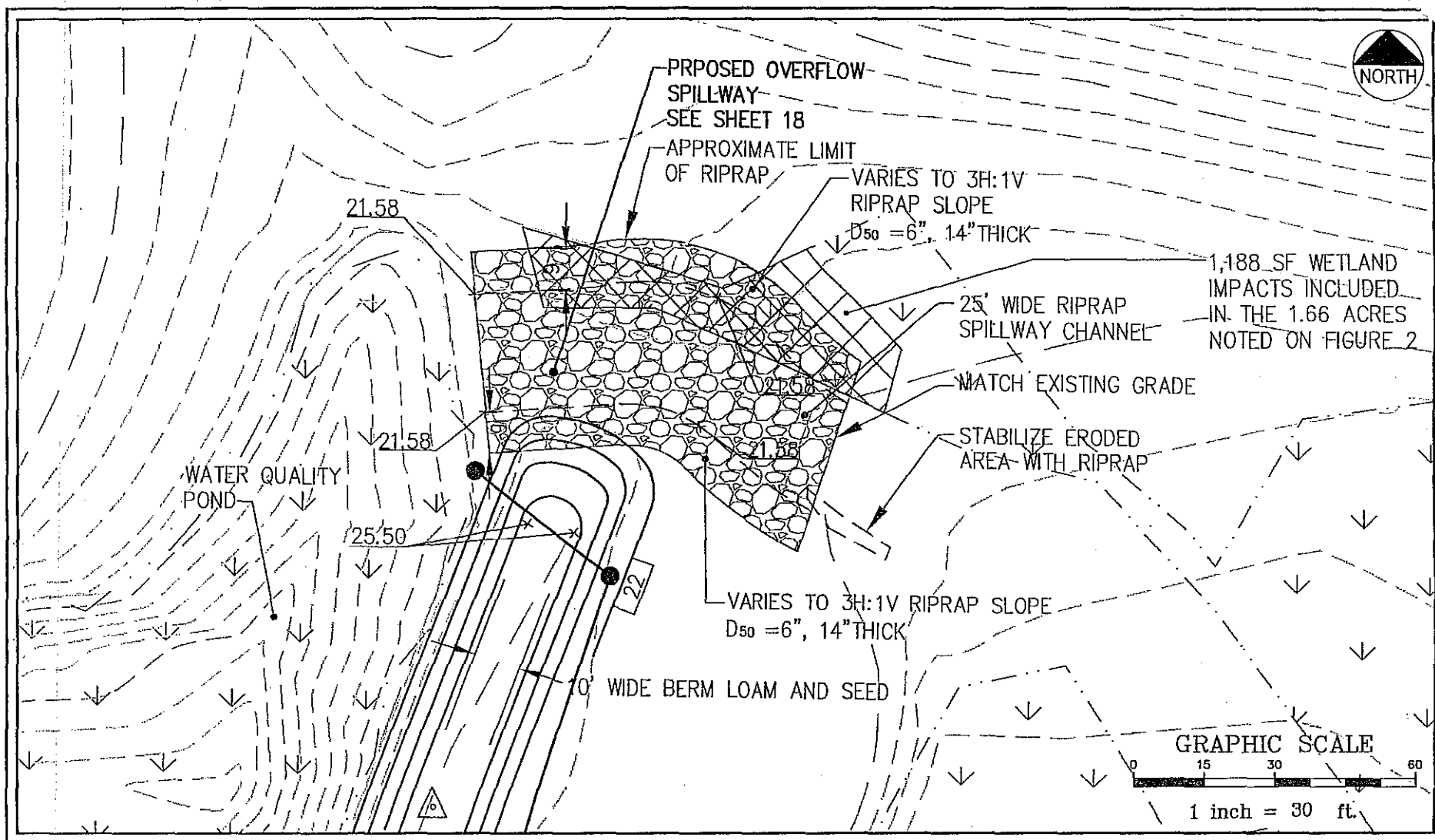


FIGURE:

