



Maine Coastal Program Coastal Zone Management Act Federal Consistency Submission Form

The Maine Coastal Program (MCP) is the lead agency for Coastal Zone Management in Maine. MCP strongly suggests that applicants for a federal consistency determination or certification use this form for activities regulated under the Coastal Zone Management Act (CZMA) of 1972, as amended, and the National Oceanic and Atmospheric Administration (NOAA) Federal Consistency Regulations under 15 CFR Part 930. Although use of this form is not required, it is provided to applicants to facilitate the submission and timely review of a consistency determination or certification. Federal agencies and applicants are only required to provide the information listed in NOAA's Federal Consistency Regulations unless otherwise described in the [Maine Guide to Federal Consistency Review](#), as approved by NOAA.

I. Applicant Information:

Project/Activity Name: Bolt Hill Substation Project		
Contact Name: Central Maine Power Company c/o Jack Wu	Authorized Agent (if applicable): Stantec Consulting Services Inc. c/o Kara Moody	
Federal Agency: U.S. Army Corps of Engineers		
Address: 83 Edison Drive		
City: Augusta	State: ME	Zip Code: 04336
Email: Agent: kara.moody@stantec.com	Phone Number: Agent: 207-406-5505	

II. Federal Consistency Category:

☐	Federal Agency Activity (15 CFR Part 930, subpart C)
☒	Federal License or Permit Activity (15 CFR Part 930, subpart D)
☐	Outer Continental Shelf Activity (15 CFR Part 930, subpart E)
☐	Federal Financial Assistance Activity to State/Local Government (15 CFR Part 930, subpart F)

III. Summary Description:

Refer to the Section 404 Clean Water Act Individual Permit application and the Natural Resources Protection Act permit application.

IV. Select enforceable policies relevant to project or activity:

☒	Natural Resources Protection Act (38 M.R.S. §§480-A to 480-S; and 480-U to 480-HH)
☒	Site Location of Development Law (38 M.R.S. §§481 to 485-A; 486-A, -B; 487-A to 490-FF)
☐	Maine Metallic Mineral Mining Act (38 M.R.S. §§490-LL to 490-TT)
☐	MaineDOT Traffic Movement Permit Law (23 M.R.S. §704-A)
☒	Erosion Control and Sedimentation Law (38 M.R.S. §420-C)
☐	Expedited Permitting of Grid-scale Wind Energy Development (35-A M.R.S. §§3451-3459)
☐	Solar Energy Development Decommissioning Law (35-A M.R.S. chapter 34-D)
☒	Storm Water Management Law (38 M.R.S. §420-D)
☐	Maine Waterway Development and Conservation Act (38 M.R.S. §§630 to 636-A; 640)
☐	Protection and Improvement of Air Law (38 M.R.S. §§581 to 610-A, -B)
☐	Protection and Improvement of Waters Act (38 M.R.S. §§361-A, 362, 362-A, 363-D, 372; 410-N; 411 to 424; 451, 451-A, 452; 464 to 470)
☐	Nutrient Management Act (7 M.R.S. §§4201 to 4214)
☐	Land Use Regulation Law (12 M.R.S. §§681 to 689)
☐	Maine Hazardous Waste, Septage and Solid Waste Management Act (38 M.R.S. §§1301 to 1310-BB; 1316 to 1316-L; 1317 to 1319-Y)
☐	Uncontrolled Hazardous Substance Sites Law (38 M.R.S. §§1362, 1367, 1367-B)
☐	Asbestos Law (38 M.R.S. §§1273 and 1281)
☐	Lead Abatement Law (38 M.R.S. §§1296 and 1298(3))
☐	Sale of Consumer Products Affecting the Environmental Law (38 M.R.S. §§1608 and 1609-10)
☐	Mercury-Added Products and Services Law (38 M.R.S. §§1661 to 1661-C; 1665-A, -B; 1672)
☐	Solid Waste Management and Recycling Law (38 M.R.S. §§2101; 2133, sub-§2(A); 2165)
☐	Priority Toxic Chemical Use Reduction Law (38 M.R.S. §§2321 to 2330)
☐	Wellhead Protection Law (38 M.R.S. §§1391 to 1399)
☐	Nuclear Facility Decommissioning Laws (PL 1999 c. 739; PL 1999 c. 741)
☐	Oil Discharge Prevention & Pollution Control Law (38 M.R.S. §§541 to 560)
☐	Oil Storage Facilities and Ground Water Protection Law (38 M.R.S. §§561; 562-A; 563, sub-§1(A) and 2; 563-A to -B; 564; 565-A; 566-A; 568; 568-A to -B; 569-C; 570; 570-C to -G, I to M)
☐	Maine Endangered Species Act (12 M.R.S. §12801 to 12810; 12 M.R.S. §6971 to 6976; 12 M.R.S. §10001, sub-§§19 and 62)
☐	General Licensing and Enforcement Authorities; Fees (38 M.R.S. §§341-D; 344 to 349; 352 to 353; 353-A, -B)
☐	Maine Rivers Act (12 M.R.S. §§403; 407)
☐	Marine Resources Law (12 M.R.S. §§6171 to 6192; 6432-A)
☐	Importing of Certain Marine Organisms (12 M.R.S. §6071)
☐	Aquaculture Leasing Laws (12 M.R.S. §6071-A; 12 M.R.S. §6072; 12 M.R.S. §6072-A; 12 M.R.S. §6073)
☐	Subdivision Law (30-A M.R.S. §§4401 to 4408)
☐	Mandatory Shoreland Zoning Law (38 M.R.S. §§435 to 448)
☐	Coastal Management Policies Act (38 M.R.S. §§1801 to 1802)
☐	Coastal Barrier Resources System Act (38 M.R.S. §§1901 to 1905)

V. Supporting Documentation. Please list all maps, diagrams, reports, and other materials below:

Refer to the Section 404 Clean Water Act Individual Permit application and the Natural Resources Protection Act permit application.

VI. Other Coordination. Please list all agencies and contacts required to review this project below:

Refer to the Section 404 Clean Water Act Individual Permit application and the Natural Resources Protection Act permit application.

VII. Statement of Determination/Certification and Signature. Check one and sign below:

☐	FEDERAL AGENCY CONSISTENCY DETERMINATION. Based upon the information, data, and analysis included herein, the federal agency or its authorized agent finds the proposed activity is consistent to the maximum extent practicable with the enforceable policies of the Maine Coastal Program.
☐	FEDERAL AGENCY NEGATIVE DETERMINATION. Based upon the information, data, and analysis included herein, the federal agency or its authorized agent finds the proposed activity will not have any reasonably foreseeable effects on Maine's coastal uses or resources.
☒	NON-FEDERAL APPLICANT CONSISTENCY CERTIFICATION. Based upon the information, data, and analysis included herein, the non-federal applicant certifies that the proposed activity complies with the enforceable policies of Maine Coastal Program and will be conducted in a manner consistent with such program.

Signature: Moody, Kara		Digitally signed by Moody, Kara Date: 2026.06.19 09:50:44 -04'00'
Printed Name: Kara Moody (Agent)		Date: 6/19/2026

1.0 DEVELOPMENT DESCRIPTION

Central Maine Power Company (CMP or Applicant) proposes to build a new 115/34.5/12kV Bolt Hill Road substation on land located in Eliot, Maine and remove both the existing Bolt Hill and Eliot substations and associated infrastructure in Eliot and Kittery (Project). The Project solves multiple existing area reliability and distribution system needs and facilitates the planned future large customer load growth.

1.1 Narrative

1.1.1 Project Objectives

The objective of the Project is to construct a new substation to support the electrical needs of Southern Maine customers. The Project was initiated due to existing reliability needs and new customer load growth expected in the Southern Maine area. The specific concerns have been provided to the Maine Public Utilities Commission (MPUC), which has classified these submittals as Critical Energy Infrastructure Information (CEII) and therefore, confidential. The Project also includes demolition and removal of parts and components of the existing Bolt Hill Substation and Eliot Substation.

The Project is urgently needed to address multiple existing area reliability and distribution needs. However, the Applicant is also aware that one contributor to the expected load growth in this area will involve the large expansion planned at a nearby non-residential facility in Kittery, Maine which is anticipated to increase approximately 20 megawatts (MW) to the regional load by 2045.

1.1.2 Project Details

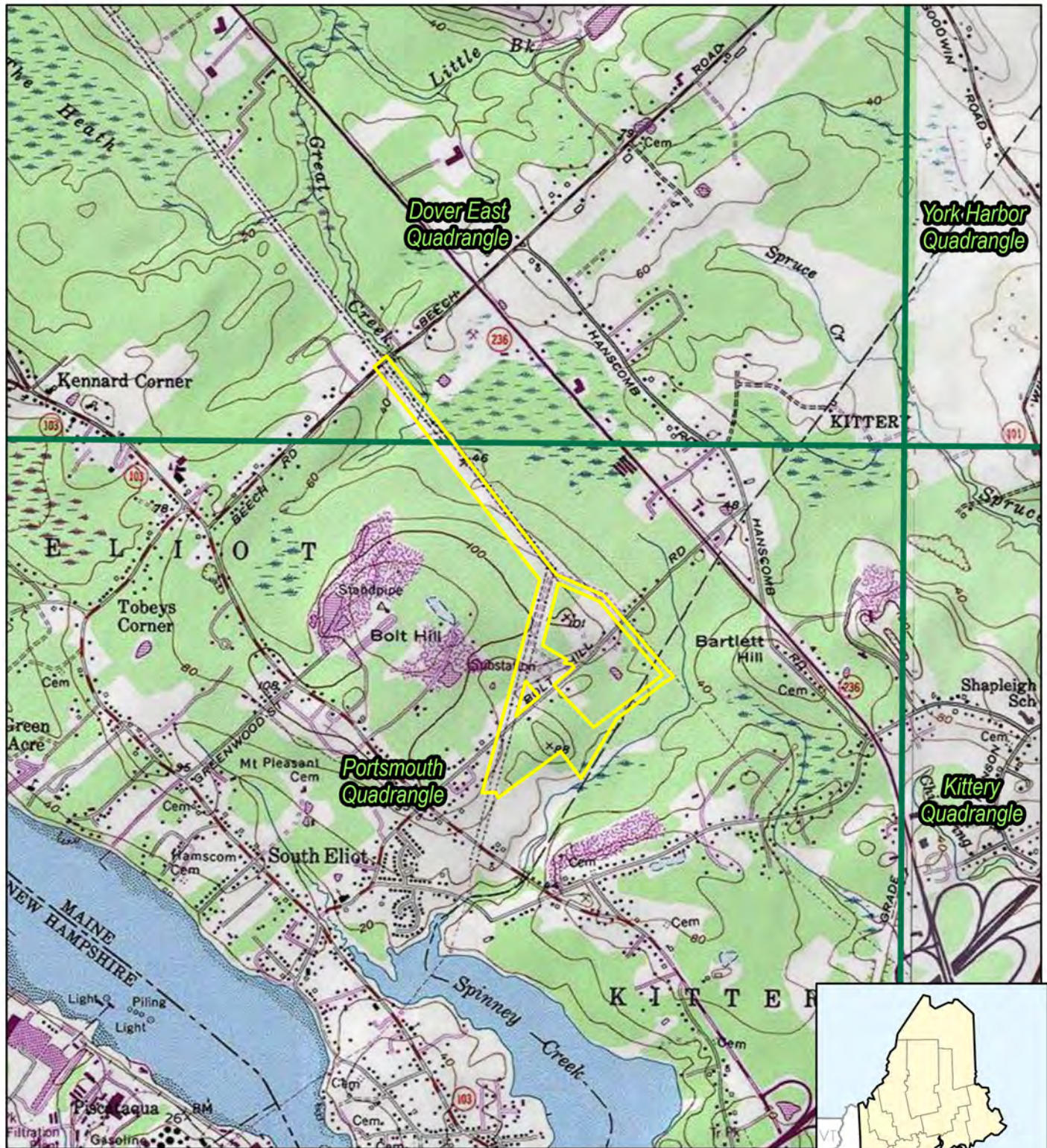
1.1.2.1 *Description of the Project Area*

The Project is located on 76 acres of property owned by CMP and Eversource Energy within the generally rural, southern end of the Town of Eliot and northern end of the Town of Kittery. The new substation will be constructed on land owned by CMP (Parcels 11-40, 11-41, 12-9, 12-10, 19-7, 19-9, and 19-10). The Bolt Hill and Beech Road substations will be demolished (Parcels 12-1 and 11-38). Some work will also be required within transmission lines owned by Eversource Energy (Parcels 11-38, 7-68, and 17-25). Primary access to the Project area will be from Bolt Hill Road in Eliot with secondary access needed from Beech Road in Eliot. Project location maps are provided as Figures 1-1 through 1-3 herein, and Project Plans are provided as Appendix 1-1.

The northernmost portion of the Project area is comprised of the existing Eliot Substation, located at 140 Beech Road, which is slated for demolition. Proceeding south is an existing utility right-of-way (ROW) owned by Eversource Energy which consists generally of low-growing, shrubby areas and wetlands. The midportion of the Project area is the existing Bolt Hill substation, which is located at 299 Bolt Hill Road and is bordered by Bolt Hill Road to the south and the transmission ROW to the west and north. A residential area along Langley Farm Road is located to the east.

