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## Transmittal

**To:** Jay Clement (USACE), Marybeth Richardson (MDEP), Dan Bacon (Scarborough), Jim Wendel (Scarborough), Ken Grondin (Grondin)

**From:** Richard Jordan (Boyle Associates) on behalf of Grondin Aggregates/Larrabee Farms Wetland Mitigation Site

**Date:** 12/15/2009

**Re:** Cabela's (New England Expedition Scarborough LLC)  
Wetland Mitigation Monitoring Report – Year 2 of 10

**Corps Permit No.:** NAE-2006-3128  
**Maine DEP NRPA Project Number:** L-23242-26-A-N

Attached, please find the 2009 (year 2) monitoring report for the wetland mitigation project completed for the Gateway at Scarborough retail development (anchored by Cabela's). There are no remediation actions recommended at this time.

If you have any questions or would like to conduct a site visit, please contact Ken Grondin (207-854-1147) or me (207-541-9100).

Thank you,

Richard Jordan  
Senior Wetland Scientist – Boyle Associates

**Marybeth Note:** this was a Doug Burdick project. Last year I sent the report to Linda Kokemuller – please let me know if you want me to forward future correspondence regarding this project to anyone else – thanks.

**MITIGATION REPORT**  
**TRANSMITTAL AND SELF-CERTIFICATION**

**DEPARTMENT OF THE ARMY PERMIT NUMBER: NAE-2006-3128**

**PROJECT TITLE:** The Gateway at Scarborough (Cabela's): Larrabee Farms Wetland Mitigation Project

**PERMITTEE:** New England Expedition – Scarborough, LLC

**MAILING ADDRESS:** 220 Elm Street, Ste 104, New Caanan, CT 06840

**AUTHORIZED AGENT:** Grondin Aggregates, LLC

**MAILING ADDRESS:**

Ken Grondin

11 Bartlett Road

Gorham, Maine 04038

TELEPHONE: 207.854.1147

**ATTACHED MITIGATION REPORT TITLE:** The Gateway at Scarborough (Cabela's): Second Year Wetland Mitigation Monitoring Report

**PREPARERS:** Boyle Associates (207.541.9100)

**DATE:** December 15, 2009

**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"> <li>● <u>Tables 1 – 5: Soils Data</u></li> <li>● <u>Table 6: Fauna List</u></li> <li>● <u>Table 7: PSS/PFO Creation Area Plot Data</u></li> <li>● <u>Table 8: Herbaceous Vegetation Cover List</u></li> </ul>	
<p><u>Appendix E – Copy of Permits</u></p> <ul style="list-style-type: none"> <li>● <u>MDEP NRPA Permit</u></li> <li>● <u>ACOE DOA Permit</u></li> </ul>	

**Project Overview Form**

**Corps Permit No.:** NAE-2006-3128

**Maine DEP NRPA Project Number:** L-23242-26-A-N

**Mitigation Site Name(s):** Larrabee Farms Wetland Mitigation Site: The Gateway at Scarborough (Cabela's)

**Monitoring Report** : Year 2 of 10 years

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

New England Expedition – Scarborough, LLC 220 Elm Street, Ste 104 New Caanan, CT 06840	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 (Lauren Leclerc #207.541.9100)

**Date(s) of Inspection(s) (Specific to Monitoring):** August 4, 5 and 6

**Project Summary:**

Second year monitoring procedures were conducted at the emergent, scrub-shrub and forested wetland creation areas at the Larrabee Farms Wetland Mitigation Site on August 4, 5 and 6. These wetland areas were created as compensation for wetland functions and values impacted by construction of the Gateway at Scarborough (anchored by Cabela's). Construction of the project impacted approximately 4.47 acres of freshwater wetland (2.49 acres wet meadow, 1.29 acres forested and 0.69 acres of mixed forested/shrub/open water wetlands) and included installation of new culverts under an existing access road. Wetland compensation totals 31.55 acres and consists of 4.55 acres of wetland creation (2.10 acres PEM, 0.35 acres PSS and 2.10 acres PFO), preservation of 14.93 acres of existing upland and preservation of 12.07 acres of existing wetland preservation (including a stretch of the Nonesuch River). Wetland mitigation took place at Grondin Aggregate's Larrabee Farms Wetland Mitigation Site, a multi-user mitigation project site.

**Location 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	Spring 2007
Final wetland grading began	February 2007
Final wetland grading completed	Oct. 15, 2007
Hydroseeding with wetland herbaceous seed mix completed	Oct. 15, 2007
Installation of woody vegetation completed	

**Performance Standards are/are not being met:**

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

**Dates of Corrective or Maintenance Activities Conducted Since Last Report:**

- An approximately ½-acre portion of wetland creation area was completed in the spring of 2009.
- Chemical treatment and hand removal of reed canarygrass, Japanese knotweed and purple loosestrife occurred in the summer of 2009.
- Removal of the berm bisecting the two northern creation cells occurred in January of 2009 (is allowing better flow of surface hydrology in the two upper creation cells).
- Installation of rip rap-lined swale and sediment basin to direct surface flow from adjacent road into wetland creation area completed in spring of 2009.

**Recommendations for Additional Remedial Actions:**

- No specific remedial actions suggested at this time (more information discussed under "Success Standards" located in the "Summary" portion of this report).

**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 7<sup>th</sup> and 10<sup>th</sup> years, if necessary, following construction.

**Success Standards:**

1. Hydrology <ul style="list-style-type: none"> <li>• Adequate to support the designed wetland type:</li> <li>• Proposed hydrology being met:</li> <li>• Percentage of site meeting proposed hydrology:</li> <li>• Too wet/dry areas identified and corrective measures proposed:</li> </ul>	Yes Yes 90-100% Yes
2. Proposed vegetation diversity and/or density goals for woody plants from the plan met:	Yes
3. Aerial cover <ul style="list-style-type: none"> <li>a. Each mitigation site has at least 80% aerial cover, by noninvasive species:</li> <li>b. Emergent areas have at least 80% cover by noninvasive hydrophytes:</li> <li>c. Scrub-shrub and forested cover types have at least 60% cover by noninvasive hydrophytes, of which at least 15% are woody species:</li> </ul>	Yes <u>No</u> Yes
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 and is successfully providing wetland functions and values similar to those provided by wetlands impacted by construction of The Gateway at Scarborough. 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. Finally, survivorship of the planted shrubs and trees is good and overall plant cover is high. The percent aerial coverage of non-invasive hydrophytes has greatly increased since the 2008 monitoring session (from approximately 40% in 2008 to over 70% in 2009), and should exceed the success standard of 80% aerial coverage by non-invasive hydrophytes during 2010.

As discussed in the 2008 (Year 1) monitoring report, an additional approximately ½-acre portion of the wetland creation site was completed in the spring of 2009. This area had been added late during permit negotiations and was not constructed in 2007. This area is located at the northwestern end of the project site adjacent to the quarry.

## Summary Data

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

### Wetland Creation Monitoring

General site walks were conducted throughout winter, spring and summer of 2009 to assess general site health and to determine if any winter damage occurred which would warrant correction measures. Some girdling by rodents, mainly of chokeberry and ash, was observed. However, no significant damage was observed, and no corrective measures were recommended. In-depth monitoring of the creation area occurred in August 2009. As discussed in the as-built report (30 October 2007): “(w)hile some areas were planted solely with tree or shrub species, most of the plants were installed in clumps, with tree and shrub plantings close together and dispersed over the site. Much of the creation area will presumably grow to achieve a PSS/PFO or PFO/PSS description, showing co-dominance among the tree and shrub species with interspersed pockets of both wetland types.” Thus, as for the first year of monitoring, the second year monitoring reviewed the PSS and PFO areas together as a PFO/PSS wetland type. In subsequent monitoring seasons, as the site begins to reach maturity and the PSS and PFO habitats begin to become clear, we will map and monitor the habitats separately.

Linear transects were established 25 feet apart in a generally north-to-south direction across the upper and lower wetland creation areas in order to survey woody vegetation. Six-foot wide transects with varying lengths were used to create rectangular plots in order sample twenty-five percent (25%) of the mixed scrub-shrub/forested (PSS/PFO) wetland creation area. Every other transect end was marked with wooden stakes. The locations of each transect were GPS-located using a survey-grade GPS unit. Herbaceous vegetation data was gathered for all wetland creation cover types (emergent and scrub-shrub/forested) by transacting the creation cells at least two times. Herbaceous vegetation was identified to species level and aerial cover was determined for each species within each covertype within each creation cell. For planted woody species, if more than half of the plant was located within the sample plot, the plant was counted. Please see Figure 1 for a depiction of the monitoring transects.

### **Success Standards**

#### **1) Hydrology**

**Is the proposed hydrology met at the site?**

Yes.

Most of the creation site is meeting the projected hydrology levels as evidenced by: the presence of reducing conditions within the soil profile, ponded water within the lowest portions of the site and in occasional 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 interception and surface runoff from the adjacent quarry area. Further hydrologic input is provided by rain and snow. 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), water-stained leaves, evidence of flooding, and evidence of reducing conditions within the soil profiles. Furthermore, most of the wetland species planted in the creation area are alive and growing, indicating an adequate hydrologic regime.

Due to the removal of the berm in between the upper cells and the addition of the rip rap spillway directing excess surface flow from the road and quarry, the PEM creation areas are wetter than last year and have adequate hydrology similar to the PSS/PFO areas. The PEM areas will continue to be monitored through the winter and spring months as well as the summer of 2010 to ensure that permanent adequate hydrology has been established in these areas.

**What percentage of the site is meeting projected hydrology levels?**

90-100%

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

While in 2008, the northern portion of the mitigation site (adjacent to the quarry) seemed drier than desired in September 2008, this area showed adequate hydrology in August 2009. The PEM areas in the northern portion of the site benefited from increased rainfall in the spring and summer of 2009 and from removal of the berm dividing the northern cells. The areas were designed to be wet meadows, so they are expected to be

drier than the adjacent PSS/PFO areas. Spring and summer visits showed saturated conditions and all pits within the pit-and-mound microtopography areas were flooded through August.

