

11. SIGNIFICANT NATURAL FEATURES

11.1 UNUSUAL NATURAL AREAS

In support of the original permit application for the Technology Park, Woodard & Curran contacted the Maine Department of Conservation in May 2010 regarding the existence of rare or endangered botanical features within the area of the proposed Technology Park. A response was received from the Maine Natural Areas Program in May 2010. The response letter stated that no rare botanical features were documented within the project area. The development of LCE within the Technology Park will not affect any unusual natural areas. A copy of the correspondence was provided as part of the original application dated November 5, 2010, and can be provided again if required.

11.2 WILDLIFE AND FISHERIES

In support of the original permit application, Woodard & Curran contacted the Maine Department of Inland Fisheries and Wildlife (IF&W) in May 2010 for review of any known areas of significant wildlife habitats within the area of the proposed site. A response was received from IF&W in June 2010. The response letter stated that there were no known threatened/endangered fish species or habitat in the vicinity of the proposed project. In addition, there were also no known fisheries resources within the proposed project area.

Since that time, it is our understanding that the Northern Long Eared Bat has been listed as a threatened species in the state of Maine. A request for an official species list was made through the U.S. Fish & Wildlife's online Information for Planning and Conservation program. This list is attached, and confirms that the Northern Long Eared Bat habitat includes our project area; however, there are no critical habitat areas located within our project area.

It is our understanding based on a review of U.S. Fish & Wildlife information that this species of bats typically lives in caves during the winter months, and in trees larger than 3 inches in diameter (DBH) during the summer, with migration between these two habitats in the spring in the fall. The clearing of trees greater than 3 inches will be required for the completion of the project; however, project construction, beginning with tree clearing, is anticipated to begin in the winter of 2016. Tree clearing will not occur at a time when bats are utilizing the trees as habitat. In addition, a tree assessment was completed for the entire Technology Park and submitted as part of the original application. Stands of significant trees have been identified to be maintained, helping to maintain some summer bat habitat in place on the property.

It is not anticipated that this project will have a significant impact on the Northern Long Eared Bat Species. The project will be reviewed by U.S. Fish & Wildlife as part of the Army Corps of Engineers review process.

11.3 SIGNIFICANT TREE ASSESSMENT

A tree assessment of significant tree resources was completed on April 3, 2007 by Woodlot Alternatives, Inc. Trees with potential significance with regards to age, size, form, function, and/or species were identified in support of the original permit application. This included trees that appeared to belong to an older-than-average age class for the forested area, trees with an unusual height, crown size, and/or girth (measured in diameter at breast height or DBH), trees located in or adjacent to wetland resources, and trees in exceptional health for the species. There were approximately 12 individual trees and 12 tree clusters that were identified to be significant. A copy of the Woodlot report was provided as part of the original application dated November 5, 2010.

Care has been taken to preserve significant trees to the extent possible. An updated Tree Preservation Plan with the new LCE 4 layout is attached. Clearing has increased slightly within the setbacks, but is still well below the limits defined in the City's Code of Ordinances.

11.4 WETLANDS

Several areas of forested wetlands border the perimeter of the Site; a wetland delineation and functional assessment was first conducted by Dames and Moore for the site in May 1998. The City followed up with a wetland reconnaissance

in December 2006 by S.W. Cole and hired URS to perform a vernal pool assessment in April and May 2006; copies of these reports were provided as part of the original application.

Boyle Associates completed an evaluation of the wetlands and vernal pools as part of a City-wide Wetland Compensation Opportunities Assessment in July 2009. Boyle Associates then revisited the site in early December 2010 to collect additional information and complete the Vernal Pool Assessment forms to file with Maine Department of Environmental Protection (MDEP) & the Department of Inland Fisheries and Wildlife (IF&W). None of the potential vernal pools identified by URS and Boyle Associates have the criteria necessary to be classified as “significant vernal pools” by the NRPA rules and none of the wetlands in the area of the proposed Site are classified as “wetlands of special significance”. Wetland delineation reports that were submitted with the previous permit application for the Technology Park have not been attached to this application, but can be provided as required.

The Portland Technology Park was originally permitted for a total wetland impact of 37,416 square feet. With the proposed changes to LCE 4, and the associated realignment of the access road and adjacent lots, wetland impacts have changed. The total wetland impact is now 37,409 square feet, and the locations of some of the impacts have changed.

Approximately 5,243 square feet of wetland impacts have already occurred at the site with the construction of the roadway. Approximately 1,676 square feet of wetland impacts will occur as a result of the LCE 4 development, including both lot and new road impacts. Following the completion of the LCE 4 work, the total wetland impacts will have reached 6,919 square feet (road and LCE 4).