The proposed new substation (i.e., approximately nine acres in size) will be constructed in the southwest portion of the Project Area, south of Bolt Hill Road. In addition to the new substation, a switchyard (i.e., approximately 0.2 acres in size) will be constructed within the existing ROW to serve as an interchange between the differing infrastructure owned by CMP and Eversource Energy. The area to be developed is

characterized by upland forest, cleared ROW, and freshwater wetlands. This area is topographically dominated by a central ridge that runs from a northwesterly to southeasterly direction with a maximum elevation of approximately 86 feet. With the exception of the central ridge and respective flanks, the terrain generally slopes to the southeast towards Spinney Creek, a tributary to the Piscataqua River, which is located approximately 1.3 miles south of the Project area.



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.



1" = 2,000'
1:24,000

0 2,000 4,000
FEET



CENTRAL MAINE
POWER

Flycatcher
LAND • WATER • PEOPLE

PROJECT:

**CENTRAL MAINE POWER
BOLT HILL SUBSTATION
ELIOT & KITTERY, YORK COUNTY, MAINE**

LEGEND:



PROJECT AREA

USGS 7.5-MINUTE QUADRANGLE BOUNDARY

DRAWN BY:

D. KENWORTHY

CHECKED BY:

K. NICKERSON

MONTH:

FEBRUARY

YEAR:

2026

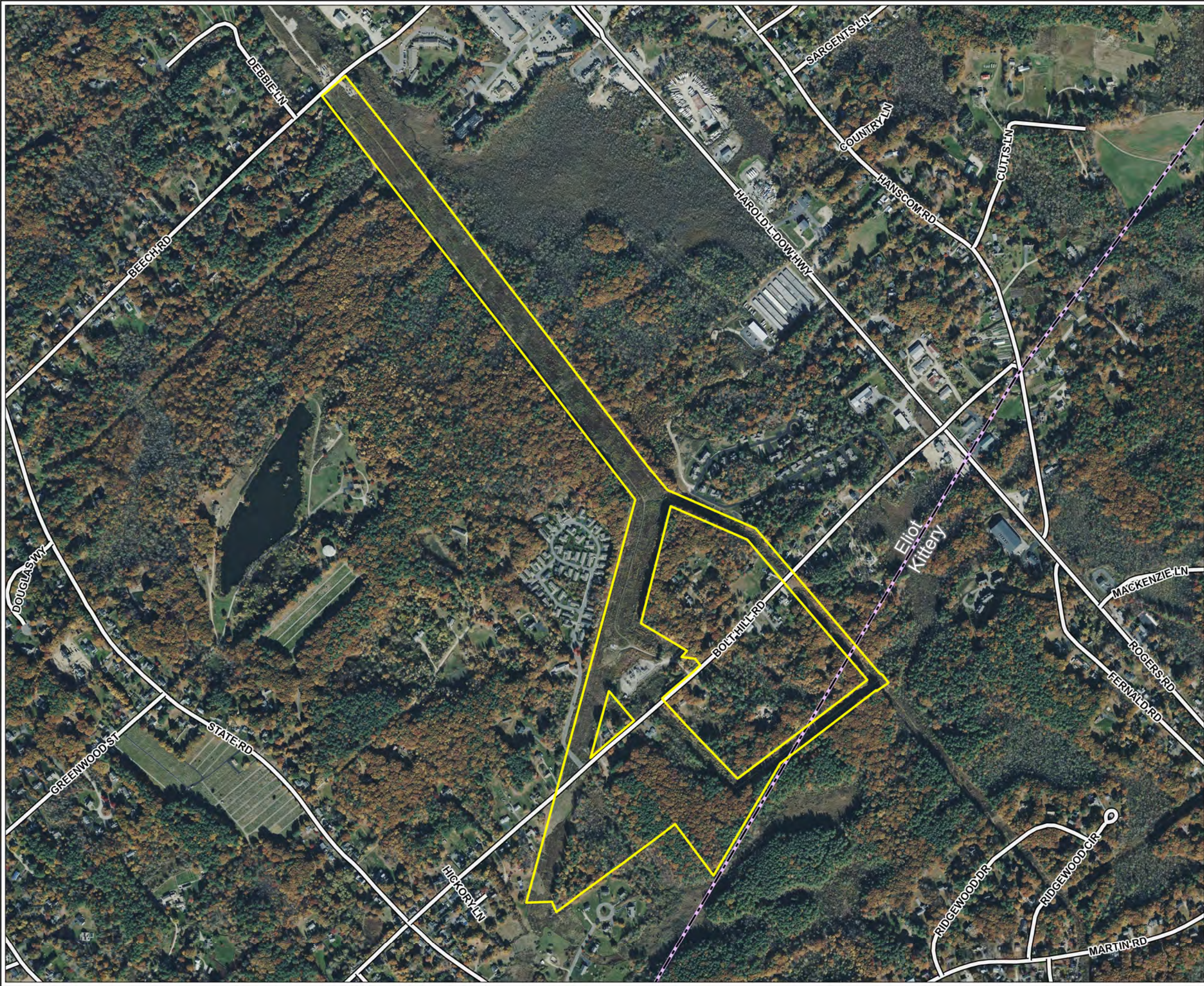
PROJ. NO.:

21V-016

CLIENT:

CMP

FIGURE 1-1 - USGS LOCATION MAP



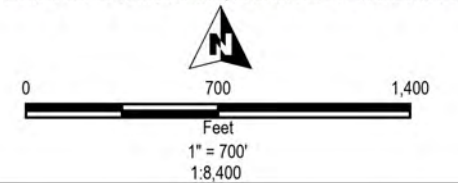
LEGEND

-  PROJECT AREA
-  TOWN BOUNDARY

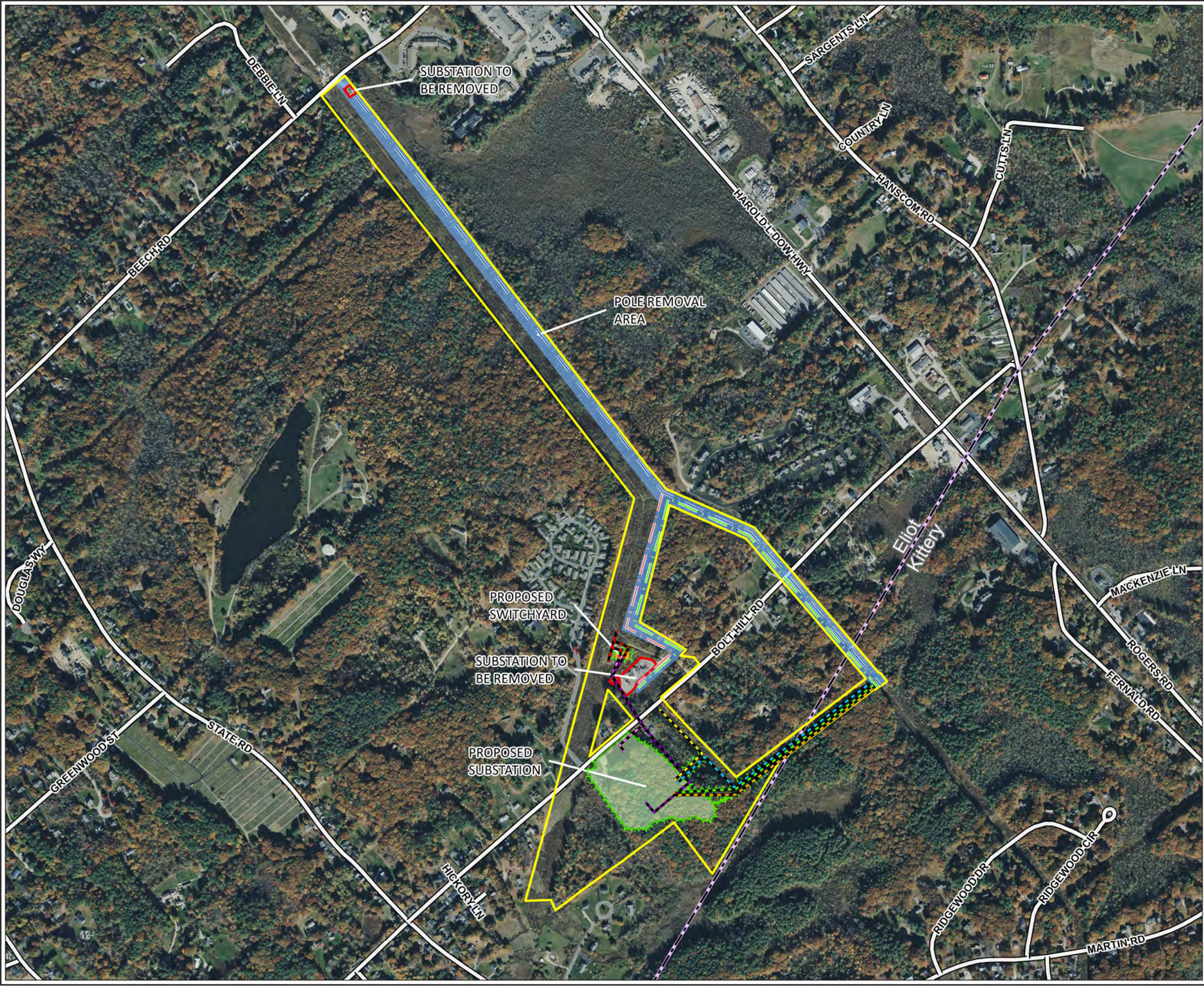


NOTES:

- 1 BASEMAP IS FROM VEXCEL ORTHO IMAGERY, 15-20cm STATE OF MAINE SERVICE LAYER.



PROJECT:		CENTRAL MAINE POWER BOLT HILL SUBSTATION ELIOT & KITTERY, YORK COUNTY, MAINE	
TITLE:		AERIAL PROJECT MAP	
DRAWN BY:	D. KENWORTHY	PROJ NO.:	21V-016
CHECKED BY:	K. NICKERSON	FIGURE 1-2	
MONTH:	FEBRUARY		
YEAR:	2026	 	

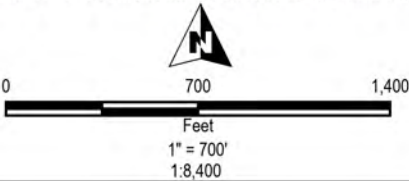


LEGEND

- PROJECT AREA
- PROPOSED SUBSTATION
- PROPOSED SWITCHYARD
- SUBSTATION TO BE REMOVED
- POLE REMOVAL AREA
- TOWN BOUNDARY
- SECT N133A (NEW)
- SECT N133B (NEW)
- SECT 136 (NEW)
- SECT 176 (NEW)
- SECT 177 (NEW)
- SECT 178 (NEW)
- SECT N133 (NEW)
- SECT 176 (OLD)
- SECT 176A (OLD)
- SECT 177 (OLD)



NOTES:
1 BASEMAP IS FROM VEXCEL ORTHO IMAGERY, 15-20cm STATE OF MAINE SERVICE LAYER.



PROJECT: **CENTRAL MAINE POWER
BOLT HILL SUBSTATION
ELIOT & KITTERY, YORK COUNTY, MAINE**

TITLE: **OVERVIEW OF PROJECT COMPONENTS**

DRAWN BY:	D. KENWORTHY	PROJ NO.:	21V-016
CHECKED BY:	K. NICKERSON		
MONTH:	FEBRUARY		
YEAR:	2026		

FIGURE 1-3

1.1.2.2 Description of the Project

The Project proposes to construct a new substation and switchyard, access road, and several poles to connect to the adjacent transmission system. Additionally, the entirety of Section 176A as well as a portion of Section 176 lines (Figure 1-3) between the existing Eliot and Bolt Hill substations will be removed. The new substation (i.e., approximately nine acres in size) and a switchyard (i.e., approximately 0.2 acre in size) will be constructed to serve as an interchange between the differing infrastructure owned by CMP and Eversource Energy. Approximately nine acres of developed land area will be required to construct the new substation and switchyard. There are 34,724 square feet (0.8 acre) of direct impacts to freshwater wetlands proposed for development of the new substation. Additional temporary and indirect impacts to natural resources are proposed. The Project is filing for a Natural Resources Protection Act permit simultaneously with this Site Law application. Figure 1-3 depicts an overview of the proposed and existing infrastructure overlaid on an aerial photograph. Site plans are provided in Appendix 1-A.

1.1.3 Existing Facilities

The Bolt Hill and Eliot Substations are currently in operation. Once the new substation is constructed and operational however, these facilities will be demolished and the area restored. Similarly, the transmission line connecting these two substations will be removed at this time.

1.2 Topographic Map and Location of Development

1.2.1 Location of Development Boundaries

Construction of the Project will primarily be located south of Bolt Hill Road for the proposed substation, which will occupy an area of approximately nine acres. Site plans are provided in Appendix 1-A. A switchyard will be constructed north of Bolt Hill Road within the existing Eversource Energy ROW. Once the new facility is in operation, the two existing substations as well as the connecting transmission lines will be removed.

1.2.2 Quadrangle Name

The proposed Project primarily falls within U. S. Geological Survey (USGS) Portsmouth Quadrangle (scale 1:100,000), with the northernmost portion occurring within the Dover East Quadrangle.