**Regrading:** An approximately ½-acre portion of the wetland creation site that was not adequately constructed in 2007 was graded and planted in the spring of 2009. This area is located at the northwestern end of the project site near the adjacent quarry. During 2008 site monitoring, the wetland monitors GPS-located the boundaries of the different types of habitats within the creation area (PEM, PSS, PFO). The PSS and PFO areas were still forming, and most of the area was planted with mixes of both shrubs and trees, installed in clumps throughout the site and based on site conditions during planting (as described in the mitigation plan). The PEM areas geolocated in 2008 included the portions of the site that, due to hydrology or herbaceous plant density, appeared to be trending towards permanent stasis as a PEM wetland. Our 2008 findings indicated that the overall, completed creation site (all habitat types) was 3.9 acres. PFO/PSS habitats made up 2.2 acres of the site and PEM areas made up 1.7 acres of the site. The regraded portion of the site was installed as a continuation of the adjacent creation conditions, with ½ of the additional area graded with pit and mound microtopography and planted with tree species, and the other half (northern half) seeded for PEM development (to provide a total of 2.53 acres of PFO, PSS and PFO/PSS and 2.02 acres of PEM). This additional construction brought the creation area into congruence with the mitigation plan and permitted requirements: 4.55 acres. Grondin conducted the earthwork and installed herbaceous seed mix and 132 new trees in this area in spring 2009 (400/acre\*0.33 acre). Coarse woody debris was installed and covered approximately 4% of the extension. First year growing conditions seem to be adequate as the herbaceous community has grown well and there was no mortality noted among the planted shrubs and trees.

**2) The proposed vegetation diversity and density goals for woody plants from the plan are met.** Yes – the density of planted woody species exceeds the density goal and 12 of the 14 tree and shrub species planted at the mitigation site have densities greater than 50 plants per acre; therefore, the plant diversity goal for the site is also met.

The planted densities for the PSS/PFO creation areas were 600 shrubs/acre and 400 trees/acre. The planted density goal, as described in the Corps checklist, is 500 trees and shrubs per acre (of which at least 350 per acre are tree species for PFO creation areas). Based on the investigated plot data, the average density of shrubs was determined to be approximately 604 shrubs per acre and the average density of trees was determined to be approximately 390 trees per acre, for a total density of over 995 woody plants per acre. For additional details on the shrub and tree plantings, please see Table 7 in Appendix B.

**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 transect data, average aerial cover by non-invasive species was approximately 100% throughout the wetland creation site. The transect areas did not include some planned non-vegetated areas such as sand mounds (turtle nesting islands) and a few of the deeper pits and puddles 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.

While the average aerial percent cover of noninvasive hydrophytes within all PEM creation areas is 86%, two of the three emergent creation cells have less than 80% aerial cover by non-invasive hydrophytes. The southwestern PEM creation area has 76% cover by noninvasive hydrophytes, the southeastern PEM creation area has 107% and the northern PEM creation area has 74%. During the Year 1 monitoring effort in 2008, average aerial cover by non-invasive hydrophytes was determined to be 42%. Thus, percent aerial cover by non-invasive hydrophytic vegetation increased over 30% from 2008 to 2009. Monitors estimate that this trend will continue and do not suggest additional seeding at this time.

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

Yes.

Monitors observed 108% aerial cover by non-invasive hydrophytes in the southern scrub-shrub and forested creation area (herbaceous vegetation *and* woody vegetation). Twenty percent of the cover is by woody hydrophytes, and this number is expected to increase as the shrubs and trees continue to grow.

Ninety-three (93%) aerial cover by non-invasive hydrophytes was recorded in the northern scrub-shrub and forested creation areas (herbaceous vegetation *and* woody vegetation). Twenty-one percent (21%) of the cover is by woody hydrophytes, and this number is expected to increase as the shrubs and trees continue to grow.

**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.

The only invasive and noxious species observed within the creation area were purple loosestrife (*Lythrum salicaria*), bird's-foot trefoil (*Lotus corniculatus*), Japanese knotweed (*Polygonum cuspidatum*), reed canarygrass (*Phalaris arundinacea*), barnyard grass (*Echinochloa crusgalli*), common reed (*Phragmites australis*), and broad-leaf cattail (*Typha latifolia*). These were observed in very small numbers (eight percent cover by invasive species across the entire creation site) and were noted for further monitoring. The Japanese knotweed and purple loosestrife were hand removed in the summer of 2009. The common reed was chemically treated and removed in the summer of 2009. No treatments (mechanical or chemical) were applied to the small pockets of canarygrass, barnyard grass, cattail, or trefoil.

**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:**

Five soil profiles were investigated within the wetland creation site (three from the PEM areas and two from PSS/PFO areas). Soils observed consisted of dark and very dark A horizons underlain by grayish-brown horizons with redoximorphic features. Five of the five profiles investigated keyed as hydric following the Field Indicators for Identifying Hydric Soils in New England, Version 3 (HSNE3).

Please see Tables 1 through 5 in Appendix D for representative soil profile descriptions for each creation type. The HSNE3 hydric soil indicator reference is indicated in parentheses after the wetland creation type.

**Remediation:**

Some hand removal of small Japanese knotweed and purple loosestrife individuals occurred in the summer of 2009. Very few individuals were removed and observed. A very small patch of common reed was identified and chemically sprayed in the summer of 2009. The other problem species do not appear to be a threat to the creation site and will continue to be monitored.

**Erosion Control Measures:**

No erosion problems were observed onsite. Temporary measures, such as silt fence, were removed upon completion of the project in October 2007. Erosion control mulch remains in place around the lower 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 100%. The average percent cover of invasive species is approximately 8% (primarily by *Typha latifolia* and *Lotus corniculatus*).

**Fish and Wildlife Use at the Site:**

Please see Table 6 in Appendix D. Of particular note, a wood turtle (*Glyptemys insculpta*) was located within the creation area in early 2009. A rare animal reporting form was filed with MDIF&W. This is the second wood turtle identified on this creation site. In October 2009, Grondin found broken, predated turtle shells in one of the sandy turtle nesting islands installed during initial site construction. MDIF&W biologists were contacted and are unsure of the species – but signs indicate that the desiccated shells *could* be those of wood turtles. Monitors plan to conduct a site visit with MDIF&W in 2010.

**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 (*Aronia melanocarpa*, *Betula populifolia*, *Cornus sericea*, *Ilex verticillata*, *Salix discolor*, *Vaccinium corymbosum*, *Viburnum cassinoides*, and *Viburnum dentatum*) and tree species (*Acer rubrum*, *Fraxinus pennsylvanica*, *Larix laricina*, *Pinus strobus*, *Quercus bicolor*, and *Ulmus americana*) appear to be healthy and growing. Hydrology appears adequate for these plants and there is limited evidence of death from herbivory, flooding, or desiccation. These plants have a high likelihood of survival.

### 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 TRANSECTS AND AS BUILT CONDITIONS (additional maps can be available by request)

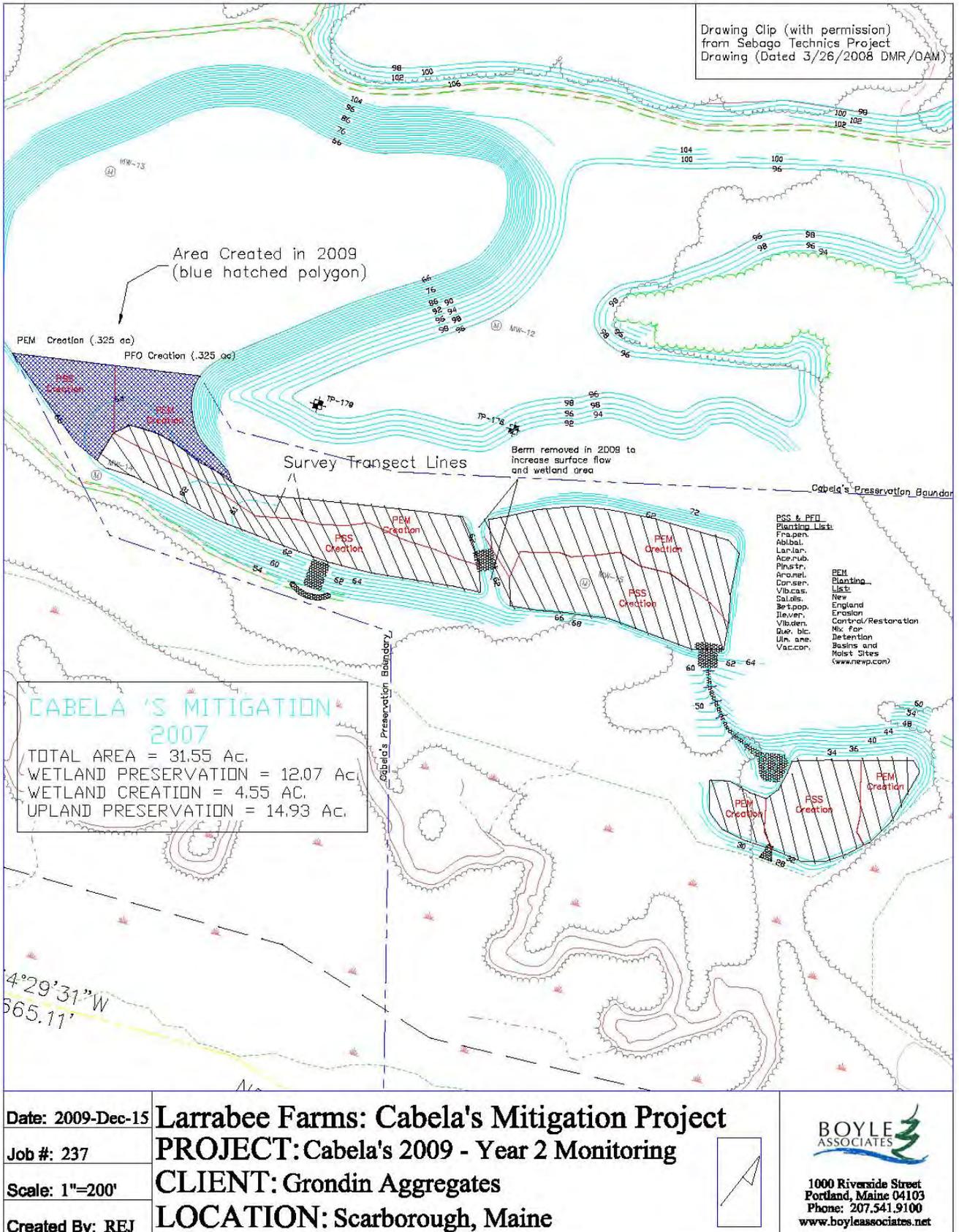


Figure 1. Site map and survey transect centerlines.