The wetland impacts anticipated for the LCE property include a small area of wetland impacts in the northwest corner of the lot, near a proposed dumpster enclosure. This area of impact is reduced from the previous design, and eliminates direct impact to a nearby vernal pool. The remainder of the impacts are associated with the outlet for Gravel Wetland 8. Much of the outlet impact overlaps with the location of the future roadway; however the impact is counted as part of the LCE 4 development that will occur before the road is constructed.

The project was originally divided into two phases for wetland impacts. Phase 1 included the entire road and LCEs 1 and 2, with a wetland impact of 14,669 square feet. This phasing was approved by the Maine DEP and the Army Corps of Engineers as part of the Technology Park permitting process with the understanding that following completion of Phase 1, an in lieu fee for wetland compensation would be paid to the State. As part of our permit applications to Maine DEP and the Army Corps, we are requesting to adjust the phasing such that the first phase will include LCE 1, LCE 2, LCE 4, the portion of the road completed to date, and the portion of the road to be constructed with LCE 4. The total wetland impact for Phase 1 will then be 14,588 square feet. Wetland impact figure WI-01 is attached, and shows the wetland impact areas along with proposed (revised) wetland phasing boundaries. Wetland impacts and phasing boundaries will be reviewed as required with the development of each lot.

11.5 HISTORIC SITES

A narrative on the historic sites in the vicinity of the Portland Technology Park and potential impacts was provided as part of the original application; no impacts to significant historical and cultural resources within the vicinity to the project area are anticipated to result from the proposed development. Refer to the original application dated November 5, 2010, for additional information.

A similar request for review was submitted in 2014 associated with Maine DEP and Army Corps permit revisions for gas service installation in the Technology Park. Maine Historic Preservation confirmed in December 2014 that the proposed gas line work would have no adverse effect on historic properties. This latest response is attached for your reference.

The project area has not changed since either of the two Maine Historic Preservation Reviews have been completed, and no impacts to significant historical and cultural resources within the vicinity to the project area are anticipated to result from the proposed development.

11.6 ATTACHMENTS

- Official Species List
- Tree Plan
- Wetland Impact Figure
- 2015 Maine Historic Preservation Commission Response



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Maine Ecological Services Field Office

17 GODFREY DRIVE, SUITE 2

ORONO, ME 04473

PHONE: (207)866-3344 FAX: (207)866-3351

URL: www.fws.gov/mainefieldoffice/index.html

Consultation Code: 05E1ME00-2015-SLI-0413

September 25, 2015

Event Code: 05E1ME00-2015-E-00573

Project Name: Portland Technology Park

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies the threatened, endangered, candidate, and proposed species and designated or proposed critical habitat that may occur within the boundary of your proposed project or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC Web site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the Endangered Species Consultation Handbook at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

This species list also identifies candidate species under review for listing and those species that the Service considers species of concern. Candidate species have no protection under the Act but are included for consideration because they could be listed prior to completion of your project. Species of concern are those taxa whose conservation status is of concern to the Service (i.e., species previously known as Category 2 candidates), but for which further information is needed.

If a proposed project may affect only candidate species or species of concern, you are not required to prepare a Biological Assessment or biological evaluation or to consult with the Service. However, the Service recommends minimizing effects to these species to prevent future conflicts. Therefore, if early evaluation indicates that a project will affect a candidate species or species of concern, you may wish to request technical assistance from this office to identify appropriate minimization measures.

Please be aware that bald and golden eagles are not protected under the Endangered Species Act but are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.). Projects affecting these species may require development of an eagle conservation plan:

http://www.fws.gov/windenergy/eagle_guidance.html Information on the location of bald eagle nests in Maine can be found on the Maine Field Office Web site:

<http://www.fws.gov/mainefieldoffice/Project%20review4.html>

Additionally, wind energy projects should follow the wind energy guidelines:

<http://www.fws.gov/windenergy/> for minimizing impacts to migratory birds and bats. Projects may require development of an avian and bat protection plan.

Migratory birds are also a Service trust resource. Under the Migratory Bird Treaty Act, construction activities in grassland, wetland, stream, woodland, and other habitats that would result in the take of migratory birds, eggs, young, or active nests should be avoided. Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm> and at:

<http://www.towerkill.com>; and at:
<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Portland Technology Park

Official Species List

Provided by:

Maine Ecological Services Field Office

17 GODFREY DRIVE, SUITE 2

ORONO, ME 04473

(207) 866-3344

<http://www.fws.gov/mainefieldoffice/index.html>

Consultation Code: 05E1ME00-2015-SLI-0413

Event Code: 05E1ME00-2015-E-00573

Project Type: DEVELOPMENT

Project Name: Portland Technology Park

Project Description: Development of a lot within a previously permitted technology park in Portland, Maine in 2016.