1.3 Construction Plan

Pending approvals, the Project is anticipated to start construction in Q1 of 2027. Prior to initiating earthwork activities, resource areas will be flagged and/or fenced for protection and erosion and sediment control measures will be installed in accordance with regulatory requirements. Following installation of temporary erosion and sediment control measures such as silt fence and erosion control mix (ECM), the site will be cleared and grubbed as necessary. The design of erosion and sedimentation control measures will be based on the Maine Erosion & Sediment Control Handbook for Construction: Best Management Practices (BMPs) Manual for Designers and Engineers (October 2016)¹ and CMP's Environmental Guidelines for Construction and Maintenance Activities on Transmission Line and Substation Projects (provided in Section 10, Appendix 10-1). Following preparation of the site and

¹ Available online at https://www.maine.gov/dep/land/erosion/escbmps/esc_bmp_engineers.pdf.

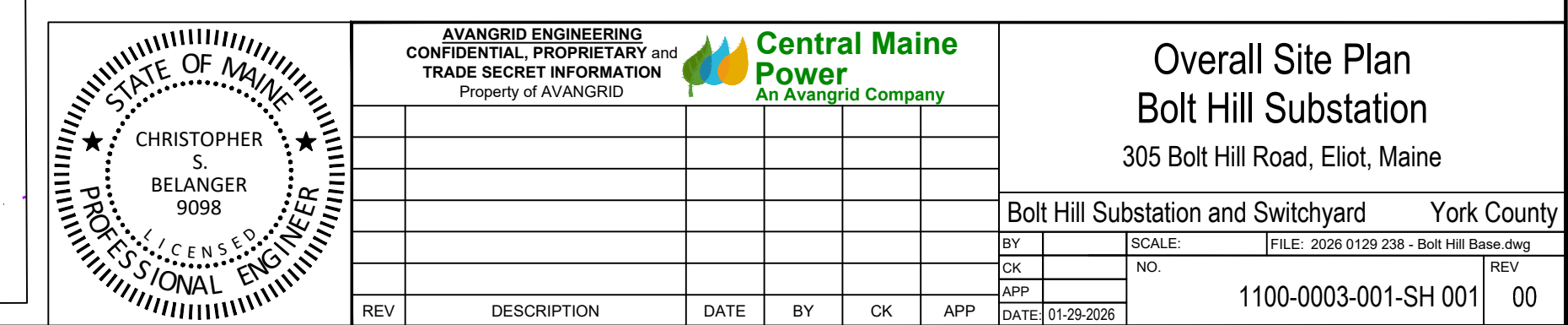
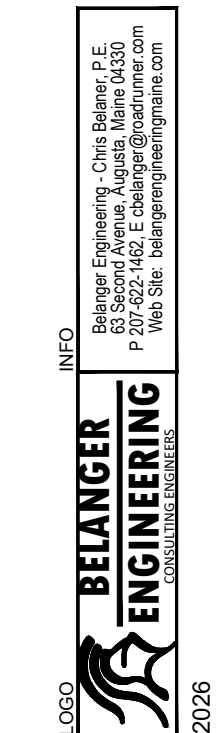
installation of BMPs, infrastructure construction will begin. A perimeter fence will be installed around the substation and yard. Any necessary final grading, site stabilization, vegetation management and landscaping will subsequently be completed. Construction is expected to be finished in Q4 of 2028.

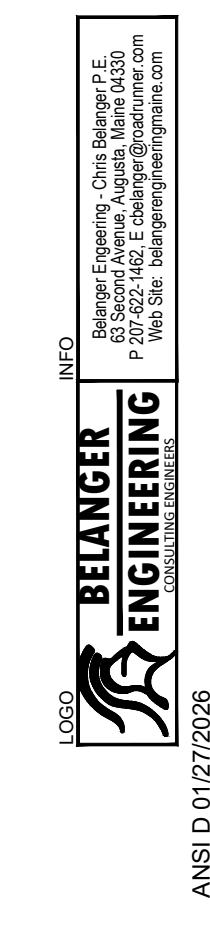
1.4 Drawings

1.4.1 Development Description, Site Work, Existing Facilities, and Topography

Detailed plans of the proposed Project are included within the Project Site Plan drawings (see Appendix 1-A). These drawings show the plan view of the proposed facility.

APPENDIX 1-1
PROJECT SITE PLANS



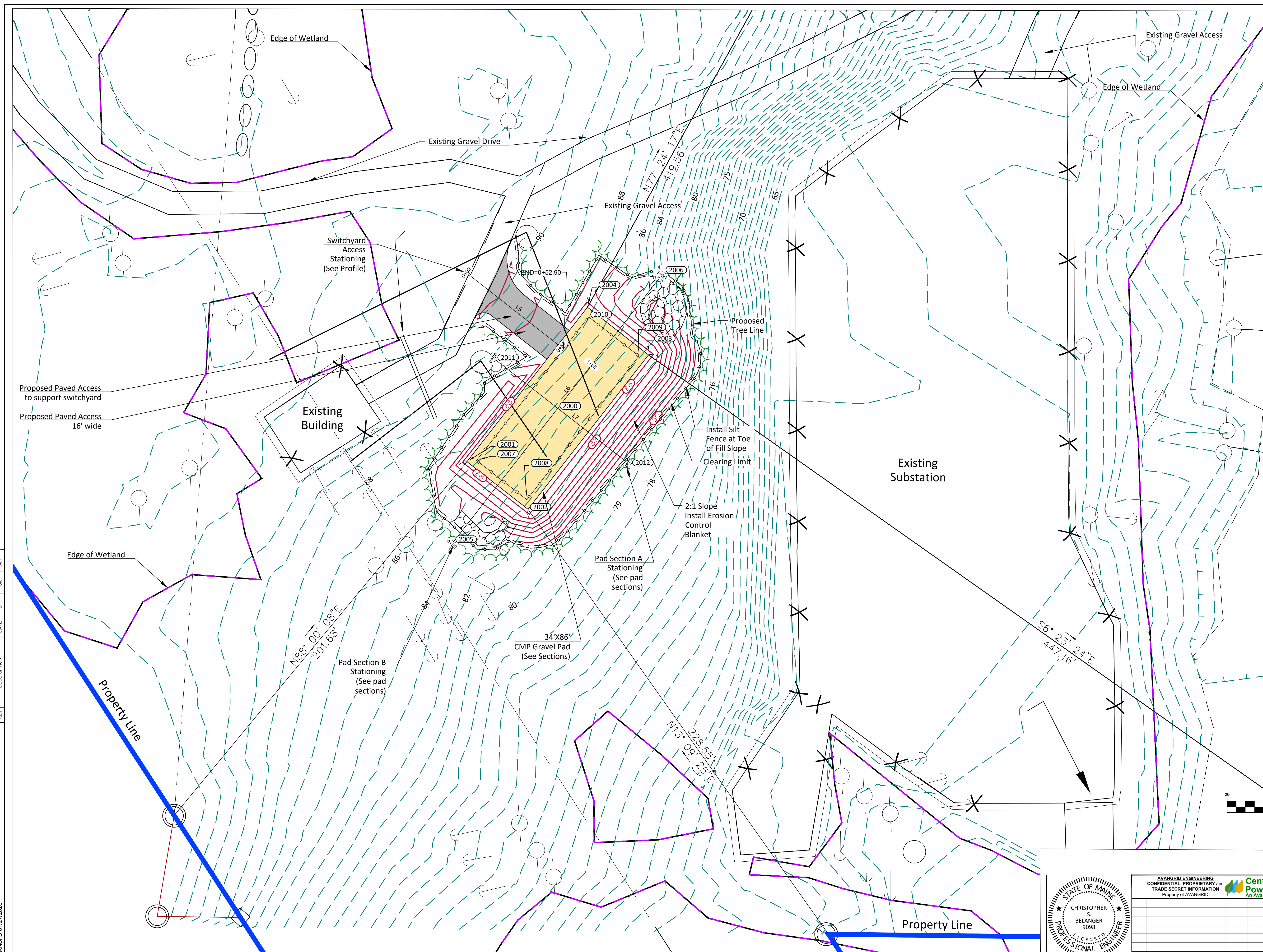
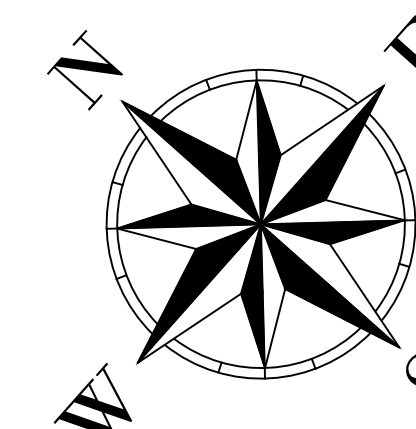


A circular professional engineer seal for the State of Maine. The outer ring contains the text "STATE OF MAINE" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The center of the seal contains the text "CHRISTOPHER S. BELANGER" and "9098" above the word "LICENSED".

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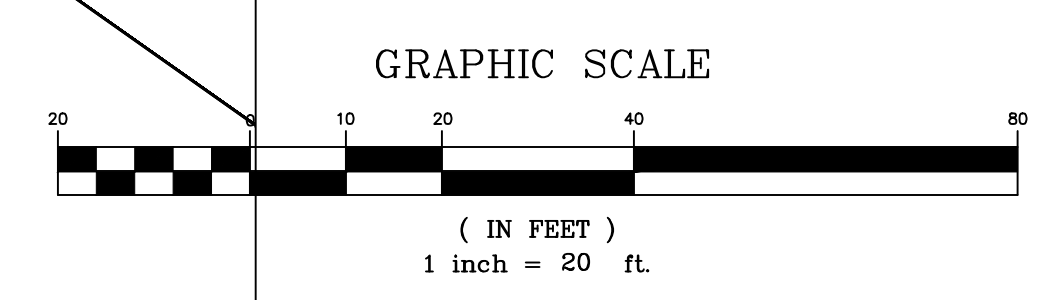
Site Plan Bolt Hill Substation 305 Bolt Hill Road, Eliot, Maine			
Bolt Hill Substation and Switchyard		York County	
BY	SCALE: 1"=40'	FILE: 2026 0129 238 - Bolt Hill Subst.dwg	
CHK	NO.		REV
APP	1100-0003-001-SH 003		00
DATE: 01-29-2026			

Ch B. Page 1-29-2026



PROGRESS PLAN
NOT FOR CONSTRUCTION

THIS DOCUMENT IS ISSUED FOR
INFORMATIONAL PURPOSES ONLY.
THE DATA SHOWN HEREON
IS SUBJECT TO REVISION.

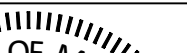


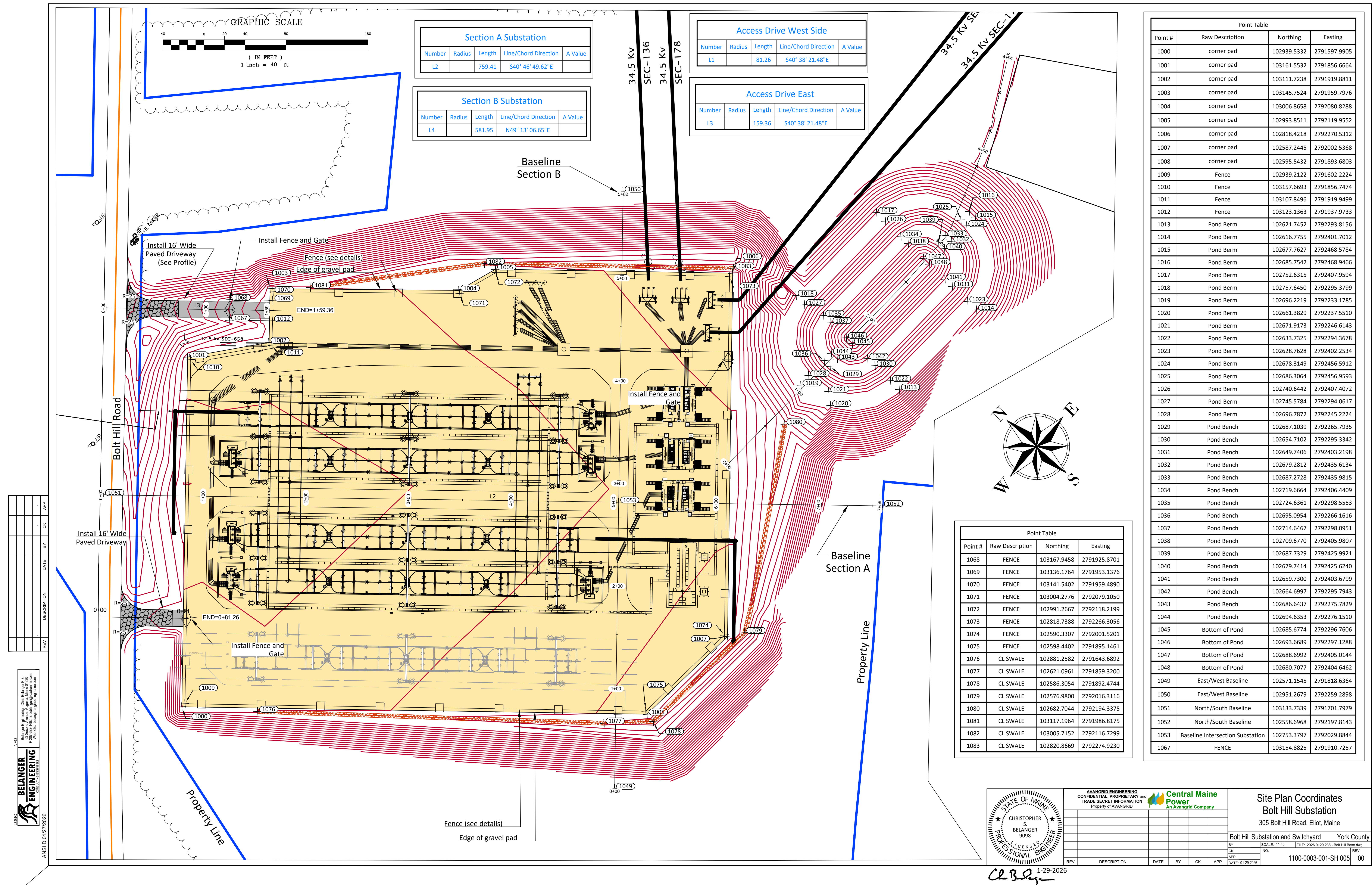
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-	-	-	-	-	-