**Conclusions (1 page)**

In general, and as can be noted from the photographs and data, the wetland creation areas are responding well after two years 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 increased over 30% from the first year to the second year of growth. Wildlife usage within the wetland creation site and surrounding habitat preservation areas is abundant year-round. For example, a wood turtle (*Glyptemys insculpta*) was located within the creation area in early 2009. A rare animal reporting form was filed with MDIF&W. This is the second wood turtle identified on this creation site. In October 2009, Grondin found broken, predated turtle shells in one of the sandy turtle nesting islands that was installed during initial site construction. MDIF&W biologists were contacted and are unsure of the species – but signs indicate that the desiccated shells *could* be those of wood turtles. Monitors plan to conduct a site visit with MDIF&W in 2010.

The 0.65-acre extension of the wetland creation site was graded and planted in the winter of 2008 and spring of 2009, respectively. This area is located in the northwest portion of the creation site and appears to have adequate hydrology, plant survival and herbaceous vegetation establishment. This area will be monitored with the older creation areas during the 2010 monitoring effort.

The berm located between the two, upper wetland creation cells was also removed during 2009. This feature was originally constructed to control excess surface runoff from the adjacent quarry. A riprap drainage feature was left in the center of this berm and was observed to be functioning in terms of allowing overland flow between the two upper cells. However, as discussed before, the two PEM creation areas found on the northern end of the upper cells were drier in 2008 than anticipated. By converting the berm area into additional PEM wetland habitat, additional surface flow has been established at the existing PEM sites.

Finally, the lower creation cell (PEM and PSS) appears much wetter than in 2008. Hydrophytic plants are now dominant across the entire site, and soils show signs of prolonged saturation. Planted shrubs and trees are growing well, and there is no sign of significant invasion from non-native or invasive plants.

No remedial actions are requested or recommended.

**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 5 in Appendix D.
- A site map showing the Cabela's location in comparison to the overall Larrabee Farms site is attached in this appendix.

**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>Carex lurida</i>	Shallow Sedge	OBL	12
<i>Carex scoparia</i>	Pointed Broom Sedge	FACW	15
<i>Comptonia peregrina</i>	Sweet fern	UPL	1
<i>Juncus bufonius</i>	Toad Rush	FACW	2
<i>Juncus canadensis</i>	Canada Rush	OBL	1
<i>Juncus effusus</i>	Soft Rush	FACW+	25
<i>Juncus tenuis</i>	Path Rush	FAC-	1
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	FACU-	3
<i>Panicum sp.</i>	Grass species	NI	1
<i>Phalaris arundinacea</i>	Reed canarygrass	FACW+	1
<i>Polygonum pennsylvanicum</i>	Pennsylvania Smartweed	FACW	1
<i>Scirpus atrovirens</i>	Black bulrush	OBL	2
<i>Trifolium pratense</i>	Red Clover	FACU-	1
<i>Trifolium repens</i>	White Clover	FACU-	2
<i>Typha latifolia</i>	Broad-leaved Cattail	OBL	4

\*Being that this is the second 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.**

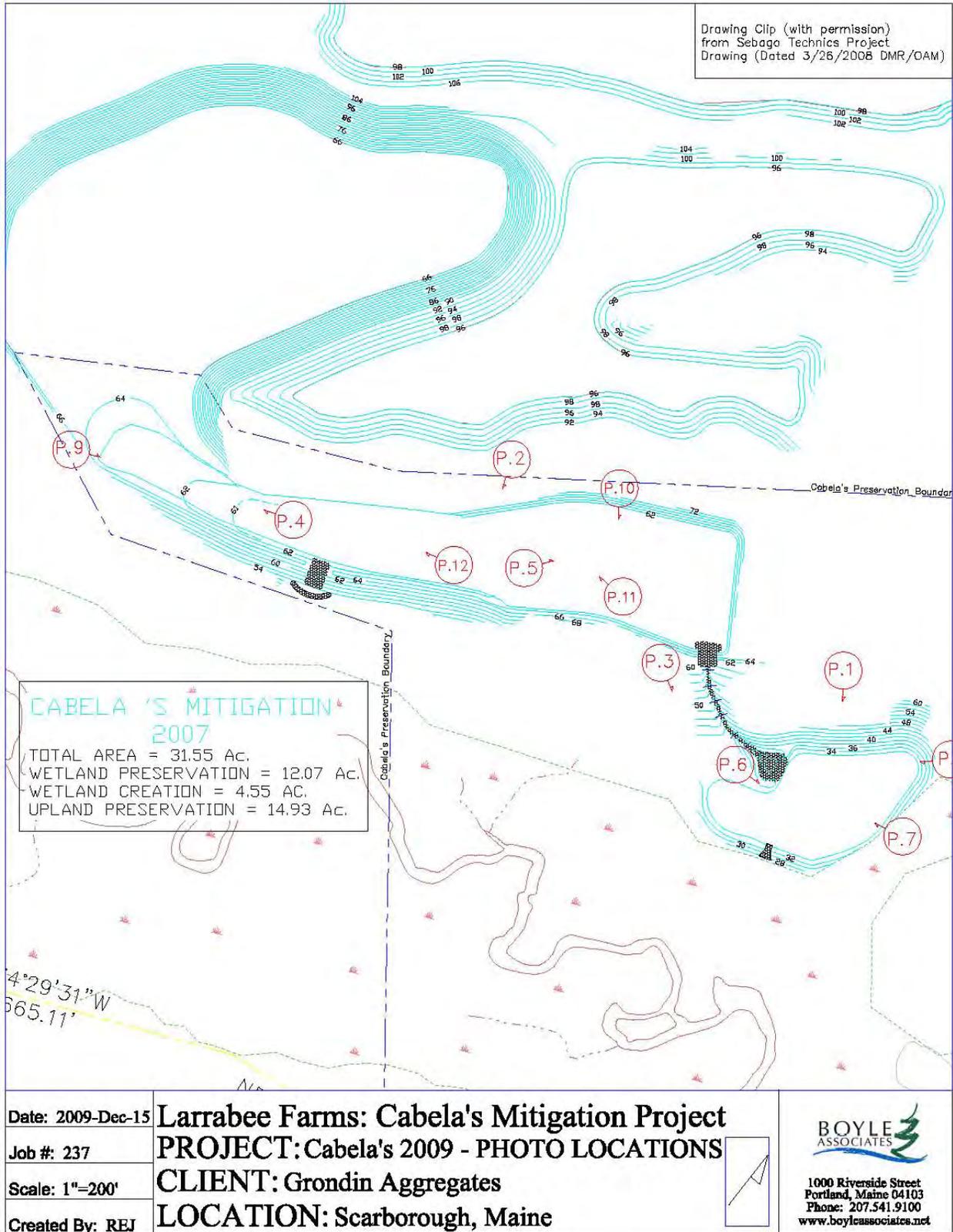


Figure 2. Photo locations for 2009 monitoring report (“P.1 = Photo 1, “P.2”= Photo 2, et cetera).



Photo 1 (pre-construction). Facing south towards southeastern wetland creation cell during soil tests, 07-Sep-2006.



Photo 1 (Year 2). Facing south towards southeastern wetland creation cell, 04-Aug-2009.



Photo 2 (Year of construction). Facing south towards separator berm and spillway between upper two cells, 28-Mar-2007.



Photo 2 (Year 2). Facing south towards former location of separator berm which was a spillway between upper two cells. The berm was removed in the spring of 2009, 05-Aug-2009.



Photo 3 (Year of construction). Facing southeast towards southeastern creation cell just after snowmelt in 2007, 28-Mar-2007.



Photo 3 (Year 2). Facing southeast towards southeastern creation cell during the summer, 04-Aug-2009.



Photo 4 (Year of construction). Facing west across northwestern creation cell at watering activities just after plant installation and mulching, 26-Sep-2007.



Photo 4 (Year 2). Facing northwest across northwestern creation cell, 05-Aug-2009.



Photo 5 (Year of construction). Facing northeast inside of northeastern creation cell after ½" rain event, 26-Oct-2007.



Photo 5 (Year 2). Facing northeast inside of northeastern creation cell, 05-Aug-2009.



Photo 6 (Year of construction). Facing southeast towards southeastern creation cell after ½" rain event, 26-Oct-2007.



Photo 6 (Year 2). Facing southeast towards southeastern creation cell, 04-Aug-2009.



Photo 7 (Year 1). Facing northwest at lower creation cell from southeastern boundary (over PEM towards PSS) during mitigation monitoring, 16-Sep-2008.



Photo 7 (Year 2). Facing northwest at lower creation cell from southeastern boundary (over PEM towards PSS) during mitigation monitoring, 04-Aug-2009.



Photo 8 (Year 1). Facing west across lower creation cell from northeastern boundary (over PEM), 16-Sep-2008.



Photo 8 (Year 2). Facing west across lower creation cell from northeastern boundary (over PEM), 04-Aug-2009.



Photo 9 (Year 1). Facing west across the upper wetland creation cell from the southwestern boundary, 16-Sep-2008.



Photo 9 (Year 2). Facing west across the upper wetland creation cell from the southwestern boundary, 05-Sep-2009.



Photo 10 (Year 1). Facing south/southwest across the eastern half of the upper creation cell, planted trees and shrubs are obscured by the herbaceous vegetation and photo washout in this picture, 16-Sep-2008.