11

BOOK: PAGE:
REFER TO EXHIBIT A IN
SLDA APPLICATION

LOCATION:
PORTLAND AND SOUTH
PORTLAND, MAINE

PROPOSED ACTIVITY:
WATER QUALITY POND
IMPROVEMENTS

PROJECT APPLICANT:
CITY OF PORTLAND

LEGAL DESCRIPTION:
REFER TO PLANS IN
SLDA APPLICATION

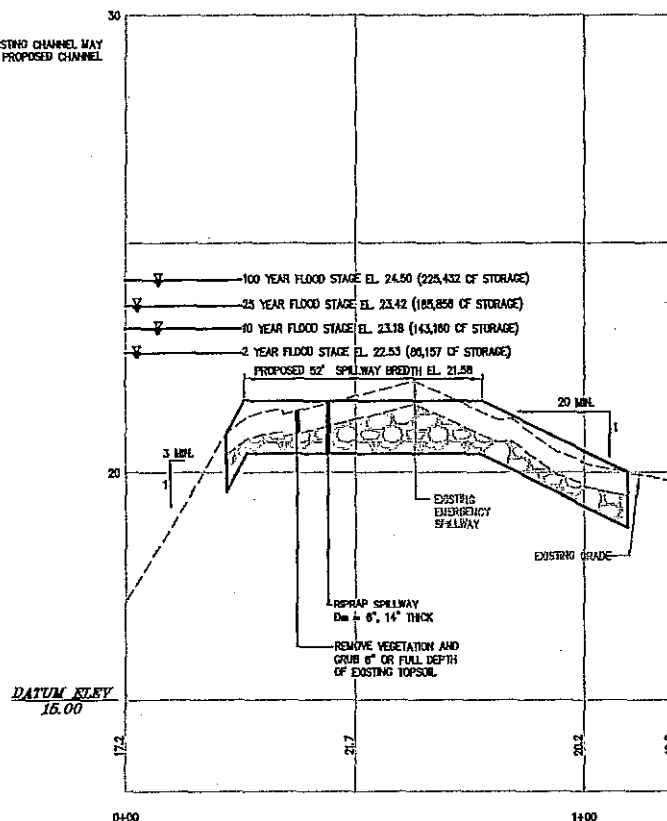
WATER BODY:
FORE RIVER AND TIDAL
PORTION OF LONG CREEK

ABUTTERS:
SEE EXHIBIT 25 OF SLDA
APPLICATION

SCALE: 1"=30'
DATUM: NGVD29
DATE: 12.12.08

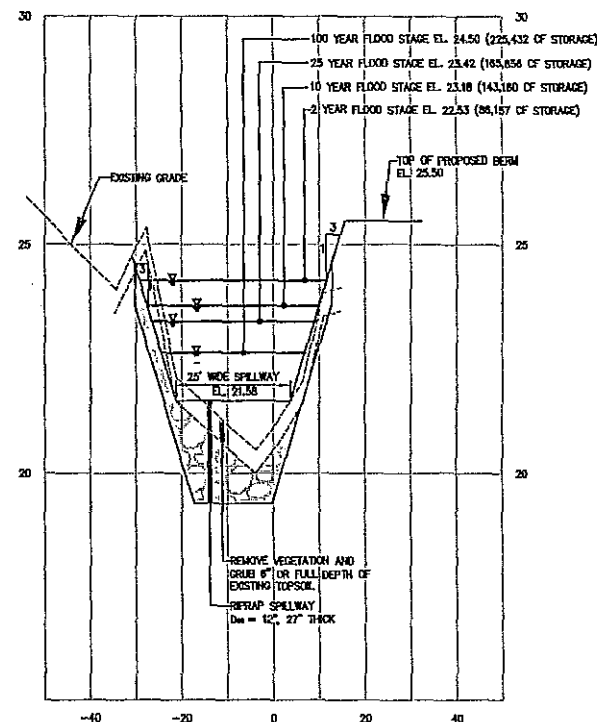
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NOTE: REPAIR IN EXISTING CHANNEL MAY BE REUSED IN PROPOSED CHANNEL