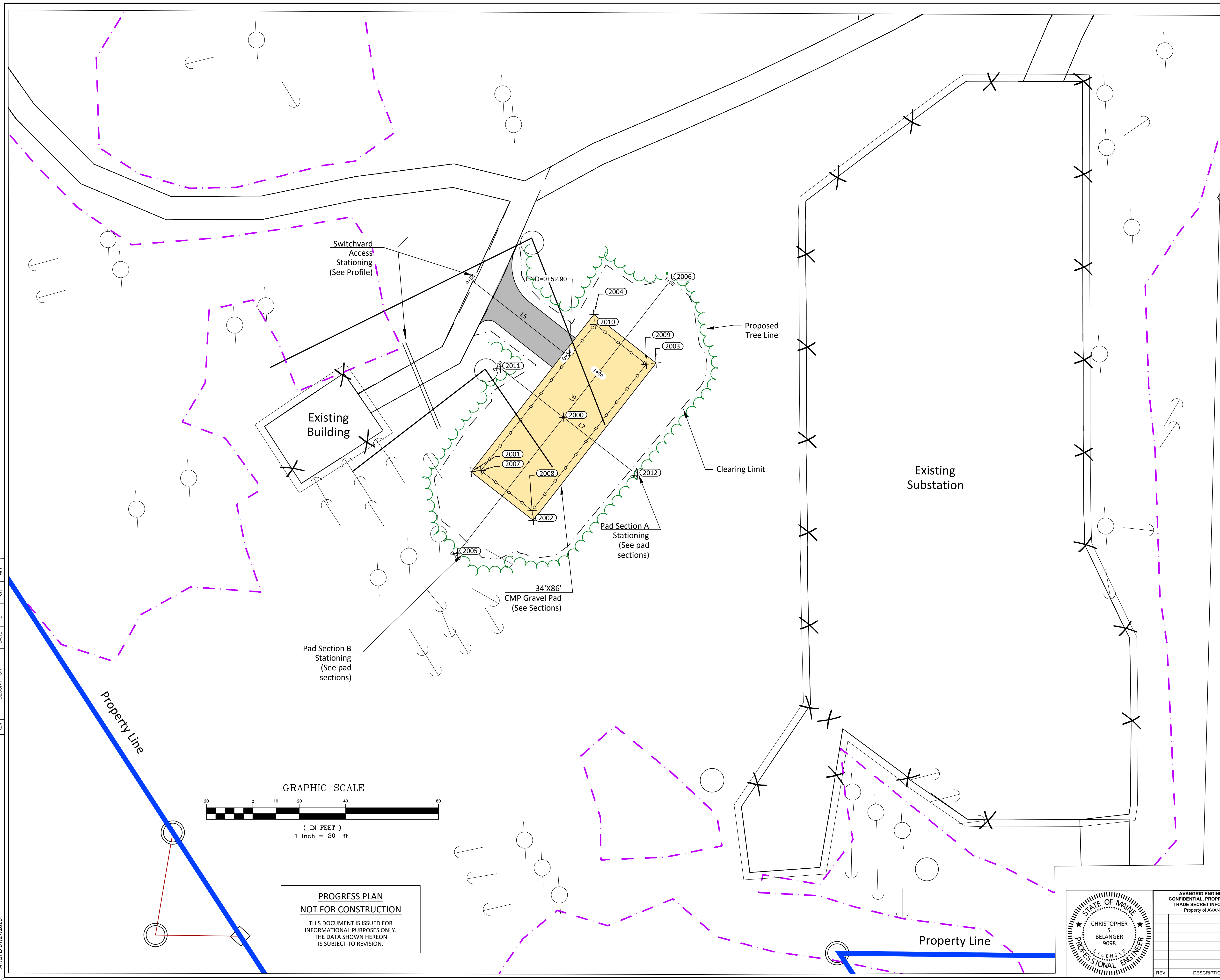

BELANGER
ENGINEERING
CONSULTANTS INC.

INFO
 Belanger Engineering - Chris Belanger P.E.
 2017-2022: 445 E. 43rd Ave. #200, Denver, CO 80218
 P: 303.427.4452; 445 E. 43rd Ave. #200, Denver, CO 80218
 F: 303.427.4452; 445 E. 43rd Ave. #200, Denver, CO 80218
 Web Site: belangerengineeringna.com

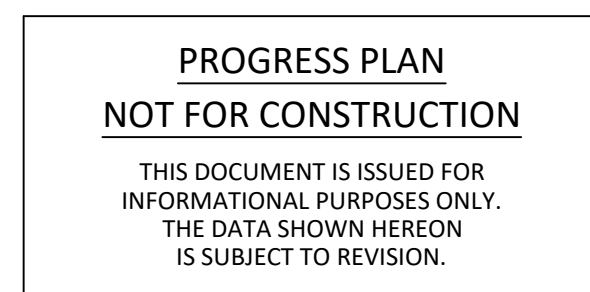
ANS I D 01/27/2026

	AVANGRID ENGINEERING CONFIDENTIAL, PROPRIETARY and TRADE SECRET INFORMATION Property of AVANGRID					 Central Maine Power An Avangrid Company		Site Plan Bolt Hill Switchyard 305 Bolt Hill Road, Eliot, Maine		
								Bolt Hill Substation and Switchyard York County BY: _____ SCALE: 1"=20' FILE: 2026 0129 238 - Bolt Hill Basin.dwg CK _____ NO. _____ APP _____ DATE: 01-29-2026 1100-0003-001-SH 004 00		
REV	DESCRIPTION	DATE	BY	CK	APP					

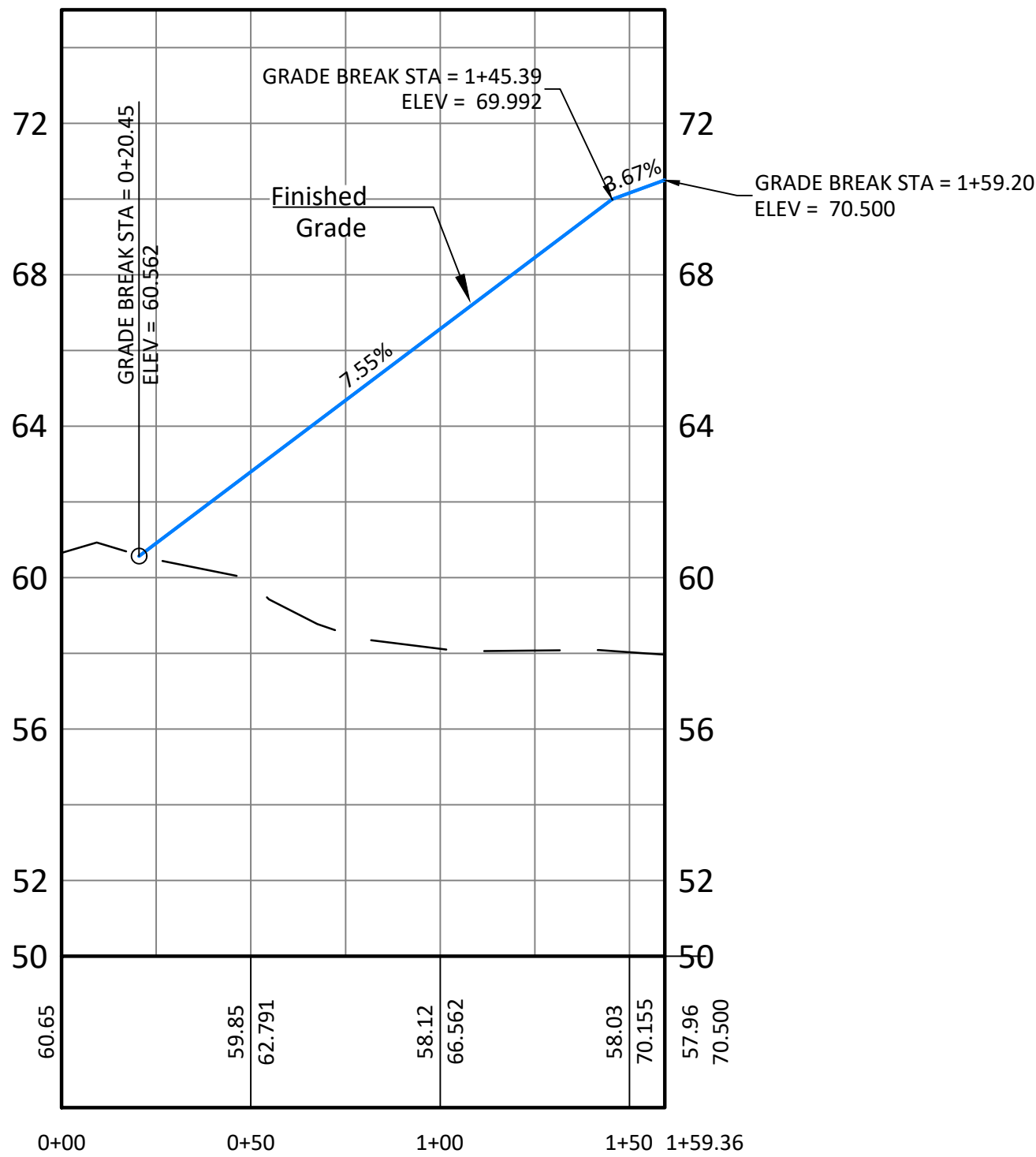




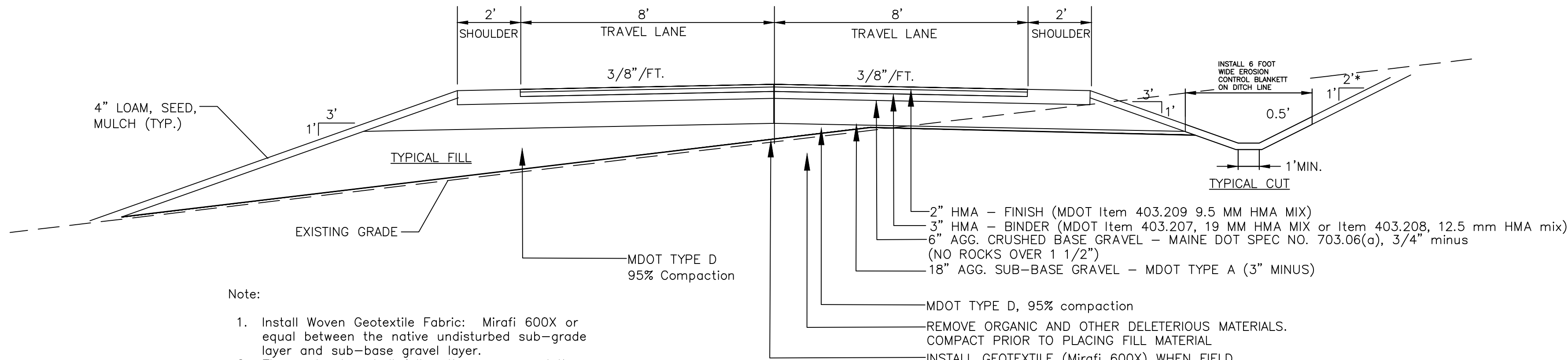
Switchyard Driveway				
Number	Radius	Length	Line/Chord Direction	A/V
L5		52.90	S3° 26' 09.84"E	



Access Drive East PROFILE



Scale:
1"=40' Horizontal
1"=4' Vertical



- Note:
1. Install Woven Geotextile Fabric: Mirafi 600X or equal between the native undisturbed sub-grade layer and sub-base gravel layer.
 2. The contractor shall follow the recommendations of the SW Cole Geotechnical Report completed for the Bolt Hill Substation project in Eliot, Maine, dated May 22, 2023.
 3. Remove unsuitable soils minimum of 12 inches. Replace with compacted MDOT Type D Subgrade fill on top of geotextile.