Photo 10 (Year 2). Facing south/southwest across the eastern half of the upper creation cell, planted trees and shrubs are less obscured by the herbaceous vegetation during the 2009 growing season than the 2008 growing season, 05-Aug-2009.



Photo 11 (Year 1). Facing north/northwest across the eastern half of the upper creation area, 17-Sep-2008.



Photo 11 (Year 2). Facing north/northwest across the eastern half of the upper creation area, 05-Aug-2009.



Photo 12 (Year 1). Facing north/northwest across the western half of the upper creation cell, towards the quarry – planted shrubs and trees can be seen well in this picture, 17-Sep-2008.



Photo 12 (Year 2). Facing north/northwest across the western half of the upper creation cell, towards the quarry – planted shrubs and trees can be seen well in this picture, 05-Aug-2009.

**Appendix D. Tables**

**Table 1. Soil profile 1 in southwestern PEM creation area (HSNE3 Indicator XI B).**

<u>Depth</u>	<u>Horizon</u>	<u>Matrix</u>	<u>Redox</u>	<u>Texture</u>
0-11	A	10YR2/2	10YR3/4 – 5%	SL
11-14	B <sub>1</sub>	2.5Y4/2	10YR4/4 – 25% 10YR4/1 – 15%	VfSL
14-20+	B <sub>2</sub>	2.5Y5/2	10YR3/6 – 2% 2.5Y3/1 – 5% 2.5Y5/6 – 15%	SiL

**Table 2. Soil profile 2 in southern PSS/PFO creation area (HSNE3 Indicator VII<sup>1</sup>).**

<u>Depth</u>	<u>Horizon</u>	<u>Matrix</u>	<u>Redox</u>	<u>Texture</u>
0.5-0	O <sub>i</sub>			
0-6	A <sub>1</sub>	10YR2/2	None observed	VfSL
6-13	A <sub>2</sub>	10YR3/2	10YR3/6 – 5%	VfSL
13-22+	B	2.5Y5/2	10YR4/6 – 15% 10YR4/1 – 5%	CL

**Table 3. Soil profile 3 in southeastern PEM creation area (HSNE3 Indicator VII).**

<u>Depth</u>	<u>Horizon</u>	<u>Matrix</u>	<u>Redox</u>	<u>Texture</u>
0-12	A	10YR2/2	10YR3/4 – 2%	LS
12 – 20+	B <sub>1</sub>	2.5Y5/2	10YR4/6 – 5% 2.5Y4/3 – 25% 10YR4/1 – 2%	CL

**Table 4. Soil profile 4 in northern PSS/PFO creation area (HSNE3 Indicator VIII B).**

<u>Depth</u>	<u>Horizon</u>	<u>Matrix</u>	<u>Redox</u>	<u>Texture</u>
0-10	A	10YR3/1	None observed Sulfidic odor noticed	LS
10-18	A/B <sub>1</sub>	10YR3/1	2.5Y4/1 – 5% 10YR3/3 – 2%	LS
18-20+	B <sub>2</sub>	2.5YR5/2	10YR4/4 – 10% 10YR4/1 – 2%	S

**Table 5. Soil profile 5 in northern PEM creation area (HSNE3 Indicator VIII A).**

<u>Depth</u>	<u>Horizon</u>	<u>Matrix</u>	<u>Redox</u>	<u>Texture</u>
0-6	A	10YR3/2	7.5YR5/3 – 10% 10YR3/6 – 2%	LS
6-20+	B <sub>1</sub>	2.5Y3/1	5Y4/2 – 2% 2.5Y4/4 – 5%	LS

<sup>1</sup> This soil keys as HSNE3 Indicator VII because although there are two A horizons, they are both dark (moist colors with chroma 2 or less and values 3 or less) and combined are thick (greater than 10 inches and less than or equal to 15 inches).

**Table 6: Fauna Species List April through September 2009 (wetland creation area)**

Common Name	Scientific Name	Field ID Methodology	Use
<b>Birds:</b>			
Black-capped chickadee	<i>Parus atricapillus</i>	visual	feeding, nesting
American goldfinch	<i>Carduelis tristis</i>	visual	feeding, nesting
Song sparrow	<i>Melospiza melodia</i>	visual	feeding, nesting
Cedar waxwing	<i>Bombycilla cedrorum</i>	visual	feeding
Red-tailed hawk	<i>Buteo jamaicensis</i>	visual	feeding
American crow	<i>Corvus brachyrhynchos</i>	visual	feeding, roosting
Savannah sparrow	<i>Passerculus sandwichensis</i>	visual	feeding
Mallard	<i>Anas platyrhynchos</i>	visual	feeding
Killdeer	<i>Charadrius vociferus</i>	visual	feeding, nesting
European starlings	<i>Sturnus vulgaris</i>	visual	feeding
Wild turkey	<i>Meleagris gallopavo</i>	visual	feeding
Blue jay	<i>Cyanocitta cristata</i>	visual	feeding
Pileated woodpecker	<i>Dryocopus pileatus</i>	visual	feeding, roosting
Gray catbird	<i>Dumetella carolinensis</i>	visual	feeding
American robin	<i>Turdus migratorius</i>	visual	feeding
Flycatcher species	Empidonax species	visual	feeding
Northern flicker	<i>Colaptes auratus</i>	song	feeding
White-breasted nuthatch	<i>Sitta carolinensis</i>	visual	feeding
Chipping sparrow	<i>Spizella passerine</i>	visual	feeding
American woodcock	<i>Scolopax minor</i>	probe holes	feeding
Northern shrike	<i>Lanius excubitor</i>	visual	roosting
Snow buntings	<i>Plectrophenax nivalis</i>	visual	feeding
American kestrel	<i>Falco sparverius</i>	visual	feeding
Northern harrier	<i>Circus cyaneus</i>	visual	Feeding
Eastern bluebird	<i>Sialia sialis</i>	visual	Feeding, roosting, nesting
<b>Mammals:</b>			
White-tailed deer	<i>Odocoileus virginianus</i>	scat, tracks	feeding
Moose	<i>Alces alces</i>	tracks	feeding
Fox	<i>Vulpes vulpes</i>	visual	feeding
Raccoon	<i>Procyon lotor</i>	tracks	feeding
Coyote	<i>Canis latrans</i>	tracks	feeding
<b>Amphibians:</b>			
Green frog	<i>Rana clamitans</i>	visual	feeding, breeding
Wood frog	<i>Rana sylvatica</i>	visual	feeding, breeding
American toad	<i>Bufo americanus</i>	visual	feeding, breeding
Leopard frog	<i>Rana pipiens</i>	visual	feeding
Wood turtle*	<i>Glyptemys insculpta</i>	visual	feeding
Gray tree frog	<i>Hyla versicolor</i>	visual	feeding
Spring Peeper	<i>Hyla crucifer</i>	heard	feeding, breeding

\*Maine Species of Special Concern

<b>Table 7. Cabelas Wetland Mitigation Year Two Monitoring Results - 2009</b>							
<b>Scrub/Shrub and Forested Wetland Areas</b>							
<b>Plot #</b> ("S"=southern, lower cell; "N"=northern, upper cell) (Date Surveyed)	<b>Length (ft)</b> <b>Width (ft)</b>	<b>Area (sq. ft. then acreage)</b>	<b>Plants</b>	<b>Number of Plants</b>	<b>Tree &amp; Shrub Species/Acre</b>	<b>Trees /Acre</b>	<b>Shrubs /Acre</b>
<b>S5</b>	78	468	Cose	2	<b>838</b>	<b>279</b>	<b>558</b>
(8/4/09)	6	0.011	Frpe	2			
			Pist	1			
			Vica	2			
			Vide	2			
			<b>Total</b>	<b>9</b>			
<b>S6</b>	153	918	Acru	3	<b>949</b>	<b>617</b>	<b>332</b>
(8/4/09)	6	0.021	Frpe	2			
			Lala	3			
			Pist	1			
			Qubi	1			
			Ulam	3			
			Vica	7			
			<b>Total</b>	<b>20</b>			
<b>S7</b>	172	1032	Acru	1	<b>802</b>	<b>211</b>	<b>591</b>
(8/4/09)	6	0.024	Bepo	1			
			Cose	3			
			Frpe	1			
			Lala	1			
			Pist	1			
			Qubi	1			
			Sadi	2			
			Vaco	3			
			Vica	4			
			Vide	1			
			<b>Total</b>	<b>19</b>			
<b>S8</b>	179	1074	Acru	1	<b>852</b>	<b>446</b>	<b>406</b>
(8/4/09)	6	0.025	Bepo	1			
			Cose	4			
			Frpe	3			
			Ilve	2			
			Pist	5			
			Qubi	1			
			Ulam	1			
			Vaco	1			
			Vica	2			
			<b>Total</b>	<b>21</b>			
<b>S9</b>	153	918	Arme	4	<b>1329</b>	<b>285</b>	<b>1044</b>
(8/4/09)	6	0.021	Bepo	2			
			Cose	4			
			Frpe	2			
			Ilve	3			
			Pist	2			
			Qubi	2			
			Sadi	1			
			Vaco	2			
			Vica	3			
			Vide	3			
			<b>Total</b>	<b>28</b>			
<b>S10</b>	126	756	Arme	1	<b>864</b>	<b>403</b>	<b>461</b>
(8/4/09)	6	0.017	Bepo	2			
			Cose	2			
			Frpe	1			
			Ilve	2			
			Lala	3			
			Pist	1			
			Qubi	1			
			Ulam	1			
			Vica	1			
			<b>Total</b>	<b>15</b>			