OVERFLOW SPILLWAY PROFILE

SCALE: 1"=40'H; 1"=4'V



SECTION C-C

SCALE: 1"=40'H; 1"=4'V

FIGURE:

12

BOOK: PAGE:
REFER TO EXHIBIT A IN
SLDA APPLICATION

LEGAL DESCRIPTION:
REFER TO PLANS IN
SLDA APPLICATION

LOCATION:
PORTLAND AND SOUTH
PORTLAND, MAINE

WATER BODY:
FORE RIVER AND TIDAL
PORTION OF LONG CREEK

PROPOSED ACTIVITY:
WATER QUALITY POND
IMPROVEMENTS

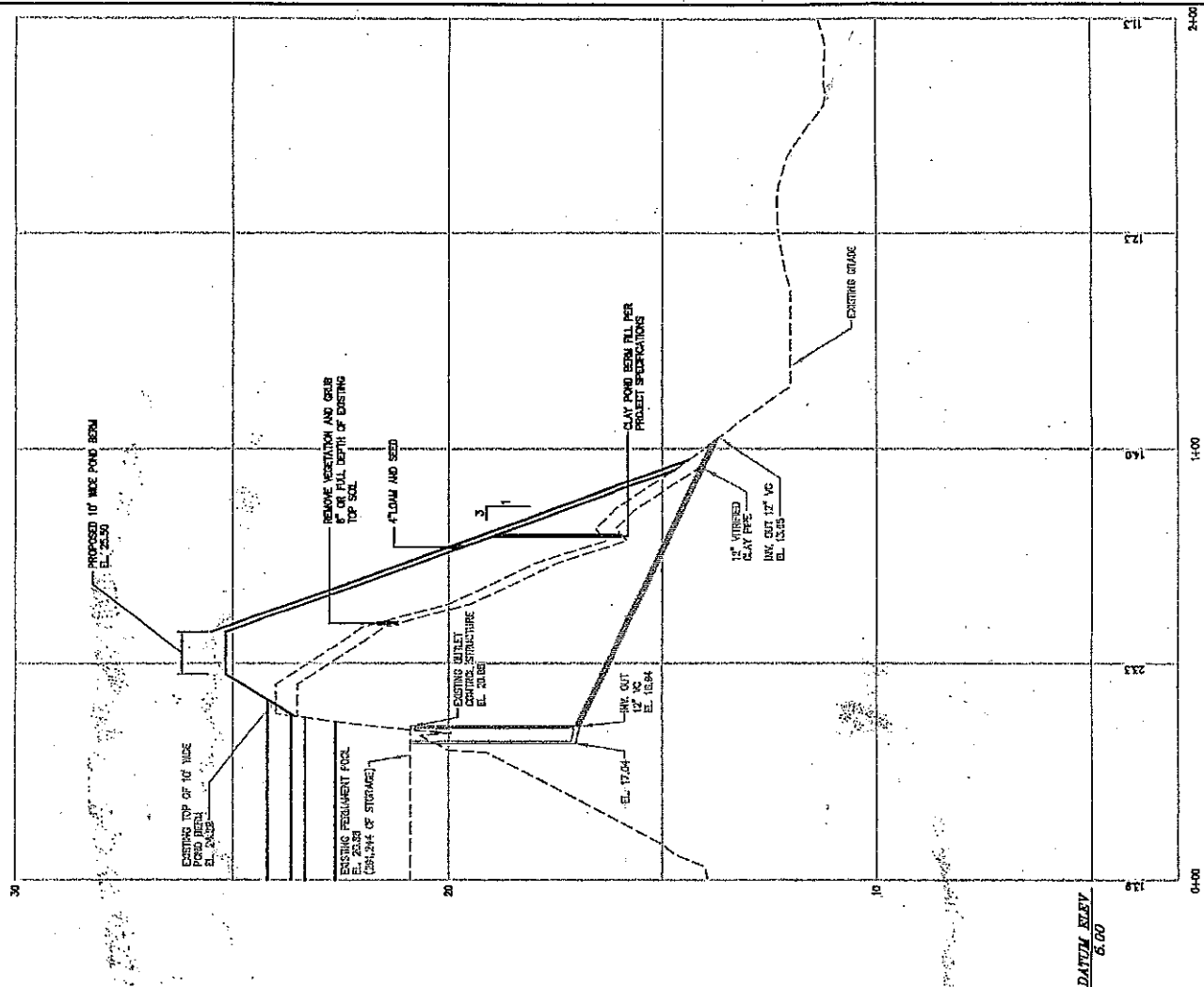
ABUTTERS:
SEE EXHIBIT 25 OF SLDA
APPLICATION