CMP - Private Paved Access Cross Section
NOT TO SCALE
(Rock Row access drive to CMP Switchpad)

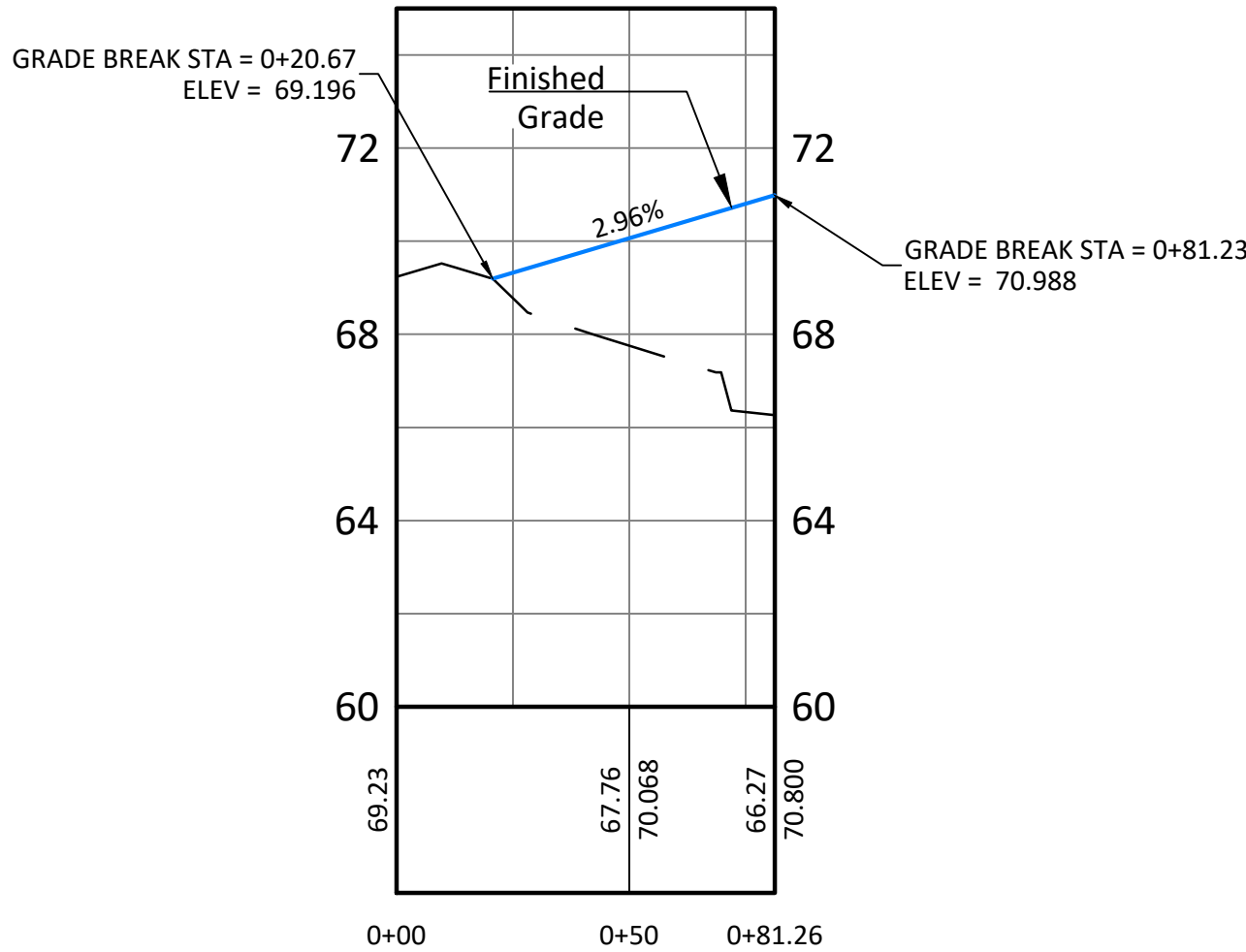
Roadway Ditch Notes:

1. Reference is made to Town of Eliot Technical Design Standards.
2. Slopes and ditches shall be loamed and seeded with a minimum of 4" loam and then mulched.
3. Seed mixture shall be conservation mix.
4. Ditches shall have a slope of no less than 1.5%.
5. Erosion control methods shall adhere to Best Management Practices as set forth by the Maine Department of Environmental Protection.

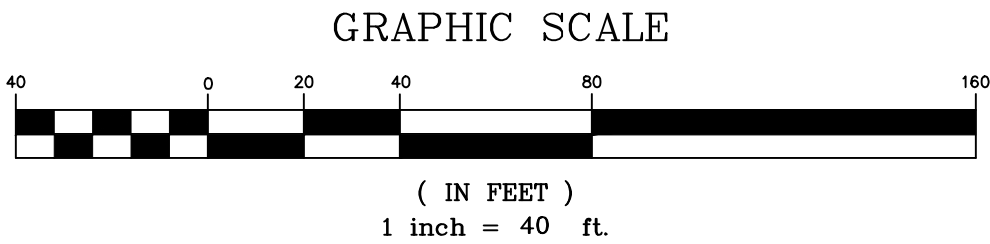
ROAD CONSTRUCTION CROSS SECTION NOTES:

1. THE ROAD SHALL BE CONSTRUCTED, AT A MINIMUM, IN ACCORDANCE WITH THE "PRIVATE STREET" STANDARDS OUTLINED IN THE CITY OF WESTBROOK TECHNICAL STANDARDS.
2. THE GRADED AREAS BETWEEN DITCHES SHALL BE CLEARED OF ALL STUMPS, ROOTS, BUSHES, TOPSOIL, AND PERISHABLE MATERIALS INCLUDING TREES AND LARGE ROCKS.
3. ALL LEDGE SHALL BE REMOVED TO A MINIMUM DEPTH OF TWO FEET BELOW SUBGRADE. ROCKS AND BOULDERS VISIBLE AT SUBGRADE AND EXCEEDING SIX (6) INCHES IN SIZE SHALL ALSO BE REMOVED. SUBSOILS WHICH HAVE BEEN IDENTIFIED BY THE TOWN ENGINEER AS NOT SUITABLE FOR ROADWAYS SHALL BE REMOVED FROM THE STREET SITE TO A DEPTH OF TWO (2) FEET BELOW SUBGRADE AND REPLACE WITH MATERIAL MEETING THE SPECIFICATIONS FOR GRAVEL AGGREGATE SUBBASE.
4. ALL DEVELOPED AREAS OF THE ROAD SECTION SHALL BE LOCATED WITHIN THE RIGHT OF WAY OR DEEDED SLOPE EASEMENT, INCLUDING CUT AND FILL SLOPES OVER CROSS CULVERTS.
5. ROAD DITCH SHALL BE 0.5' BELOW AGGREGATE SUBBASE AT A MINIMUM.
6. DITCH CENTERLINE VARIES WITH DITCH ELEVATION. SEE CROSS SECTION.
7. IN FILL AREAS THE GRANULAR MATERIAL TO BE USED SHALL CONFORM TO SECTION 703.19 OF THE STATE OF MAINE STANDARDS SPECIFICATIONS FOR GRANULAR BORROW.
8. EXTEND SUB-BASE TO DITCH LINE TO ALLOW PROPER DRAINAGE.
9. INSTALL APPROPRIATE GEOTEXTILE (Mirafi 600X or equal) OVER CLAY OR UNSUITABLE SOILS WHEN ENCOUNTERED DURING CONSTRUCTION AS SUGGESTED BY THE SW COLE GEOTECHNICAL REPORT COMPLETED IN MAY 2023. AS AN ALTERNATIVE, THE TOWN ENGINEER MAY APPROVE THE USE OF A GEOTEXTILE FABRIC WHICH MEETS THE MAINE DEPARTMENT OF TRANSPORTATION'S SPECIFICATION UNDER SECTION 620 AND 722 "STABILIZATION GEOTEXTILE".
10. EXCEPT IN A LEDGE CUT OR FOR BRIDGE APPROACHES, BACK SLOPES SHALL BE NO STEEPER THAN A SLOPE OF TWO (2) FEET HORIZONTAL TO ONE (1) FOOT VERTICAL, AND SHALL BE GRADED, LOAMED, LIMED, FERTILIZED, AND SEEDDED ACCORDING TO THE SPECIFICATIONS OF THE EROSION AND SEDIMENTATION CONTROL PLAN. WHERE A CUT RESULTS IN EXPOSED LEDGE OR IN CASES SUCH AS BRIDGE APPROACHES, A BACK SLOPE NO STEEPER THAN FOUR (4) FEET VERTICAL TO ONE (1) FOOT HORIZONTAL IS PERMITTED. THERE SHALL BE A SNOW SHELF PROVIDED IN LEDGE CUT AREAS WITH A MINIMUM WIDTH OF SIX (6) FEET BEHIND THE EDGE OF TRAVEL WAY.
11. THE SUBGRADE IS TO BE SHAPED TO DRAIN. NO IRREGULARITIES WHICH CAUSE WATER TO BE TRAPPED WILL BE ALLOWED. THE BASE AND SUB-BASE MUST DRAIN TO A DITCH OR FILL SLOPE. THE DEPTH OF THE SUBBASE COURSE ON A GRANULAR MATERIAL SUBGRADE MAY BE REDUCED TO A TOTAL OF 18", SUBJECT TO APPROVAL OF THE CITY ENGINEER. THE AGGREGATE BASE COURSE SHALL BE SAND OR GRAVEL OR HARD DURABLE PARTICLES FREE FROM VEGETATIVE MATTER, LUMPS OR BALLS OF CLAY AND OTHER UNSUITABLE SUBSTANCES.

Access Drive West Side PROFILE



Scale:
1"=40' Horizontal
1"=4' Vertical



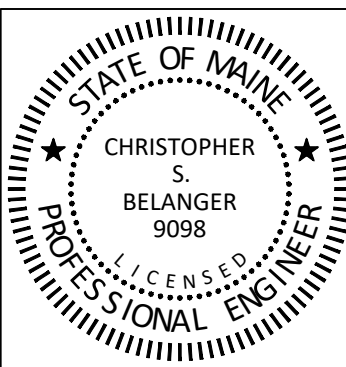
PRELIMINARY
ISSUED FOR REVIEW
NOT FOR CONSTRUCTION

REV.	DESCRIPTION	DATE	BY	CHK	APP

Belanger Engineering, Chris Belanger P.E.
P 207.622.1462, E c.belanger@belangereng.com
1455 S.W. 3rd Ave., Suite 200, Gainesville, FL 32609

BELANGER
ENGINEERING
CONSULTANTS, INC.

ANSI D 01/27/2026



AVANGRID ENGINEERING CONFIDENTIAL, PROPRIETARY and TRADE SECRET INFORMATION Property of AVANGRID					



Access Drives Plan and Profiles
Bolt Hill Substation
305 Bolt Hill Road, Eliot, Maine

Bolt Hill Substation and Switchyard		York County	
BY	SCALE: 1"=40'H/V	FILE: 2026 0129 238 - Bolt Hill Base.dwg	REV
CHK	NO		
APP			
REV	DATE: 01-29-2026	1100-0003-001-SH 007	00

1-29-2026
Chris Belanger

REV.	DESCRIPTION	DATE	BY	CK	APP

LOGO

Belanger Engineering, Chris Belanger P.E.
P 207.622.1462, E cbelanger@belangereng.com
1400 Main Street, Bangor, Maine 04401

BELANGER

ENGINEERING

CONSULTANTS, INC.

ANSI D 01/27/2026

Switchyard Driveway PROFILE

Scale:
1"=20' Horizontal
1"=2' Vertical

Note:

1. Install Woven Geotextile Fabric: Mirafi 600X or equal between the native undisturbed sub-grade layer and sub-base gravel layer.
2. The contractor shall follow the recommendations of the SW Cole Geotechnical Report completed for the Bolt Hill Substation project in Eliot, Maine, dated May 22, 2023.
3. Remove unsuitable soils minimum of 12 inches. Replace with compacted MDOT Type D Subgrade fill on top of geotextile.

CMP - Private Paved Access Cross Section
NOT TO SCALE
(Rock Row access drive to CMP Switchpad)

Roadway Ditch Notes:

1. Reference is made to Town of Eliot Technical Design Standards.
2. Slopes and ditches shall be loamed and seeded with a minimum of 4" loam and then mulched.
3. Seed mixture shall be conservation mix.
4. Ditches shall have a slope of no less than 1.5%.
5. Erosion control methods shall adhere to Best Management Practices as set forth by the Maine Department of Environmental Protection.