Plot # ("S"=southern, lower cell; "N"=northern, upper cell) (Date Surveyed)	Length (ft) Width (ft)	Area (sq. ft. then acreage)	Plants	Number of Plants	Tree & Shrub Species/Acre	Trees /Acre	Shrubs /Acre
<b>S11</b> (8/4/09)	97 6	582 0.013	Acru	1	<b>1347</b>	<b>524</b>	<b>823</b>
			Arme	3			
			Bepo	2			
			Frpe	2			
			Lala	1			
			Pist	2			
			Qubi	1			
			Vica	5			
			Vide	1			
			<b>Total</b>	<b>18</b>			
<b>S12</b> (8/4/09)	67 6	402 0.009	Arme	1	<b>433</b>	<b>108</b>	<b>325</b>
			Bepo	1			
			Lala	1			
			Vica	1			
			<b>Total</b>	<b>4</b>			
<b>N2</b> (8/4/09)	25 6	150 0.003	Cose	1	<b>871</b>	<b>0</b>	<b>871</b>
			Vica	1			
			Vide	1			
			<b>Total</b>	<b>3</b>			
<b>N3</b> (8/4/09)	84 6	504 0.012	Acru	1	<b>1124</b>	<b>346</b>	<b>778</b>
			Bepo	1			
			Qubi	3			
			Vaco	1			
			Vica	2			
			Vide	5			
			<b>Total</b>	<b>13</b>			
<b>N4</b> (8/4/09)	110 6	660 0.015	Acru	1	<b>1254</b>	<b>330</b>	<b>924</b>
			Arme	3			
			Cose	3			
			Frpe	3			
			Lala	1			
			Sadi	2			
			Vaco	3			
			Vide	3			
			<b>Total</b>	<b>19</b>			
			<b>N5</b> (8/4/09)	130 6			
Cose	3						
Frpe	3						
Pist	2						
Qubi	1						
Ulam	2						
Vica	2						
Vide	1						
<b>Total</b>	<b>17</b>						
<b>N6</b> (8/4/09)	130 6	780 0.018			Acru	1	<b>1899</b>
			Arme	2			
			Bepo	6			
			Cose	5			
			Frpe	3			
			Ilve	2			
			Sadi	5			
			Ulam	3			
			Vaco	2			
			Vica	5			
<b>Total</b>	<b>34</b>						

Plot # ("S"=southern, lower cell; "N"=northern, upper cell) (Date Surveyed)	Length (ft) Width (ft)	Area (sq. ft. then acreage)	Plants	Number of Plants	Tree & Shrub Species/Acre	Trees /Acre	Shrubs /Acre						
<b>N7</b> (8/4/09)	126 6	756 0.017	Acru	1	1325	576	749						
			Bepo	3									
			Cose	1									
			Frpe	1									
			Ilve	4									
			Lala	3									
			Pist	3									
			Qubi	2									
			Sadi	1									
			Vaco	2									
			Vide	2									
			<b>Total</b>	<b>23</b>									
<b>N8</b> (8/4/09)	141 6	846 0.019	Arme	2	618	257	360						
			Cose	1									
			Frpe	1									
			Ilve	1									
			Lala	2									
			Qubi	1									
			Ulam	1									
			Vaco	2									
			Vica	1									
			<b>Total</b>	<b>12</b>									
			<b>N9</b> (8/4/09)	130 6				780 0.018	Acru	1	949	335	614
									Arme	1			
Bepo	2												
Cose	3												
Frpe	1												
Ilve	2												
Lala	1												
Pist	1												
Qubi	1												
Ulam	1												
Vica	3												
<b>Total</b>	<b>17</b>												
<b>N10</b> (8/4/09)	122 6	732 0.017	Acru	1	774	179	595						
			Arme	2									
			Bepo	2									
			Qubi	1									
			Ulam	1									
			Vica	5									
			Vide	1									
			<b>Total</b>	<b>13</b>									
<b>N11</b> (8/5/09)	111 6	666 0.015	Cose	2	850	262	589						
			Frpe	1									
			Lala	2									
			Ulam	1									
			Vaco	6									
			Vide	1									
			<b>Total</b>	<b>13</b>									
<b>N12</b> (8/5/09)	114 6	684 0.016	Bepo	1	573	318	255						
			Cose	1									
			Frpe	1									
			Pist	1									
			Qubi	1									
			Ulam	2									
			Vide	2									
			<b>Total</b>	<b>9</b>									
<b>N13</b> (8/5/09)	108 6	648 0.015	Arme	1	807	202	605						
			Cose	2									
			Frpe	1									
			Ilve	1									
			Lala	1									
			Qubi	1									
			Sadi	3									
			Vide	2									
<b>Total</b>	<b>12</b>												

Plot # ("S"=southern, lower cell; "N"=northern, upper cell) (Date Surveyed)	Length (ft) Width (ft)	Area (sq. ft. then acreage)	Plants	Number of Plants	Tree & Shrub Species/Acre	Trees /Acre	Shrubs /Acre
<b>N14</b>	110	660	Acru	1	<b>1320</b>	<b>198</b>	<b>1122</b>
(8/5/09)	6	0.015	Bepo	4			
			Cose	1			
			Ilve	6			
			Qubi	1			
			Ulam	1			
			Vaco	5			
			Vide	1			
			<b>Total</b>	<b>20</b>			
<b>N15</b>	101	606	Bepo	3	<b>934</b>	<b>144</b>	<b>719</b>
(8/5/09)	6	0.014	Ilve	3			
			Lala	1			
			Qubi	1			
			Sadi	1			
			Vica	1			
			Vide	3			
			<b>Total</b>	<b>13</b>			
<b>N16</b>	70	420	Frpen	1	<b>104</b>	<b>104</b>	<b>0</b>
(8/5/09)	6	0.010	<b>Total</b>	<b>1</b>			
<b>N17</b>	18	108			<b>0</b>	<b>0</b>	<b>0</b>
(8/5/09)	6	0.002	<b>Total</b>	<b>0</b>			
<b>N18</b>	22	132			<b>0</b>	<b>0</b>	<b>0</b>
(8/5/09)	6	0.003	<b>Total</b>	<b>0</b>			
<b>N19</b>	57	342	Cose	1	<b>127</b>	<b>0</b>	<b>127</b>
(8/5/09)	6	0.008	<b>Total</b>	<b>1</b>			
<b>N20</b>	66	396	Bepo	1	<b>660</b>	<b>220</b>	<b>440</b>
(8/5/09)	6	0.009	Cose	3			
			Frpa	1			
			Ulam	1			
			<b>Total</b>	<b>6</b>			
<b>N21</b>	71	426	Cose	3	<b>511</b>	<b>102</b>	<b>409</b>
(8/5/09)	6	0.010	Sadi	1			
			Ulam	1			
			<b>Total</b>	<b>5</b>			
<b>N22</b>	77	462	Acru	1	<b>754</b>	<b>283</b>	<b>471</b>
(8/5/09)	6	0.011	Bepo	2			
			Cose	2			
			Ulam	2			
			Vide	1			
			<b>Total</b>	<b>8</b>			
<b>N23</b>	80	480	Acru	1	<b>545</b>	<b>363</b>	<b>182</b>
(8/5/09)	6	0.011	Bepo	2			
			Ulam	3			
			<b>Total</b>	<b>6</b>			
<b>N24</b>	90	540	Acru	3	<b>807</b>	<b>645</b>	<b>161</b>
(8/5/09)	6	0.012	Qubi	1			
			Ulam	4			
			Vide	2			
			<b>Total</b>	<b>10</b>			

Plot # ("S"=southern, lower cell; "N"=northern, upper cell) (Date Surveyed)	Length (ft) Width (ft)	Area (sq. ft. then acreage)	Plants	Number of Plants	Tree & Shrub Species/Acre	Trees /Acre	Shrubs /Acre			
<b>N25</b> (8/5/09)	95	570	Acru	2	<b>1070</b>	<b>535</b>	<b>535</b>			
	6	0.013	Cose	2						
			Ilve	2						
			Lala	1						
			Qubi	2						
			Ulam	2						
			Vaco	2						
			Vide	1						
		<b>Total</b>	<b>14</b>							
<b>N26</b> (8/5/09)	87	522	Acru	3	<b>834</b>	<b>417</b>	<b>417</b>			
	6	0.012	Cose	2						
			Ilve	2						
			Lala	1						
			Ulam	1						
			Vaco	1						
			<b>Total</b>	<b>10</b>						
	<b>N27</b> (8/5/09)	83	498	Acru				2	<b>1050</b>	<b>612</b>
6		0.011	Arme	1						
			Cose	1						
			Frpe	1						
			Ilve	1						
			Lala	2						
			Ulam	2						
			Vaco	1						
			Vica	1						
			<b>Total</b>	<b>12</b>						
<b>N28</b> (8/5/09)		77	462	Acru	2	<b>1697</b>	<b>754</b>	<b>943</b>		
	6	0.011	Arme	2						
			Bepo	2						
			Cose	1						
			Ilve	4						
			Lala	2						
			Pist	1						
			Ulam	3						
			Vaco	1						
			<b>Total</b>	<b>18</b>						
	<b>N29</b> (8/5/09)	78	468	Acru	2				<b>1024</b>	<b>465</b>
6		0.011	Arme	2						
			Ilve	1						
			Lala	1						
			Qubi	1						
			Ulam	1						
			Vaco	1						
			Vica	2						
		<b>Total</b>	<b>11</b>							
<b>N30</b> (8/5/09)	74	444	Acru	1	<b>1472</b>	<b>589</b>	<b>883</b>			
	6	0.010	Arme	3						
			Lala	1						
			Qubi	1						
			Ulam	3						
			Vaco	4						
			Vica	1						
			Vide	1						
			<b>Total</b>	<b>15</b>						
	<b>N31</b> (8/5/09)	67	402	Acru				1	<b>975</b>	<b>217</b>
6		0.009	Ilve	3						
			Ulam	1						
			Vaco	3						
			Vica	1						
			<b>Total</b>	<b>9</b>						
<b>N32</b> (8/5/09)	58	348	Qubi	1	<b>751</b>	<b>376</b>	<b>376</b>			
	6	0.008	Ulam	2						
			Vaco	2						
			Vide	1						
			<b>Total</b>	<b>6</b>						
<b>N33</b> (8/5/09)	53	318	Acru	1	<b>685</b>	<b>411</b>	<b>274</b>			
	6	0.007	Ulam	2						
			Vide	2						
			<b>Total</b>	<b>5</b>						