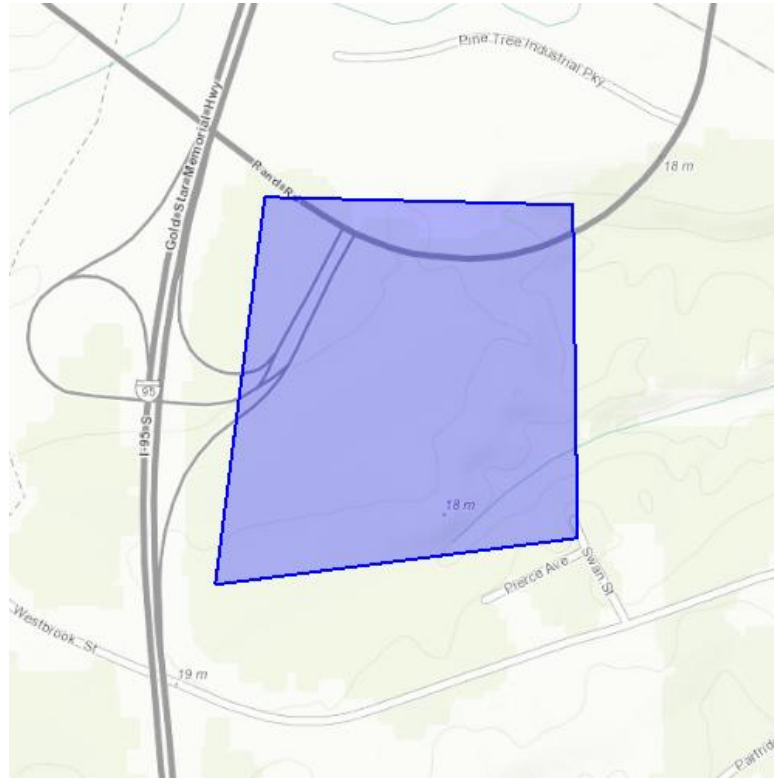
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Portland Technology Park

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-70.33015966415405 43.6665988334234, -70.32492399215698 43.666490180504134, -70.32484889030457 43.66240779260367, -70.3309965133667 43.66184120352345, -70.33015966415405 43.6665988334234)))

Project Counties: Cumberland, ME



United States Department of Interior
Fish and Wildlife Service

Project name: Portland Technology Park

Endangered Species Act Species List

There are a total of 1 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Mammals	Status	Has Critical Habitat	Condition(s)
Northern long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened		



United States Department of Interior
Fish and Wildlife Service

Project name: Portland Technology Park

Critical habitats that lie within your project area

There are no critical habitats within your project area.

Calculation for Tree Preservation within Setback

City Code of Ordinances

Sec. 14-526. Site plan standards (b) Environmental Quality Standards. 2. Landscaping and Landscape Preservation a. Landscape Preservation (ii) All development subject to zoning setbacks shall preserve a minimum of 30% of existing trees ten (10) inches DBH or greater within the required setback area.

	Length Along PL (ft)	Setback Depth (ft)	Area (ft ²)	
Preservation Within Setback	P1	283	50	14,150
	P2	130	50	6,500
	P3	120	50	6,000
	P4	122	50	6,100
	P5	191	25	4,775
	P6	295	25	7,375
	P7	244	25	6,100
	P8	777	25	19,425
Total Area Preserved			70,425	
% Trees Preserved within Setbacks*			64%	
Minimum % Required			30%	
Clearing Within Setback	C1	315	50	15,750
	C2	49	50	2,450
	C3	221	25	5,525
	C4	427	25	10,675
	C5	182	25	4,550
	Total Area Cleared			38,950
% Trees Cleared within Setbacks*			36%	
Maximum % Allowed			70%	

P1, 2, 3... = Length of tree preservation within setback; refer to dimensions noted on Plan
C1, 2, 3... = Length of tree clearing within setback; refer to dimensions noted on Plan

*Note: Actual number of trees with DBH 10" or greater was not documented due to the property size and extensive tree growth. Size and distribution of tree growth is relatively even across site, as confirmed by Jeff T Arling, City Arborist. Calculation assumes that an even distribution of trees of 10" and greater exists in all forested areas within the property setbacks.