ROAD CONSTRUCTION CROSS SECTION NOTES:

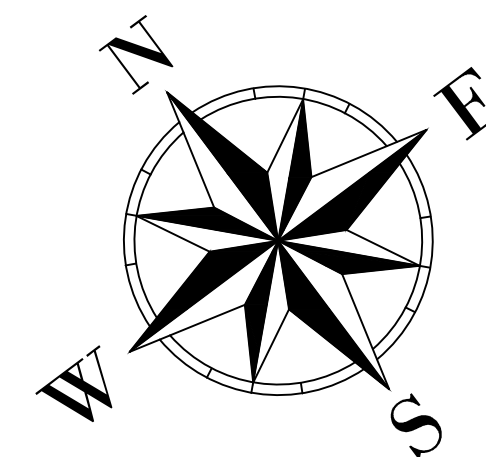
1. THE ROAD SHALL BE CONSTRUCTED, AT A MINIMUM, IN ACCORDANCE WITH THE "PRIVATE STREET" STANDARDS OUTLINED IN THE CITY OF WESTBROOK TECHNICAL STANDARDS.
2. THE GRADED AREAS BETWEEN DITCHES SHALL BE CLEARED OF ALL STUMPS, ROOTS, BUSHES, TOPSOIL, AND PERISHABLE MATERIALS INCLUDING TREES AND LARGE ROCKS.
3. ALL LEDGE SHALL BE REMOVED TO A MINIMUM DEPTH OF TWO FEET BELOW SUBGRADE. ROCKS AND BOULDERS VISIBLE AT SUBGRADE AND EXCEEDING SIX (6) INCHES IN SIZE SHALL ALSO BE REMOVED. SUBSOILS WHICH HAVE BEEN IDENTIFIED BY THE TOWN ENGINEER AS NOT SUITABLE FOR ROADWAYS SHALL BE REMOVED FROM THE STREET SITE TO A DEPTH OF TWO (2) FEET BELOW SUBGRADE AND REPLACE WITH MATERIAL MEETING THE SPECIFICATIONS FOR GRAVEL AGGREGATE SUBBASE.
4. ALL DEVELOPED AREAS OF THE ROAD SECTION SHALL BE LOCATED WITHIN THE RIGHT OF WAY OR DEEDED SLOPE EASEMENT, INCLUDING CUT AND FILL SLOPES OVER CROSS CULVERTS.
5. ROAD DITCH SHALL BE 0.5' BELOW AGGREGATE SUBBASE AT A MINIMUM.
6. DITCH CENTERLINE VARIES WITH DITCH ELEVATION. SEE CROSS SECTION.
7. IN FILL AREAS THE GRANULAR MATERIAL TO BE USED SHALL CONFORM TO SECTION 703.19 OF THE STATE OF MAINE STANDARDS SPECIFICATIONS FOR GRANULAR BORROW.
8. EXTEND SUB-BASE TO DITCH LINE TO ALLOW PROPER DRAINAGE.
9. INSTALL APPROPRIATE GEOTEXTILE (Mirafi 600X or equal) OVER CLAY OR UNSUITABLE SOILS WHEN ENCOUNTERED DURING CONSTRUCTION AS SUGGESTED BY THE SW COLE GEOTECHNICAL REPORT COMPLETED IN MAY 2023. AS AN ALTERNATIVE, THE TOWN ENGINEER MAY APPROVE THE USE OF A GEOTEXTILE FABRIC WHICH MEETS THE MAINE DEPARTMENT OF TRANSPORTATION'S SPECIFICATION UNDER SECTION 620 AND 722 "STABILIZATION GEOTEXTILE".
10. EXCEPT IN A LEDGE CUT OR FOR BRIDGE APPROACHES, BACK SLOPES SHALL BE NO STEEPER THAN A SLOPE OF TWO (2) FEET HORIZONTAL TO ONE (1) FOOT VERTICAL, AND SHALL BE GRADED, LOAMED, LIMED, FERTILIZED, AND SEEDING ACCORDING TO THE SPECIFICATIONS OF THE EROSION AND SEDIMENTATION CONTROL PLAN. WHERE A CUT RESULTS IN EXPOSED LEDGE OR IN CASES SUCH AS BRIDGE APPROACHES, A BACK SLOPE NO STEEPER THAN FOUR (4) FEET VERTICAL TO ONE (1) FOOT HORIZONTAL IS PERMITTED. THERE SHALL BE A SNOW SHELF PROVIDED IN LEDGE CUT AREAS WITH A MINIMUM WIDTH OF SIX (6) FEET BEHIND THE EDGE OF TRAVEL WAY.
11. THE SUBGRADE IS TO BE SHAPED TO DRAIN. NO IRREGULARITIES WHICH CAUSE WATER TO BE TRAPPED WILL BE ALLOWED. THE BASE AND SUB-BASE MUST DRAIN TO A DITCH OR FILL SLOPE. THE DEPTH OF THE SUBBASE COURSE ON A GRANULAR MATERIAL SUBGRADE MAY BE REDUCED TO A TOTAL OF 18", SUBJECT TO APPROVAL OF THE CITY ENGINEER. THE AGGREGATE BASE COURSE SHALL BE SAND OR GRAVEL OR HARD DURABLE PARTICLES FREE FROM VEGETATIVE MATTER, LUMPS OR BALLS OF CLAY AND OTHER UNSUITABLE SUBSTANCES.

AVANGRID ENGINEERING CONFIDENTIAL, PROPRIETARY and TRADE SECRET INFORMATION Property of AVANGRID					

Access Drive Plan and Profile
Bolt Hill Switchyard
305 Bolt Hill Road, Eliot, Maine

Bolt Hill Substation and Switchyard		York County	
BY	SCALE: 1"=20'HORIZ	NO	REV
CK	DATE: 01-29-2026	1100-0003-001-SH 008	00

1-29-2026
Chris Belanger

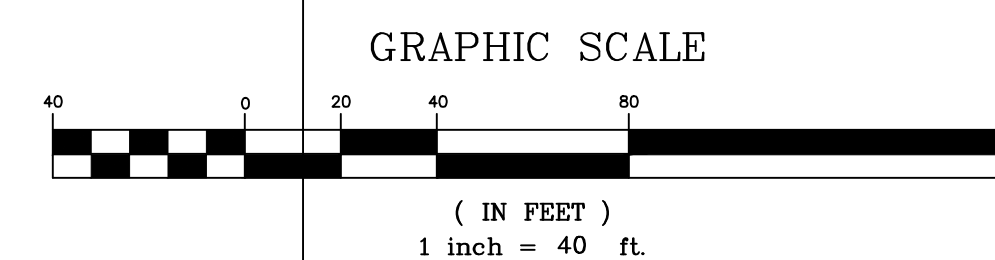


Access Drive West Side				
Number	Radius	Length	Line/Chord Direction	A Value
L1		81.26	S40° 38' 21.48"E	

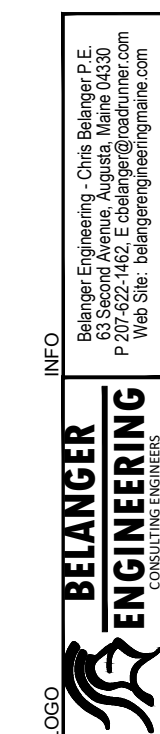
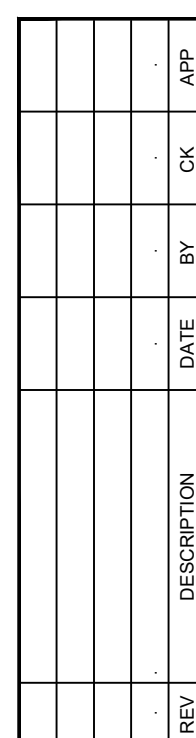
Access Drive East				
Number	Radius	Length	Line/Chord Direction	A Value
L3		159.36	S40° 38' 21.48"E	

Section A Substation				
Number	Radius	Length	Line/Chord Direction	A Value
L2		759.41	S40° 46' 49.62"E	

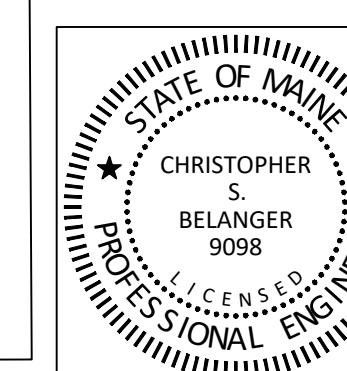
Section B Substation				
Number	Radius	Length	Line/Chord Direction	A Value
L4		581.95	N49° 13' 06.65"E	



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AVANGRID ENGINEERING
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Dimensional Control Plan
Bolt Hill Substation
305 Bolt Hill Road, Eliot, Maine

Bolt Hill Substation and Switchyard	York Coun
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						BY		SCALE: 1"=4'	FILE: 2026 0129 238 - Bott Hill Base.dwg	
						CK		NO.		REV
						APP				
REV	DESCRIPTION	DATE	BY	CK	APP			1100-0003-003-SH 001		00

Ch B. 1-29-202

REV	DESCRIPTION	DATE	BY	CK	APP

LOGO

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ANSI D 01/27/2026

1-29-2026

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STATE OF MAINE
CHRISTOPHER S. BELANGER
9098
LICENSED PROFESSIONAL ENGINEER

AVANGRID ENGINEERING
CONFIDENTIAL, PROPRIETARY and
TRADE SECRET INFORMATION
Property of AVANGRID

**Central Maine
Power**
An Avangrid Company

Dimensional Control Plan
Bolt Hill Switchyard
305 Bolt Hill Road, Eliot, Maine

Bolt Hill Substation and Switchyard

York County

BY: []
CK: []
APP: []
DATE: 01-29-2026

SCALE: 1"=20'

NO: 1100-0003-003-SH 002

FILE: 2026 0129 238 - Bolt Hill Base.dwg

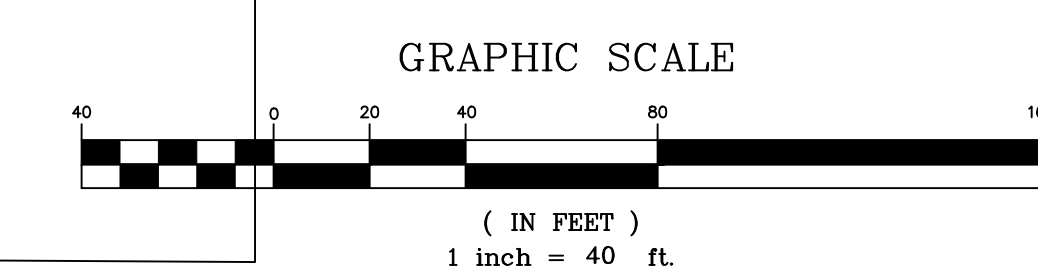
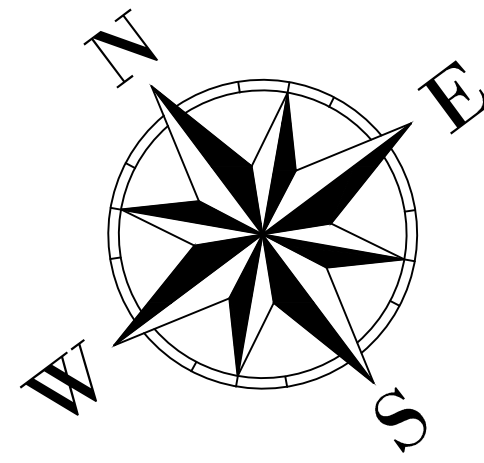
REV: 00