Plot # ("S"=southern, lower cell; "N"=northern, upper cell) (Date Surveyed)	Length (ft) Width (ft)	Area (sq. ft. then acreage)	Plants	Number of Plants	Tree & Shrub Species/Acre	Trees /Acre	Shrubs /Acre
<b>N34</b> (8/5/09)	59 6	354 0.008	Acru	1	<b>984</b>	<b>738</b>	<b>246</b>
			Cose	1			
			Frap	2			
			Sadi	1			
			Ulam	3			
			<b>Total</b>	<b>8</b>			
<b>N35</b> (8/5/09)	66 6	396 0.009	Acru	1	<b>1430</b>	<b>330</b>	<b>1100</b>
			Arme	5			
			Cose	1			
			Frap	1			
			Qubi	1			
			Sadi	3			
			Vica	1			
			<b>Total</b>	<b>13</b>			
<b>N36</b> (8/5/09)	72 6	432 0.010	Acru	1	<b>1412</b>	<b>303</b>	<b>1109</b>
			Bepo	1			
			Cose	1			
			Frpe	1			
			Ilve	1			
			Qubi	1			
			Sadi	3			
			Vaco	1			
			Vica	1			
			Vide	3			
			<b>Total</b>	<b>14</b>			
<b>N37</b> (8/5/09)	71 6	426 0.010	Acru	2	<b>1738</b>	<b>716</b>	<b>1023</b>
			Arme	3			
			Bepo	2			
			Cose	1			
			Frpe	2			
			Lala	1			
			Qubi	2			
			Vica	3			
			Vide	1			
			<b>Total</b>	<b>17</b>			
<b>N38</b> (8/5/09)	70 6	420 0.010	Acru	2	<b>1659</b>	<b>933</b>	<b>726</b>
			Arme	2			
			Bepo	1			
			Frpe	4			
			Pist	1			
			Qubi	1			
			Ulam	1			
			Vaco	2			
			Vide	2			
			<b>Total</b>	<b>16</b>			
<b>N39</b> (8/5/09)	75 6	450 0.010	Acru	1	<b>1258</b>	<b>678</b>	<b>581</b>
			Bepo	1			
			Cose	3			
			Frpe	4			
			Ilve	1			
			Pist	1			
			Qubi	1			
			Vide	1			
			<b>Total</b>	<b>13</b>			

Plot # ("S"=southern, lower cell; "N"=northern, upper cell) (Date Surveyed)	Length (ft) Width (ft)	Area (sq. ft. then acreage)	Plants	Number of Plants	Tree & Shrub Species/Acre	Trees /Acre	Shrubs /Acre	
<b>N40</b> (8/5/09)	78	468	Arme	1	<b>1582</b>	<b>372</b>	<b>1210</b>	
	6	0.011	Bepo	2				
			Cose	2				
			Ilve	3				
			Lala	2				
			Ulam	2				
			Vica	1				
			Vide	4				
			<b>Total</b>	<b>17</b>				
<b>N41</b> (8/5/09)	78	468	Acru	2	<b>1862</b>	<b>1303</b>	<b>558</b>	
	6	0.011	Bepo	3				
			Cose	2				
			Frpe	1				
			Lala	3				
			Pist	3				
			Qubi	3				
			Sadi	1				
			Ulam	2				
		<b>Total</b>	<b>20</b>					
<b>N42</b> (8/5/09)	95	570	Acru	1	<b>1681</b>	<b>611</b>	<b>1070</b>	
	6	0.013	Arme	2				
			Bepo	1				
			Cose	2				
			Ilve	1				
			Lala	2				
			Pist	1				
			Qubi	3				
			Sadi	1				
		Ulam	1					
		Vaco	7					
		<b>Total</b>	<b>22</b>					
<b>N43</b> (8/5/09)	67	402	Ilve	2	<b>1409</b>	<b>542</b>	<b>867</b>	
	6	0.009	Lala	2				
			Pist	3				
			Sadi	2				
			Vica	4				
		<b>Total</b>	<b>13</b>					
<b>Total sq ft PSS/PFO Surveyed</b>		27126					<b>Species/Acre</b>	
<b>Total acreage PSS/PFO Surveyed</b>		0.62					<b>PSS Creation Average 604</b>	
							<b>PFO Creation Average 390</b>	
							<b>Total Woody Plants per Acre 995</b>	

Scientific Name	Common Name	ME Indicator Status	SW PEM Creation	S PSS/PFO Creation	SE PEM Creation	N PEM Creation	N PSS/PFO Creation	Average Creation Area
<i>*Agrostis perennans</i>	Upland Bentgrass	FACU		1	1	1	1	1
<i>*Agrostis stolonifera</i>	Creeping Bentgrass	FACW	25	24	3	20	22	19
<i>Carex lurida</i>	Shallow Sedge	OBL	10	10	20	10	10	12
<i>Carex scoparia</i>	Pointed Broom Sedge	FACW	15	15	15	15	14	15
<i>Comptonia peregrina</i>	Sweet fern	UPL	1	1	2			1
<i>Eleocharis sp.</i>	Spike-rush species	FACW+	1		1			0
<i>*Elymus virginicus</i>	Virginia Wild Rye	FACW-				3	5	2
<i>Eupatorium perfoliatum</i>	Common Boneset	FACW+	1	1	9			2
<i>*Euthamia graminifolia</i>	Grass leaved goldenrod	FAC	1	2	1	1	1	1
<i>Festuca rubra</i>	Creeping Red Fescue	FACU		1			1	0
<i>Juncus bufonius</i>	Toad Rush	FACW	2	5	5			2
<i>Juncus canadensis</i>	Canada Rush	OBL	1		2	1		1
<i>Juncus effusus</i>	Soft Rush	FACW+	20	30	40	20	15	25
<i>Juncus tenuis</i>	Path Rush	FAC-	4			3		1
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	FACU-	1			5	10	3
<i>Panicum clandestinum</i>	Deertongue	FAC+		1				0
<i>Panicum sp.</i>	Grass species	NI				3	2	1
<i>Phalaris arundinacea</i>	Reed canarygrass	FACW+		1	1	2	2	1
<i>Pheum pratense</i>	Timothy	FACU					1	0
<i>Polygonum pennsylvanicum</i>	Pennsylvania Smartweed	FACW				1	2	1
<i>Scirpus atrovirens</i>	Black bulrush	OBL			5	2	1	2
<i>*Scirpus cyperinus</i>	Woolgrass	FACW+			2	1		1
<i>Trifolium arvense</i>	Haresfoot Clover	NI		2				0
<i>Trifolium pratense</i>	Red Clover	FACU-	2	1		2	2	1
<i>Trifolium repens</i>	White Clover	FACU-	1	2	2	2	5	2
<i>Typha latifolia</i>	Broad-leaved Cattail	OBL			15	3		4
<i>Verbena hastata</i>	Blue Vervain	FACW+			1		1	0
Overall Average % aerial cover by herbaceous vegetation			85	97	125	95	95	
Overall Average % cover of non-invasive herbaceous vegetation			84	96	109	85	83	
Average % cover of hydrophytic non-invasive herbaceous vegetation in plot			76	88	107	74	72	
Average % cover of planted woody vegetation (= % hydrophytes)			0	20	0	0	21	
% aerial cover of non-invasive herbaceous & woody veg			84	116	109	85	104	
% aerial cover of non-invasive herbaceous & woody hydrophytes			76	108	107	74	93	
* in seed mix								
Red plants are considered invasive or noxious.								
Green plants are hydrophytes.								

**Appendix E: Permits**

DEPARTMENT OF THE ARMY PERMIT

Permittee The New England Expeditions – Scarborough, LLC, 220 Elm Street, Suite 104, New Caanan, CT 06840

Permit No. NAB-2006-3128

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 4.47 acres and indirectly impact approximately 0.69 acres of freshwater wetlands in order to develop two parcels into "The Gateway Shoppes at Scarborough", a mixed use commercial development. The cornerstone of the project is a 130,000 square foot Cabela's retail store but the combined development of the two parcels will also include space for smaller retailers, restaurants, a bank, office space, and a hotel.

This work is shown on the attached plans entitled "The New England Expeditions-Scarborough, LLC" on eight sheets revised "02-24-07".

Project Location:

In wetlands adjacent to an unnamed tributary to Mill Brook at Scarborough, Maine

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on 8 MAR 2012. 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. 141d).

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 325.7 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)

\_\_\_\_\_  
(DATE)

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

*Christie Gregory*  
\_\_\_\_\_  
(DISTRICT ENGINEER)

*3-27-07*  
\_\_\_\_\_  
(DATE)

*for* Curtis L. Thalken  
Colonel, Corps of Engineers  
District Engineer

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)

(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 adverse impacts on waters and wetlands 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. No temporary fill (e.g., access roads, cofferdams) may be placed in waters or wetlands unless specifically authorized by this permit.

4. The permittee shall implement all terms and conditions contained in the attached water quality certification from the Maine Dept. of Environmental Protection dated "3/1/07". Copies of all required submittals shall also be provided to the Corps.

5. Mitigation shall be performed in accordance with the attached mitigation plan entitled, "The Gateway at Scarborough, Scarborough, Maine, Wetland Mitigation Plan" and dated "September 2006 (Revised February 2007)".

6. Your responsibility to complete the required compensatory mitigation as set forth in Special Condition 5 will not be considered fulfilled until you have demonstrated mitigation success and have received written verification from the U.S. Army 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.

7. Prior to undertaking any of the permitted work, the permittee shall obtain exclusive right, title, or interest to the land parcel to be used for the wetland mitigation and shall forward proof of such to the Corps. This proof shall reference the permit number and shall be sent to: Department of the Army, New England District, Regulatory Division, Policy Analysis and Technical Support Branch, 696 Virginia Road, Concord, Massachusetts 01742-2751.