PROJECT APPLICANT:
CITY OF PORTLAND

SCALE: 1"=40'
DATUM: NGVD29

DATE: 12.12.08

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OUTLET CONTROL STRUCTURE PROFILE

SCALE: 1"=40'H; 1"=4'V

FIGURE:

13

BOOK: PAGE:
REFER TO EXHIBIT A IN
SLDA APPLICATION

LEGAL DESCRIPTION:
REFER TO PLANS IN
SLDA APPLICATION

LOCATION:
PORTLAND AND SOUTH
PORTLAND, MAINE

WATER BODY:
FORE RIVER AND TIDAL
PORTION OF LONG CREEK

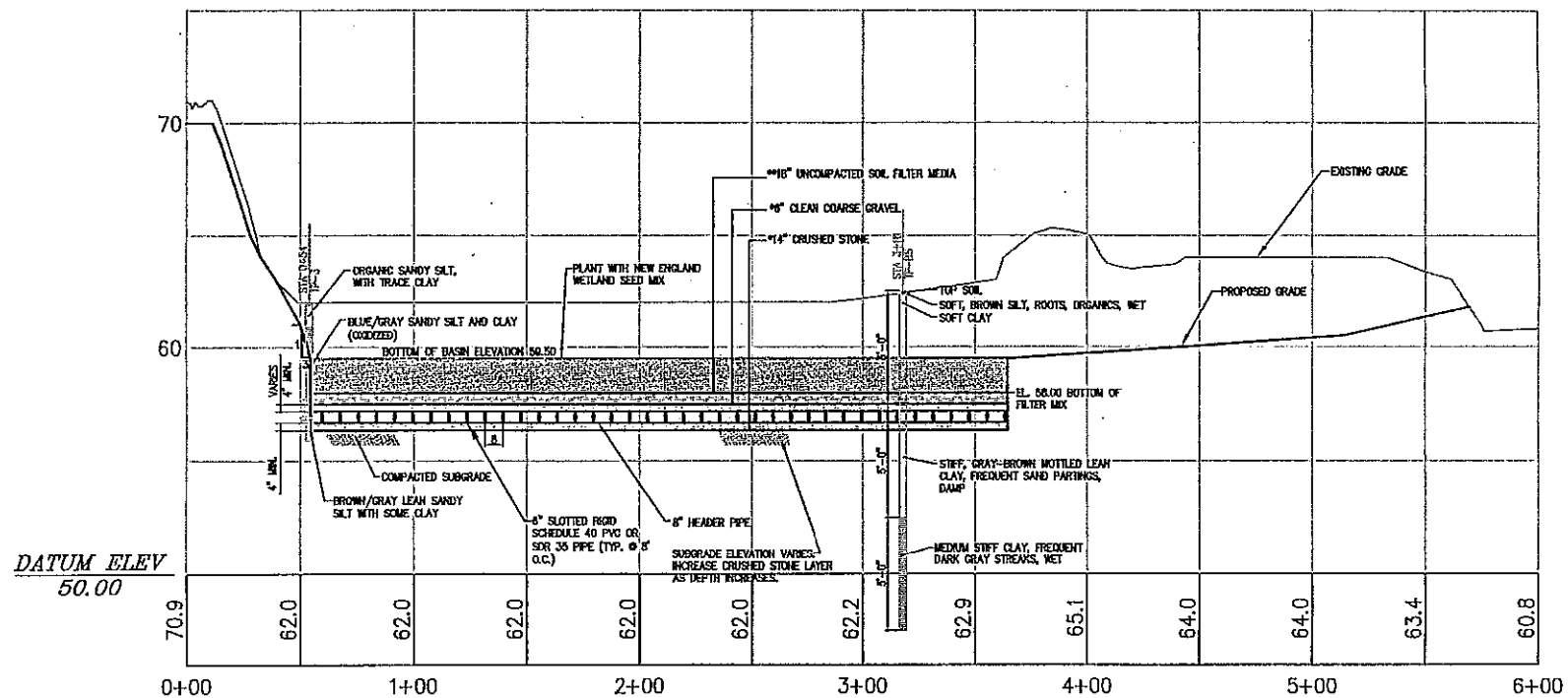
PROPOSED ACTIVITY:
WATER QUALITY POND
IMPROVEMENTS

ABUTTERS:
SEE EXHIBIT 25 OF SLDA
APPLICATION

PROJECT APPLICANT:
CITY OF PORTLAND

SCALE: 1"=40'
DATUM: NGVD29
DATE: 12.12.08

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WATER QUALITY FILTER PROFILE

SCALE: 1"=80'H; 1"=8'V

FIGURE:

15

BOOK: PAGE:
REFER TO EXHIBIT A IN
SLDA APPLICATION

LOCATION:
PORTLAND AND SOUTH
PORTLAND, MAINE

PROPOSED ACTIVITY:
TERMINAL AREA WATER QUALITY
FILTER

PROJECT APPLICANT:
CITY OF PORTLAND

LEGAL DESCRIPTION:
REFER TO PLANS IN
SLDA APPLICATION

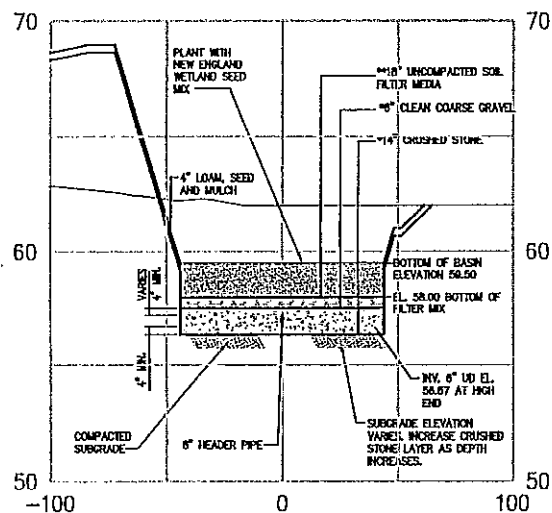
WATER BODY:
FORE RIVER AND TIDAL
PORTION OF LONG CREEK

ABUTTERS:
SEE EXHIBIT 25 OF SLDA
APPLICATION

SCALE: 1"=80'
DATUM: NGVD29

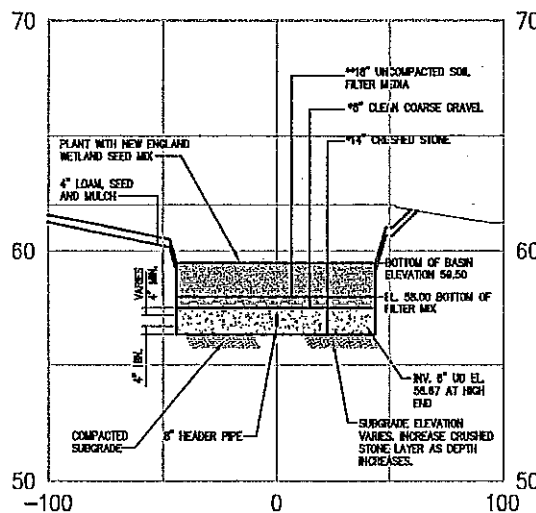
DATE: 12.12.08

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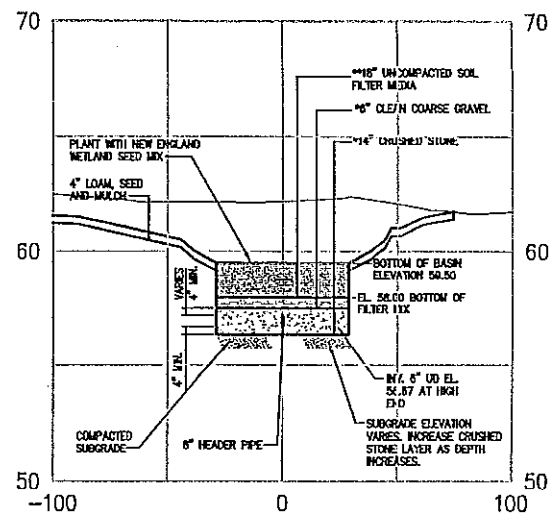
SECTION D-D

SCALE: 1"=80'H; 1"=8'V



SECTION E-E

SCALE: 1"=80'H; 1"=8'V



SECTION F-F

SCALE: 1"=80'H; 1"=8'V

FIGURE:

16

BOOK: PAGE:
REFER TO EXHIBIT A IN
SLDA APPLICATION

LEGAL DESCRIPTION:
REFER TO PLANS IN
SLDA APPLICATION

LOCATION:
PORTLAND AND SOUTH
PORTLAND, MAINE

WATER BODY:
FORE RIVER AND TIDAL
PORTION OF LONG CREEK

PROPOSED ACTIVITY:
TERMINAL AREA WATER QUALITY
FILTER

ABUTTERS:
SEE EXHIBIT 25 OF SLDA
APPLICATION

PROJECT APPLICANT:
CITY OF PORTLAND

SCALE: 1"=80'
DATUM: NGVD29

DATE: 12.12.08

Deluca-Hoffman
Associates, Inc.

Appendix F: Army Corps Memorandum

24 September 2010

MEMORANDUM FOR File

SUBJECT: Site visit to Larrabee Farms mitigation site for Portland Jetport;
Scarborough, Maine; File No. NAE-2008-00053

Inspection Date: 24 September 2010
Time arrived: 1000 Time departed: 1100
Weather conditions: overcast, 70 degrees

This is the most recently constructed of the three existing mitigation projects at this pooled mitigation site, completed within the past year.

The slopes surrounding the flat portion of the site were heavily vegetated with *Trifolium*, perhaps planted as a ground cover. In the lower portions of the slope, there was also some *Juncus effusus*, *Carex* sp., *Eleocharis* sp., and *Typha latifolia*.

The flat portion of the site had much *Typha latifolia* in patches, primarily in the center of the site. The edges were more diverse and supported *Juncus effusus*, *Euthamia graminifolia*, *Agalinis* sp., *Carex lurida*, *Polygonum* sp., *Scirpus* sp., *Schoenoplectus tabernaemontani*, *Agrostis* sp., *Acer rubrum*, and *Alnus* sp. Coarse woody debris was well placed around the site. There was evidence of deer usage and a variety of birds.

The site appears to be off to a good start. The season was wet early on, but drier later in the summer. The *Typha* should be monitored to ensure it does not limit developing diversity at the site.

PAUL MINKIN
Senior Wetland Scientist
Environmental Resource Section
Policy and Technical Support Branch