1-29-2026
Ch. Belanger

REV	DESCRIPTION	DATE	BY	CK	APP

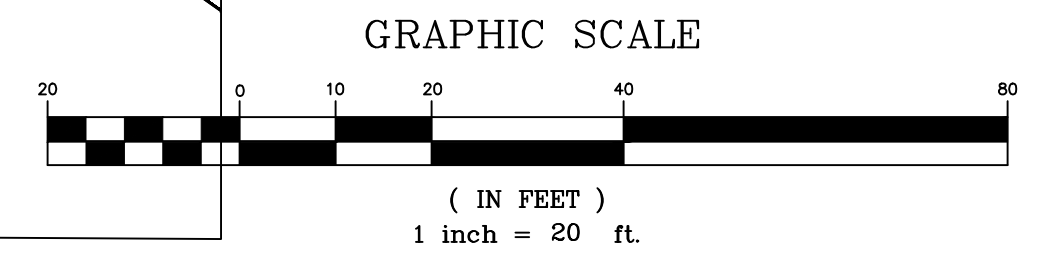
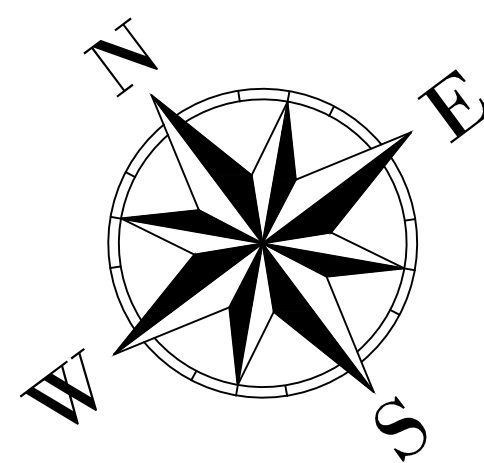
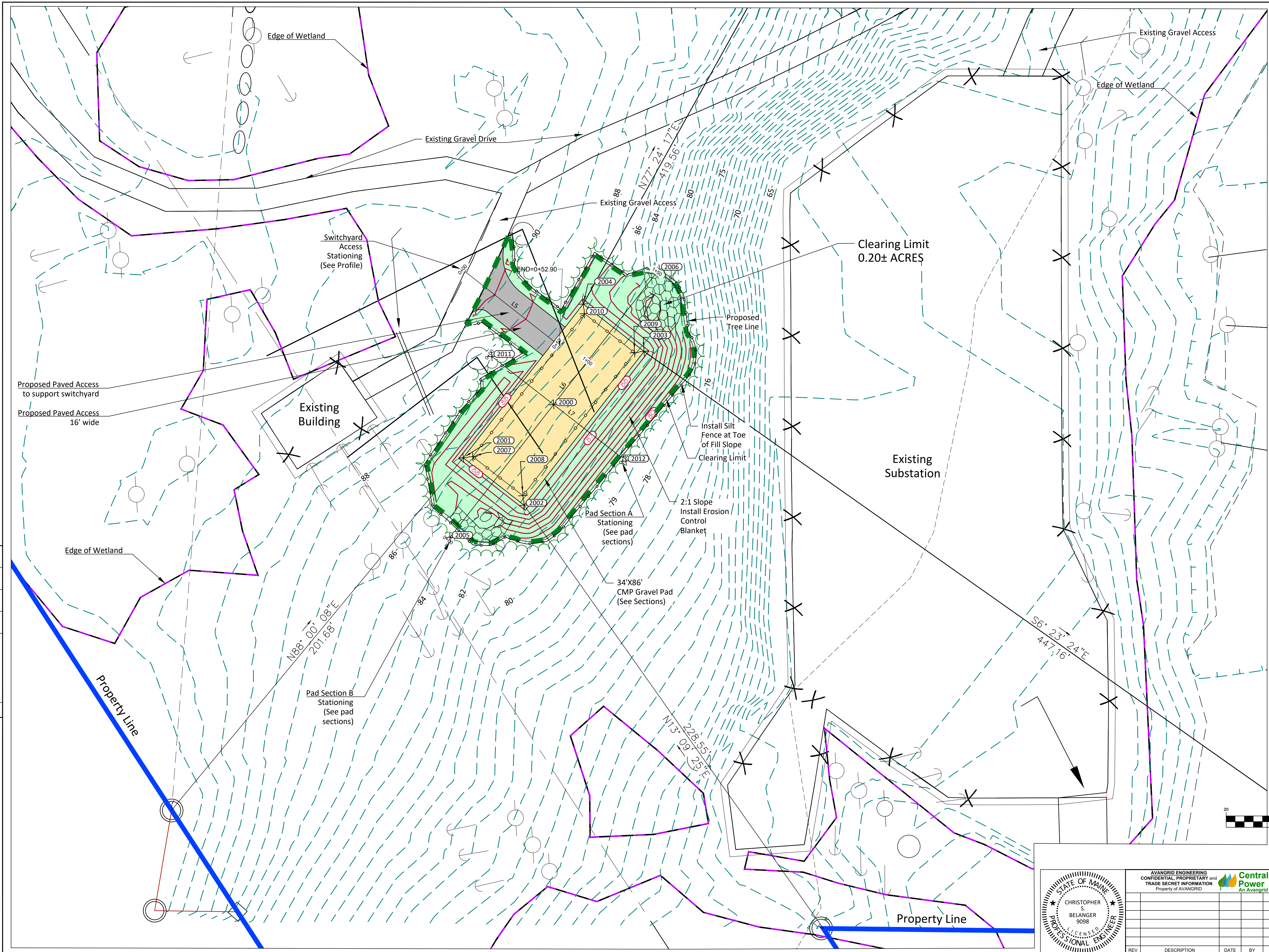
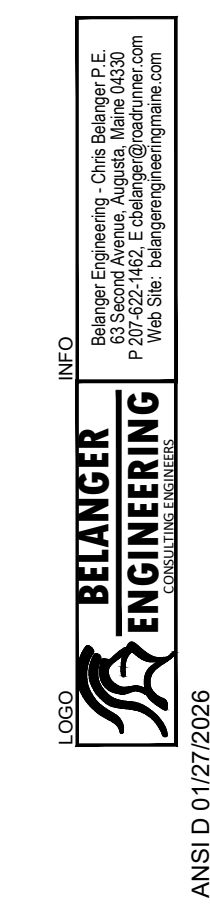
INFO
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STATE OF MAINE CHRISTOPHER S. BELANGER 9098 PROFESSIONAL ENGINEER		AVANGRID ENGINEERING CONFIDENTIAL, PROPRIETARY and TRADE SECRET INFORMATION Property of AVANGRID	Central Maine Power An Avangrid Company	Clearing Plan Bolt Hill Substation 305 Bolt Hill Road, Eliot, Maine	
Bolt Hill Substation and Switchyard York County		SCALE: 1"=40' FILE: 2026 0129 238 - Bolt Hill Base.dwg 1100-0003-004-SH 001 00			
REV	DESCRIPTION	DATE	BY	CK	APP

1-29-2026





AVANGRID ENGINEERING

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Central Maine
Power

An Avangrid Company

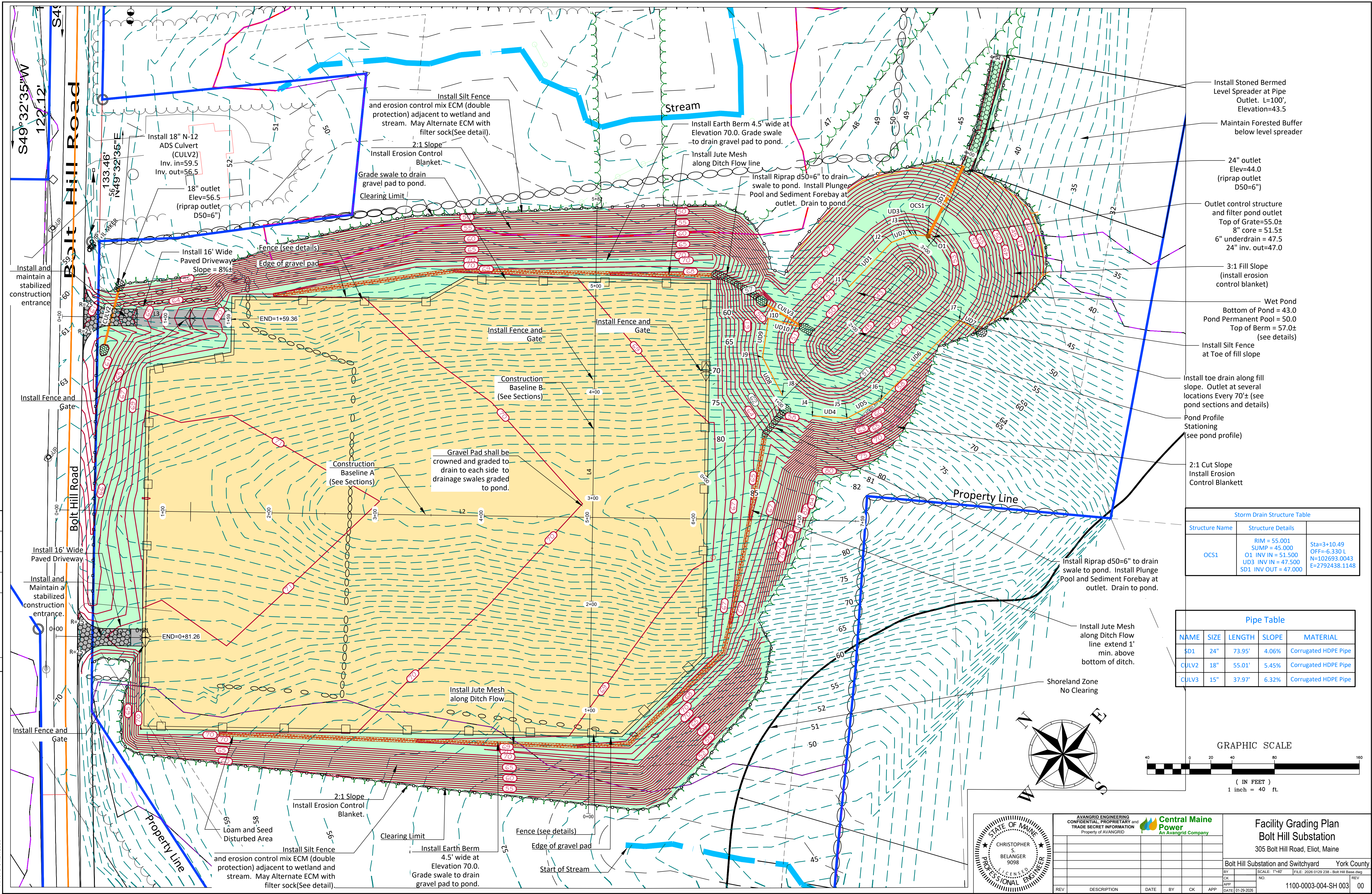
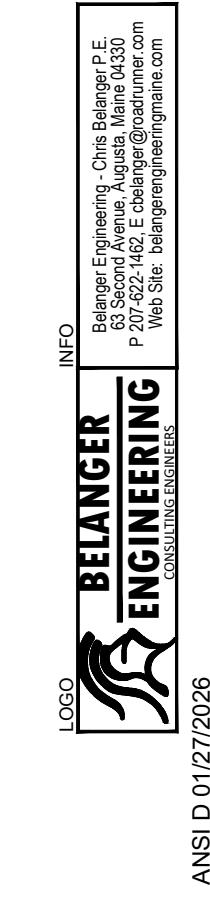
Clearing Plan

Bolt Hill Switchyard

305 Bolt Hill Road, Eliot, Maine

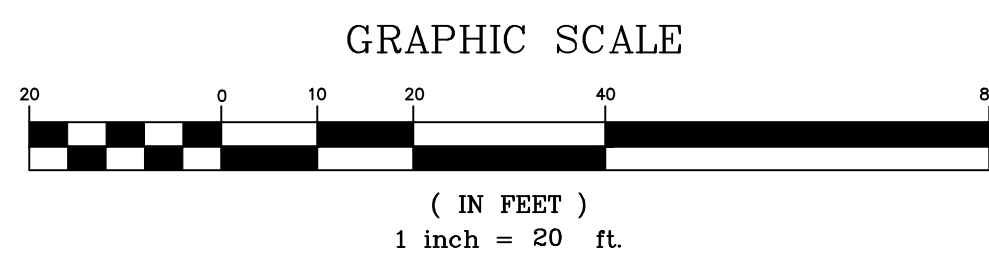
REV	DESCRIPTION	DATE	BY	CK	APP

Ch B. 1-29-2026

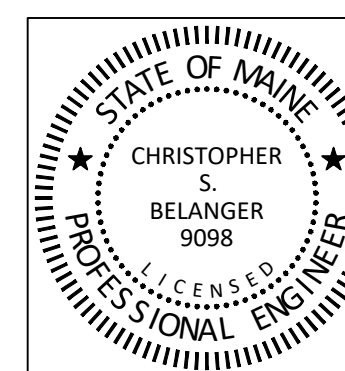


Ch B. L. 1-29-2026

Storm Drain Structure Table		
Structure Name	Structure Details	
OCS1	RIM = 55.001	Sta=3+10.49 OFF=-6.330 L N=102693.0043 E=2792438.1148
	SUMP = 45.000	
	O1 INV IN = 51.500	
	UD3 INV IN = 47.500	
	SD1 INV OUT = 47.000	

[illegible]

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[illegible]

Pond Site Plan Bolt Hill Substation 305 Bolt Hill Road, Eliot, Maine			
Bolt Hill Substation and Switchyard		York County	
BY	SCALE: 1"=20'	FILE: 2026 0129 238 - Bolt Hill Basin.dwg	
CHK	NO.		REV
APP		1100-0003-004-SH 005	00
DATE: 01-29-2026			

REV	DESCRIPTION	DATE	BY	CK	APP

LOGO

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Belanger

Engineering

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Lebanon, ME 04457

ANSI D 01/27/2026

Pond Cross Section PROFILE

Scale:
1"=20' Horizontal
1"=2' Vertical

GRAPHIC SCALE
20 0 10 20 40 60
(IN FEET)
1 inch = 20 ft.

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STATE OF MAINE
REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER S. BELANGER
9098

1-29-2026

AVANGRID ENGINEERING
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Property of AVANGRID

Central Maine
Power
An Avangrid Company

Pond Cross Section Profile
Bolt Hill Substation
305 Bolt Hill Road, Eliot, Maine

Bolt Hill Substation and Switchyard

York County

BY: []
CK: []
APP: []
DATE: 01-29-2026

SCALE: 1"=20'

NO: 1100-0003-004-SH 006

FILE: 2026 0129 238 - Bolt Hill Base.dwg

REV: 00

REV	DESCRIPTION	DATE	BY	CHK	APP

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Belanger Engineering

CONSULTANTS

Ripley's Dam may be used instead of Anti-seep Collar Detail (this sheet)

Pipe A-48

Ripley's Dam

For Steep Slopes and High Groundwater Pipe Installations

1. Why are trench dams important in pipeline construction?
When groundwater invades a pipe trench, it will flow down the slope, creating an underground river. This flow creates the heave and causes voids. When the dam is installed, it creates a barrier to the flow of water over the pipeline. It could create a siphon of the fill. The purpose of Ripley's Dam is to stop the flow in the pipe entrenchment, the area of high hydraulic conductivity. This allows the soil to function as a sponge and retain the water.

2. How have trench dams been constructed prior to the development of Ripley's Dam?
Either clay was packed around the pipe or concrete was poured or formed in the pipe envelope. Clay and concrete had to make a watertight seal. Clay is a poor building material while concrete poses an additional and possibly damaging load in the pipe.

3. Where should dams be placed on the pipe run?
It is generally recommended that a dam be placed on either side of structures such as manholes and pump stations. The engineering engineer on the job should specify the best qualified to evaluate where a dam should be installed.

4. What do contractors think of Ripley's Dam?
Contractors like the ease of installation and its watertight seal. Clay or concrete dams are very difficult to install if the trench is muddy or has water flowing in it and a watertight seal using clay or concrete is almost impossible to obtain on newly installed pipe.

5. What effects do soil moisture and corrosion have on Ripley's Dam?
The Dam, which is made of ABS (Acrylonitrile Butadiene Styrene) is not adversely affected by cold temperatures and is highly resistant to corrosion caused by chemicals or hot soils as is the flexible adapter made of customer PVC.

6. Is Ripley's Dam safe to install?
Unlike clay dams, a Ripley's Dam can be installed without leaving the trench line. The installer can stand at the rear of the trench box fully protected from wall collapse.