8. To assure successful completion of the wetland mitigation plan, the permittee shall execute a Performance Bond to provide financial assurance for the performance of the plan. The permittee shall provide the Corps with a draft performance bond using the Corps "Model Performance Bond" form. The performance bond will cover all aspects of plan implementation including contingency and inflation costs. The performance bond will

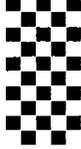
Special Conditions Continued on Page 5

Special Conditions Continued from Page 4

reference the permit number and specifically designate the permittee as the "Principal", the dollar amount of the financial assurance, and the designated entity as a bond surety who agrees to ensure performance if the permittee defaults. The bond shall be provided to the Corps for approval prior to any permitted work being undertaken. The bond shall be sent to: Department of the Army, New England District, Regulatory Division, Policy Analysis and Technical Support Branch, 696 Virginia Road, Concord, Massachusetts 01742-2751.

9. The permittee shall finalize, execute, and record the attached draft conservation easement to protect the mitigation land(s) shown on the attached plan entitled, "SITE MITIGATION PLAN OF: LARRABEE FARMS WETLAND MITIGATION PROJECT", in perpetuity. The permittee shall provide a final survey plan of the easement area that matches the legal description contained in the easement. A copy of the executed and recorded easement and plan shall be sent to the Corps of Engineers, Regulatory Division, Attn: Chief, Policy Analysis and Technical Support Branch, 696 Virginia Road, Concord, MA 01742-2751 within 120 days of the permit's issuance, but no later than 10 days after the date of the recording.

10. Upon satisfactory construction of the wetland mitigation as determined by the Corps, the permittee shall submit a second performance bond to be made as part of this permit to provide financial assurance for the completion of the monitoring and remediation portion of the compensation plan. As in Special Condition 8, the performance bond will specifically reference the permit number and designate the permittee as the "Principal", the dollar amount of the financial assurance, and the designated entity as a bond surety who agrees to ensure performance if the permittee defaults. The bond shall be provided to the Corps within 90 days of the Corps notification to do so. The bond shall be sent to: Department of the Army, New England District, Regulatory Division, Policy Analysis and Technical Support Branch, 696 Virginia Road, Concord, Massachusetts 01742-2751.



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

DEPARTMENT ORDER

IN THE MATTER OF

THE NEW ENGLAND EXPEDITION -  
SCARBOROUGH, LLC  
Scarborough, Cumberland County  
THE GATEWAY AT SCARBOROUGH  
L-23242-26-A-N (approval)  
L-23242-TG-B-N

) SITE LOCATION OF DEVELOPMENT ACT  
) NATURAL RESOURCES PROTECTION ACT  
) FRESHWATER WETLAND  
) WATER QUALITY CERTIFICATION  
) 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 NEW ENGLAND EXPEDITION – SCARBOROUGH, LLC with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. Summary: The applicant proposes a mixed use development on approximately 73 acres of land located on two parcels on the Payne Road in Scarborough. The project known as The Gateway at Scarborough includes Gateway Shoppes on a 40.9 acre parcel on the northwest side of Payne Road and Gateway Square on a 32.7 acre parcel on the southeast side of Payne Road. Gateway Shoppes includes a Cabela’s retail store, three retail facilities, two restaurants, parking areas, and access roads. Gateway Square includes a hotel, a restaurant, a bank, two retail facilities, and four office buildings. The total developed area is approximately 62 acres. The project is shown on a set of plans, the first of which is entitled “The Gateway at Scarborough,” prepared by OEST Associates, Inc., with a last revision date of February 26, 2007.

The applicant is seeking approval under the Natural Resources Protection Act (NRPA) to alter approximately 4.47 acres of freshwater wetland. The applicant also submitted an NRPA Permit by Rule Notification Form for the installation of new culverts under an existing access road (PBR #41783).

B. Current Use of Site: The site of the proposed Gateway Shoppes includes woodland, abandoned hay field, and a house and barn. The Gateway Square parcel includes wooded upland and a gravel road that provided access from Payne Road to a former gravel pit located on the site. The Gateway Square site also includes a manmade pond in the gravel pit and a small family cemetery.

STEVE HARDING  
OEST ASSOCIATES, INC.  
fax # 207-774-1246  
From ME DEP Land Bureau

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2. FINANCIAL CAPACITY:

The total cost of the project is estimated to be \$49,255,000. The applicant submitted a letter from Sovereign Bank, dated December 11, 2006, indicating that it intends to provide financing for this project. Prior to the start of construction, the applicant must submit evidence that it has been granted a line of credit or a loan by a financial institution authorized to do business in this State or evidence of any other form of financial assurance determined by Department Rules, Chapter 373(1), to be adequate to the Bureau of Land and Water Quality for review and approval.

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 OEST Associates, Inc, a professional engineering firm, and Woodlot Alternatives, Inc., an environmental consulting firm, to assist in the design and engineering of the project and its wetland compensation.

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

4. NOISE:

The applicant submitted a statement attesting to the minor nature of the sound generated by the traffic entering and departing the two sites. This sound is the primary source of noise from this development. This traffic will result in noise levels equal to or less than 70dBA which is 5dBA less than maximum limit of sound from the routine operation of developments outlined in Section 10(C)(1)(a)(i) of Department Rules (Chapter 375) and qualifies as a minor sound impact. The project site is located adjacent to a Maine Turnpike Exit, several commercial truck terminals, and two high volume roads, Payne Road and Haigis Parkway.

Based on the applicant's submission, the commercial development on adjacent properties, and the existing traffic volume on the Payne Road and the Haigis Parkway, the Department finds that the proposed project is a development with a minor sound impact.

5. SCENIC CHARACTER:

Gateway Shoppes and Gateway Square are located in the Town of Scarborough's Haigis Parkway District and the Exit 42 Economic Development Overlay District. The Gateway

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Shoppes parcel includes a large open area that was formerly pasture and hayfield. The Gateway Square parcel was formerly a gravel pit surrounded by a mixed forest. There are several commercial trucking terminals north of the site and single family houses south of the site on Payne Road. The scenic character of both sites has been impacted by past activities and adjacent commercial and residential development. The applicant is proposing an extensive landscaping plan to minimize the scenic impact and maintain the visual quality along this developed corridor.

Based on the project's location, the existing development on adjacent properties, and the proposed landscape plan, 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 proposed project. In its comments, MDIFW stated that it found no records of any essential or significant wildlife habitats, or other wildlife habitats of special concern associated with this site.

A small unnamed stream originates in a forested wetland and flows along the southerly boundary of the Gateway Shoppes parcel, crosses Payne Road flowing through scrub-shrub, forested and open water wetlands that border the development on the Gateway Square parcel. MDIFW stated that this stream is a tributary to Mill Brook and supports white sucker, nine-spine stickleback and American eel. MDIFW recommended that the applicant maintain a 100-foot undisturbed buffer along this stream corridor on the Gateway Shoppes parcel. The applicant designed its project to meet this standard by maintaining 2:1 side slopes and installing a retaining wall along the southern project boundary.

The Department finds that the applicant has made adequate provision for the protection of wildlife and fisheries.

7. HISTORIC SITES AND UNUSUAL NATURAL AREAS:

In a letter dated July 13, 2006, the Maine Historic Preservation Commission (MHPC) determined that the area within 100 meters of the unnamed stream that crosses the project site is sensitive for prehistoric archaeological sites and requested that a Phase I prehistoric archaeological survey be completed. The MHPC also determined that the project area contains the Libby homestead site, ME383-010, which was identified in 1989 during a Maine Department of Transportation survey and requested a Phase II historic archaeological survey to assess the National Register status of the site.

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In a letter dated December 15, 2006, the MHPC withdrew its request for further archaeological survey work next to the stream after reviewing a walkover report and summary of observations prepared by an archaeological consultant.

In a letter dated February 13, 2007, the MHPC stated that it had reviewed the results of the cultural surveys of the Libby homestead and concluded that the proposed development will have no effect upon any structure or site of historic, architectural, or archaeological significance as defined by the National Historic Preservation Act of 1966.

The Maine Natural Areas Program database does not contain any records documenting the existence of rare or unique botanical features on the project site and, as discussed in Finding 6, MDIFW did not identify any unusual wildlife habitats located on the project site.

The Department finds that the proposed development will not have an adverse effect on the preservation of any historic sites or unusual natural areas either on or near the development site.

8. BUFFER STRIPS:

The applicant proposes to maintain a 100-foot undisturbed buffer along the defined stream channel as described in Finding 6.

The Department finds that the applicant has made adequate provision for buffer strips.

9. SOILS:

The applicant submitted a soil survey map and report and a geotechnical report based on the soils found at the project site. These reports were prepared by a certified soils scientist and a registered professional engineer and were reviewed by staff from the Division of Environmental Assessment of the Bureau of Land and Water Quality (DEA).

The Department finds that, based on these reports 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.

10. STORMWATER MANAGEMENT:

The proposed project includes approximately 42 acres of impervious area and 62 acres of developed area. It lies within the watershed of Mill Brook which flows into the Scarborough Marsh, a coastal marsh and estuary. 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 catchbasins, a subsurface storm drain collection system, and five wet ponds.

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A. Basic Standards:

(1) Erosion and Sedimentation Control: The applicant submitted an Erosion and Sedimentation Control Plan (Section 14 of the application) 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 Bureau of Land and Water Quality (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 to the start of construction, the applicant must conduct a pre-construction meeting. 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, 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. To insure that the stormwater system is properly maintained, DWM recommended that no snow cleared from the project site be dumped or stored in or adjacent to a wet pond or in any protected natural resource and that this requirement be added to the maintenance plan. Prior to the start of construction, the applicant must submit to the BLWQ for review and approval a revised maintenance plan with all snow storage areas for the proposed project clearly marked on revised plan sheets.

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

Provided the measures outlined above are complied with, and 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).

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B. General Standard:

(1) The applicant's stormwater management plan includes BMP 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 BMPs that will control runoff from no less than 95% of the impervious area and no less than 80% of the developed area.

The best management practices proposed to meet the Chapter 500, General Standard were reviewed by, and revised in response to comments from DWM staff. DWM stated that the proposed project is in compliance with the Chapter 500 General Standard.