LEGEND:

- PAVEMENT
- CLEARED LANDSCAPED AREA
- BUILDING
- "SIGNIFICANT" TREE OR CLUSTER IDENTIFIED BY WODLLOT
- REMOVAL OF "SIGNIFICANT" TREE OR CLUSTER
- PROTECTION OF "SIGNIFICANT" TREE OR CLUSTER DURING CONSTRUCTION
- PROPOSED TREES

NOTES:

WODLLOT ALTERNATIVES, INC. PERFORMED AN ASSESSMENT OF SIGNIFICANT TREE RESOURCES ON THE PROJECT PARCEL ON APRIL 3, 2007. TREES WITH POTENTIAL SIGNIFICANCE WITH REGARDS TO AGE, SIZE, FORM, FUNCTION, AND/OR SPECIES WERE IDENTIFIED AND ARE INDICATED ON THE PLAN. SOME OF THE TREES OR TREE CLUSTERS IDENTIFIED IN THE WODLLOT STUDY WILL BE REMOVED AS PART OF THE PROJECT. THE EXACT NUMBER IS UNKNOWN, AS THE STUDY DID NOT IDENTIFY THE EXACT NUMBER OF TREES INCLUDED IN EACH CLUSTER; HOWEVER, WE ESTIMATE THAT THE FULL BUILD-OUT OF THE PROJECT WILL RESULT IN THE REMOVAL OF APPROXIMATELY 7 SIGNIFICANT TREE CLUSTERS OR INDIVIDUAL TREES IDENTIFIED IN THE STUDY. THE PROJECT PROPOSES A TOTAL OF 44 NEW TREES ALONG THE PARK ROADWAY, CLUSTERED OR LOCATED IN A MANNER THAT BLENDS WITH THE ADJACENT, PRESERVED FORESTED AREAS OF THE SITE. SIGNIFICANT TREES OR TREE CLUSTERS THAT RESIDE ADJACENT TO BUT NOT WITHIN THE PROPOSED WORK AREAS ARE IDENTIFIED FOR PRESERVATION ON THE SITE PLANS, WITH SPECIFIC CALL-OUTS AND DETAILS FOR TREE PROTECTION.

EASEMENT AREAS 1, 2 & 3 AND THE LIMITED COMMON ELEMENT LINES NOTED ON THE SUBDIVISION RECORDING PLAT DICTATE THE PERMITTED CLEARING LIMITS OF THE SITE. A FOREST MANAGEMENT PLAN IS BEING PREPARED FOR THE PROJECT SITE, AND WILL DICTATE THE FOREST MANAGEMENT PRACTICES IN THE COMMON ELEMENT AREAS OF THE SITE. THE CLEARING LIMITS WILL BE FIELD DELINEATED WITH SURVEY MARKERS OR SIGNS APPROVED BY THE CITY PRIOR TO CONSTRUCTION. LIMITED CLEARING MAY OCCUR WITHIN THE LIMITED COMMON ELEMENT AREAS PRIOR TO DEVELOPMENT OF THE BUILDING SITES. THIS WORK WILL BE PERFORMED AT THE DIRECTION OF A PROFESSIONAL FORESTER UNDER CONTRACT WITH THE CITY, WITH OVERSIGHT BY THE CITY'S ARBORIST.

41 Hutchins Drive
Portland, Maine 04110
800.426.4262 | www.woodardcurran.com

WOODARD & CURRAN
COMMITMENT & INTEGRITY DRIVE RESULTS

DAVID SENUS
10791
10/2/2015

REV	DESCRIPTION	DATE
DESIGNED BY: MKC/JUS	CHECKED BY: DAS	
DRAWN BY: JBC	Z2007-PP-01.dwg	

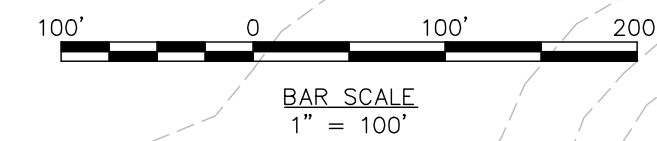
TREE PRESERVATION PLAN

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE
& LCE 4 DEVELOPMENT

JOB NO.: 229001
DATE: OCTOBER 2015
SCALE: 1" = 100'
SHEET: OF

TP-01



PERMITTING SET - NOT FOR CONSTRUCTION



MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

PAUL R. LEPAGE
GOVERNOR

EARLE G. SHETTLEWORTH, JR.
DIRECTOR

December 19, 2014

Ms. Maggie Connolly
Woodard & Curran
41 Hutchins Drive
Portland, ME 04102

Project: MHPC # 1867-14 - Portland Technology Park; gas service
Town: Portland, ME

Dear Ms. Connolly:

In response to your recent request, I have reviewed the information received December 11, 2014 to initiate consultation on the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA).

Based on the information submitted, I have concluded that this undertaking will have **no adverse effect** upon historic properties.

However, our finding is *conditional* upon the following requirements:

1. The original configuration of the C&O Canal bed and banks will be maintained by landscape restoration after the pipeline installation. Please confirm in writing that our recommendation will be incorporated into the plans for this project and send our office plans which clearly indicate that this work will be conducted.

Please contact Robin Reed of our staff if we can be of further assistance in this matter.

Sincerely,

Kirk F. Mohny
Deputy State Historic Preservation Officer