Based on DWM's review of the stormwater management plan, the Department finds that the proposed project meets the General Standard contained in Chapter 500(4)(B).

C. Flooding Standard:

The applicant is proposing to utilize a stormwater management system based on estimates of pre- and post-development stormwater runoff flows obtained by using Hydrocad, a stormwater modeling software that utilizes the methodologies outlined in Technical Releases #55 and #20, U.S.D.A., Soil Conservation Service and detains stormwater from 24-hour storms of 2-, 10-, and 25-year frequency. The post-development peak flow from the site will not exceed the pre-development peak flow from the site.

The stormwater management system proposed by the applicant was reviewed by, and revised in response to, comments from DWM. In its comments, DWM stated that the proposed system complies with the Chapter 500 Flooding Standard.

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.

The Department further finds that the proposed project will meet the Chapter 500 standards for management of stormwater discharges and discharge to freshwater wetlands.

11. GROUNDWATER:

The project site is located over a mapped significant sand and gravel aquifer as confirmed by a DEA geologist. This aquifer is located the southern half of the Gateway Square parcel and is the location of a manmade pond that the applicant proposes to modify and

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use as a wet pond to treat stormwater from this developed parcel. The applicant excavated eight test pits adjacent to this manmade pond to assess the extent of sand deposits and glaciomarine clay in the subsurface deposits in this former gravel pit. The test pits showed extensive deposits of low permeability clay adjacent to the pond. This deep clay layer will prevent the migration of stormwater pollutants into the groundwater. DEA reviewed these data and stated that the use of the existing pond for stormwater treatment will have a minor impact on groundwater and the impact will be limited to the project site provided that the bottom elevation of pond is 49 feet, as designed, the basin outlet is properly installed and maintained, and no sand layers are encountered during pond construction. If sand layers are encountered during pond construction, the applicant proposes to cover these layers with 12-inches of clay. DEA stated that this measure is adequate to protect the groundwater from stormwater pollutants.

Provided that the applicant complies with the measures outlined above, the Department finds that the proposed project will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur. Therefore, the Department further finds that the proposed project will not have an unreasonable adverse effect on ground water quality.

12. WATER SUPPLY:

When completed, the proposed project is anticipated to use 50,045 gallons of water per day. Water will be supplied by the Portland Water District. The applicant submitted a letter from the District, dated July 28, 2007, 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.

13. WASTEWATER DISPOSAL:

When completed, the proposed project is anticipated to discharge 54,045 gallons of wastewater per day to the Scarborough Sanitary District's wastewater treatment facility. The applicant submitted a letter from the Scarborough Sanitary District stating that it will accept these flows. This project was reviewed by the Division of Water Quality Management of the Bureau of Land and Water Quality (DWQM), which commented that the Scarborough Sanitary District has the capacity to treat these flows and is operating in compliance with the water quality laws of the State of Maine.

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.

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14. SOLID WASTE:

When completed, the proposed project is anticipated to generate 80 tons of general office solid waste per year. All general solid wastes from the proposed project will be disposed of at the ecomaine incinerator in Portland, which is currently in substantial compliance with the Solid Waste Management Regulations of the State of Maine.

The proposed project will generate approximately 4,500 cubic yards of stumps and grubblings. All stumps and grubblings generated will be disposed of on site, either chipped or burned, with the remainder to be worked into the soil, in compliance with Solid Waste Management Regulations of the State of Maine.

During construction the project will generate approximately 16 tons of construction debris and demolition debris per week. All construction and demolition debris generated will be disposed of at Riverside Recycling in Portland or the Community Recycling Center of Scarborough, which are both 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.

15. 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.

16. WETLAND IMPACTS:

The applicant proposes to alter 4.47 acres of freshwater wetlands to construct Gateway Shoppes and Gateway Square. This total includes altering 2.49 acres of wet meadow, 1.29 acres of forested, and 0.69 of mixed forested/shrub/open water wetlands. The latter is a freshwater wetland of special significance because it has 29,000 square feet of open water and emergent marsh vegetation.

The Department's Wetlands and Waterbodies Protection Rules, Chapter 310, require 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. The applicant submitted an alternatives analysis for the proposed project completed by Woodlot Alternatives, Inc. and Pierce Atwood LLP dated September 15, 2006. This analysis described the project

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need and purpose, analyzed the project site selection criteria, and outlined efforts to avoid wetland impacts. The purpose of the project is to develop an economically viable mixed-use commercial development of hotel, retail, restaurant, and office uses, featuring Cabela's as a destination retail anchor. The development must be located north of New Hampshire along the Interstate 95 (I-95) corridor. Cabela's is a retail business specializing in outdoor recreation and includes retail sites as well as catalog and internet sales. The detailed alternatives analysis evaluated 70 sites to determine feasibility, logistical suitability, and potential natural resource impacts. The analysis considered the market area, zoning, traffic/access, visibility, and natural resource impact. All the sites had to be large enough to support a Cabela's store, located in southern Maine and be within 0.50 mile of I-95. After completing the analysis, the applicant selected the Scarborough site adjacent to Maine Turnpike Exit 42 as the least environmentally damaging practicable alternative that met the project purpose.

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. The applicant designed the development to minimize freshwater wetland impacts by moving buildings away from wetlands, using 2:1 side slopes for road embankment slopes and using vertical retaining walls for service driveways around buildings that are adjacent to wetlands.

C. Compensation. Compensation is required to achieve the goal of no net loss of wetland functions and values. Based on the total wetland alteration of 4.47 acres and the loss of wetland values and functions to develop the Gateway Shoppes and Gateway Square, the applicant is required to provide wetland compensation in the amount of 5.16 acres. This total includes 1:1 compensation for altering 3.78 acres in wetlands not of special significance and 2:1 compensation for altering 0.69 acre in a wetland of special significance. The applicant's consultant conducted a compensation site search in the Town of Scarborough and developed a master list of over 50 candidate sites that were then ranked based on location adjacent to existing conservation areas, wetland type and habitat value, size, and opportunity for restoration, creation or enhancement. In August 2006, the consultant met with state and federal agency staffs to review the site search, evaluate compensation ratios, and present preferred options for compensation. The agencies found that the site search was sufficient and concurred that, in the absence of any wetland restoration opportunities, the Larrabee Farms mitigation site owned by Grondin Aggregates, LLC (Grondin) offered the best opportunity for wetland compensation by creation and preservation.

The Larrabee Farms site is a 284-acre parcel owned by Grondin and located southwest of the corner of Route 114 and Beech Ridge Road in Scarborough. It contains forested uplands, former agricultural lands, reclaimed and active sand/gravel pits and a section of the Nonesuch River and its floodplain. Since 2002, Grondin and a team of wetland professionals and geologists have conducted hydrogeologic studies and developed a large scale wetland mitigation or compensation plan that includes designated areas for wetland creation and preservation. The total area for wetland creation is approximately 45 acres

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that will be constructed over a period of 10 or more years after which the entire 284 acre parcel will be protected by a conservation easement that will be held by the Town of Scarborough or a land trust.

The Gateway at Scarborough compensation area, known as Wetland Creation Area 2A, is located in the south central portion of the site. It consists of open fields that have developed in an old reclaimed quarry area. Shallow soils and exposed ledge characterize the central portion of the proposed creation area. The proposed compensation plan will replace the 4.47 acres of wetland impact with 4.55 acres of wetland creation and an additional 27 acres of wetland and upland preservation resulting in a proposed compensation package that will provide 7.93 acres of wetland compensation credits. These credits are based on the minimum required ratios in the Wetland Protection Rules (Chapter 310) of 1:1 for creation in wetland not of special significance, 2:1 for creation in wetland of special significance, and 8:1 for preservation of wetland and adjacent upland areas. The proposed compensation plan entitled "The Gateway at Scarborough, Scarborough, Maine – Wetland Mitigation Plan," prepared by Woodlot Alternatives, Inc., with a last revision date of February 27, 2007 will be implemented by Grondin and completed by 2008. Post-construction monitoring will continue for a minimum of five years.

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.

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 proposed wetland mitigation plan is successfully implemented and monitored as proposed.

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- 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 provided that, prior to the start of construction, the applicant submits evidence that it has been granted a line of credit or a loan by a financial institution authorized to do business in this State or evidence of any other form of financial assurance determined by Department Rules, Chapter 373(1), to be adequate to the BLWQ for review and approval.
- 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.
- 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.
- D. The proposed development meets the standards for stormwater management in Section 420-D and the standard for erosion and sedimentation control in Section 420-C provided that the applicant holds a pre-construction meeting, retains the services of a third party inspector in accordance with the Special Condition for Third Party Inspection Program, attached to this Order, and submits a revised maintenance plan and revised plan sheets with all snow storage areas clearly marked.
- E. The proposed development will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur provided that, on the Gateway Square parcel,

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the applicant constructs the pond as designed and covers any layers of sand with 12-inches of clay, if encountered during pond construction.

- 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.
- 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 NEW ENGLAND EXPEDITION – SCARBOROUGH, LLC to develop The Gateway at Scarborough, 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, attached to this Order.
6. Prior to 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.
7. The applicant shall construct the pond on the Gateway Square parcel as designed, and shall cover all sand layers with 12-inches of clay, if encountered during pond construction.

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- 8. Prior to the start of construction, the applicant shall submit evidence that it has been granted a line of credit or a loan by a financial institution authorized to do business in this State or evidence of any other form of financial assurance determined by Department Rules, Chapter 373(1), to be adequate to the BLWQ for review and approval.
- 9. Prior to the start of construction, the applicant shall submit to the BLWQ for review and approval a revised maintenance plan and revised plan sheets with all snow storage areas clearly marked. No snow shall be dumped or stored in or adjacent to a wet pond or in any protected natural resource.

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.

DONE AND DATED AT AUGUSTA, MAINE, THIS 1<sup>ST</sup> DAY OF March, 2007.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

By:



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DAVID P. LITTELL, COMMISSIONER

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: September 28, 2006

Date of application acceptance: October 18, 2006

Date filed with Board of Environmental Protection

DBB/ATS60871/60872/L23242AN&BN