DESCRIPTION	PRODUCT
4\"/>	

SAMPLE SPECIFICATION:
Trench baffles should trench baffles at 10' intervals along the pipe from station 0+00 to station 1+00. Baffles will be set by use of an appropriately dimensioned PVC flexible coupling. Baffles shall form an impermeable barrier in the pipe envelope to the flow of water. Baffles constructed of ABS plastic are acceptable. Trench baffles shall be Ripley's Dam or approved equal.

CHARACTERISTIC	TEST METHOD	TEST RESULTS	VALUES	UNIT
Specific Gravity	ASTM D-295	775	1.45	g/cc
Modulus	ASTM D-295	775	5.5	ksi
Tensile Strength	ASTM D-295	775	600	psi
Tensile Modulus	ASTM D-295	775	2.8	psi
Impact Strength	ASTM D-295	775	200	ft-lb
Deflection Temp	ASTM D-295	775	11	°F
Heat Deflection Temp	ASTM D-295	775	11	°F
Heat Deflection Temp	ASTM D-295	775	11	°F
Heat Deflection Temp	ASTM D-295	775	11	°F
Heat Deflection Temp	ASTM D-295	775	11	°F

Phone: 800-645-0418 (301-84451) • Fax: 301-845-5657

MEDOT Specifications for Underdrains (ME DOT #703.22)		
Sieve Size	% Passing by Weight	
Underdrain Type B		
1"	90-100	
1/2"	75-100	
#4	50-100	
#20	15-80	
#50	0-15	
#200	0-5	
Underdrain Type C		
1"	100	
3/4"	90-100	
3/8"	0-75	
#4	0-25	
#10	0-5	

6 Typical Emergency Spillway Section
Not to Scale

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STATE OF MAINE
CHRISTOPHER S. BELANGER
9098
LICENSED PROFESSIONAL ENGINEER

AVANGRID ENGINEERING
CONFIDENTIAL, PROPRIETARY AND
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Property of AVANGRID

Central Maine Power

An Avangrid Company

Pond Details
Bolt Hill Substation
305 Bolt Hill Road, Eliot, Maine

Bolt Hill Substation and Switchyard

York County

BY: [Signature]
CHK: [Signature]
APP: [Signature]
DATE: 01-29-2026

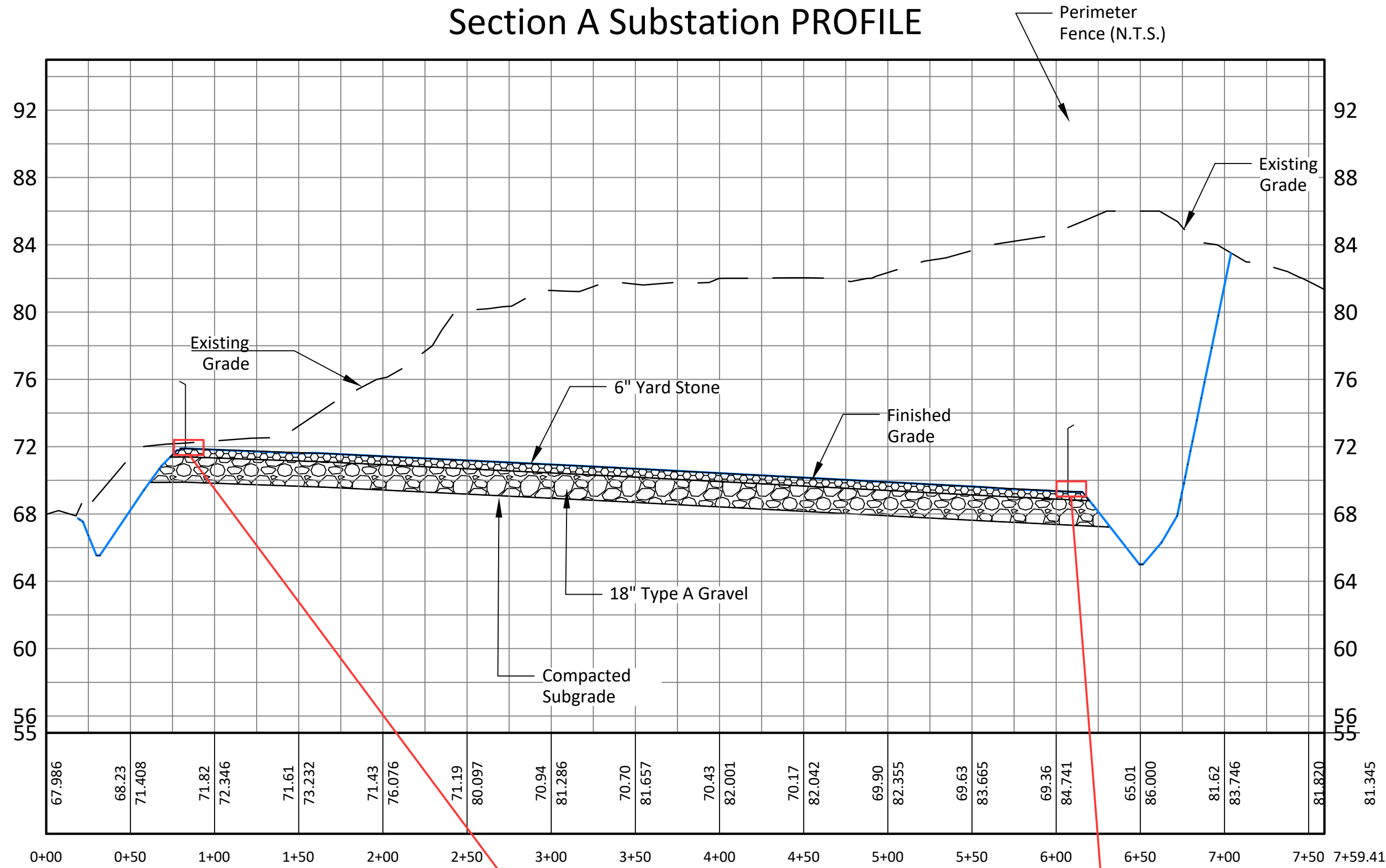
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1100-0003-004-SH 008

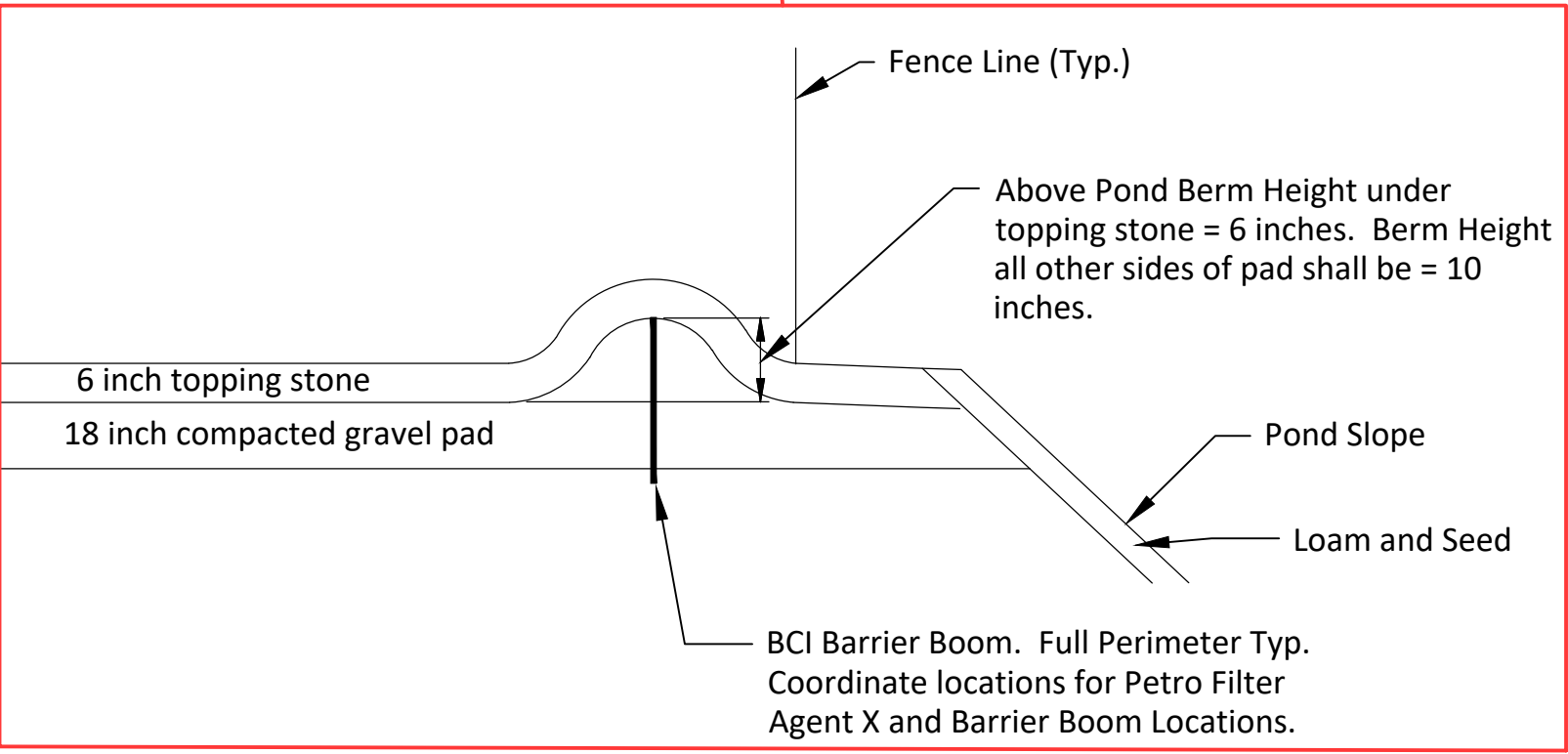
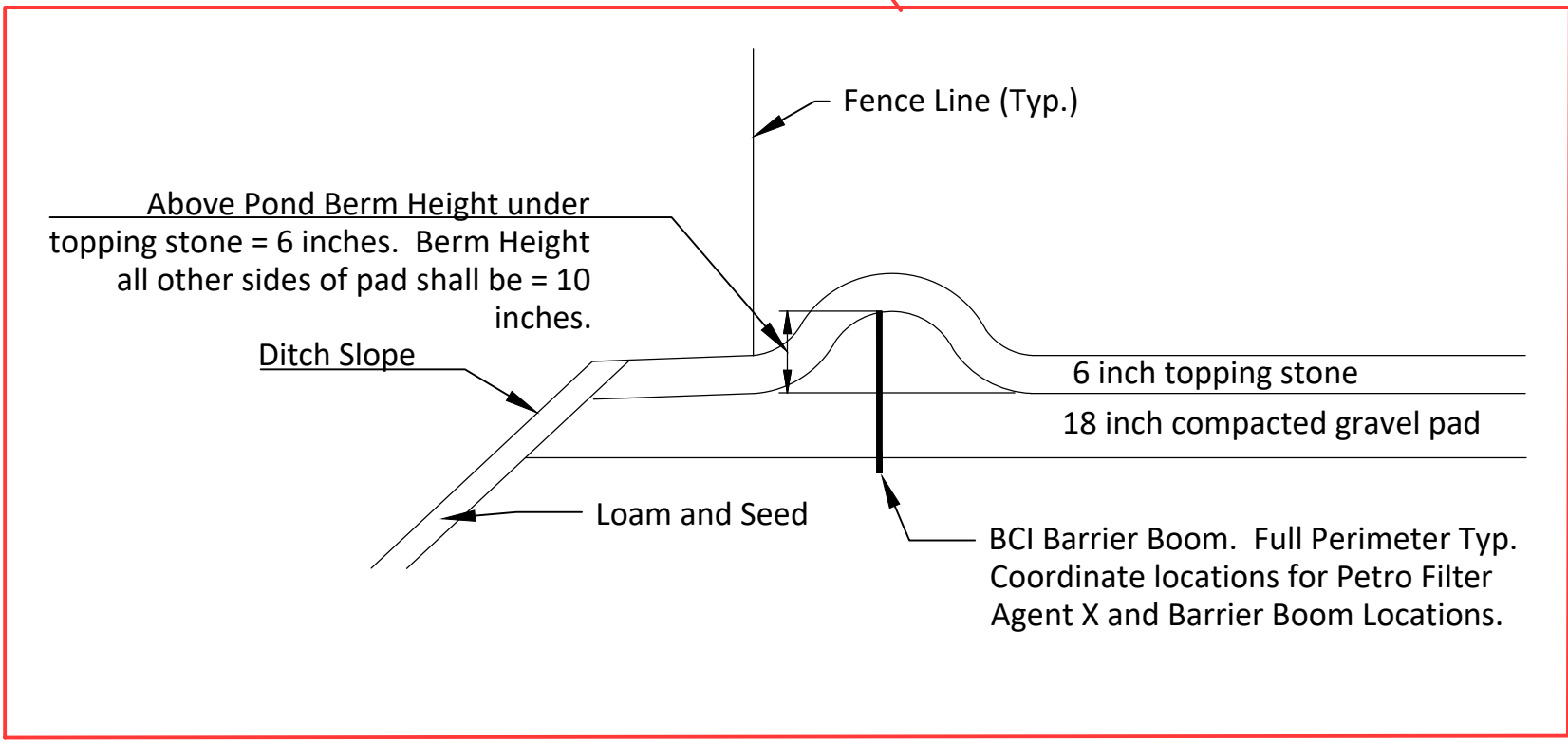
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1-29-2026
Chris Belanger

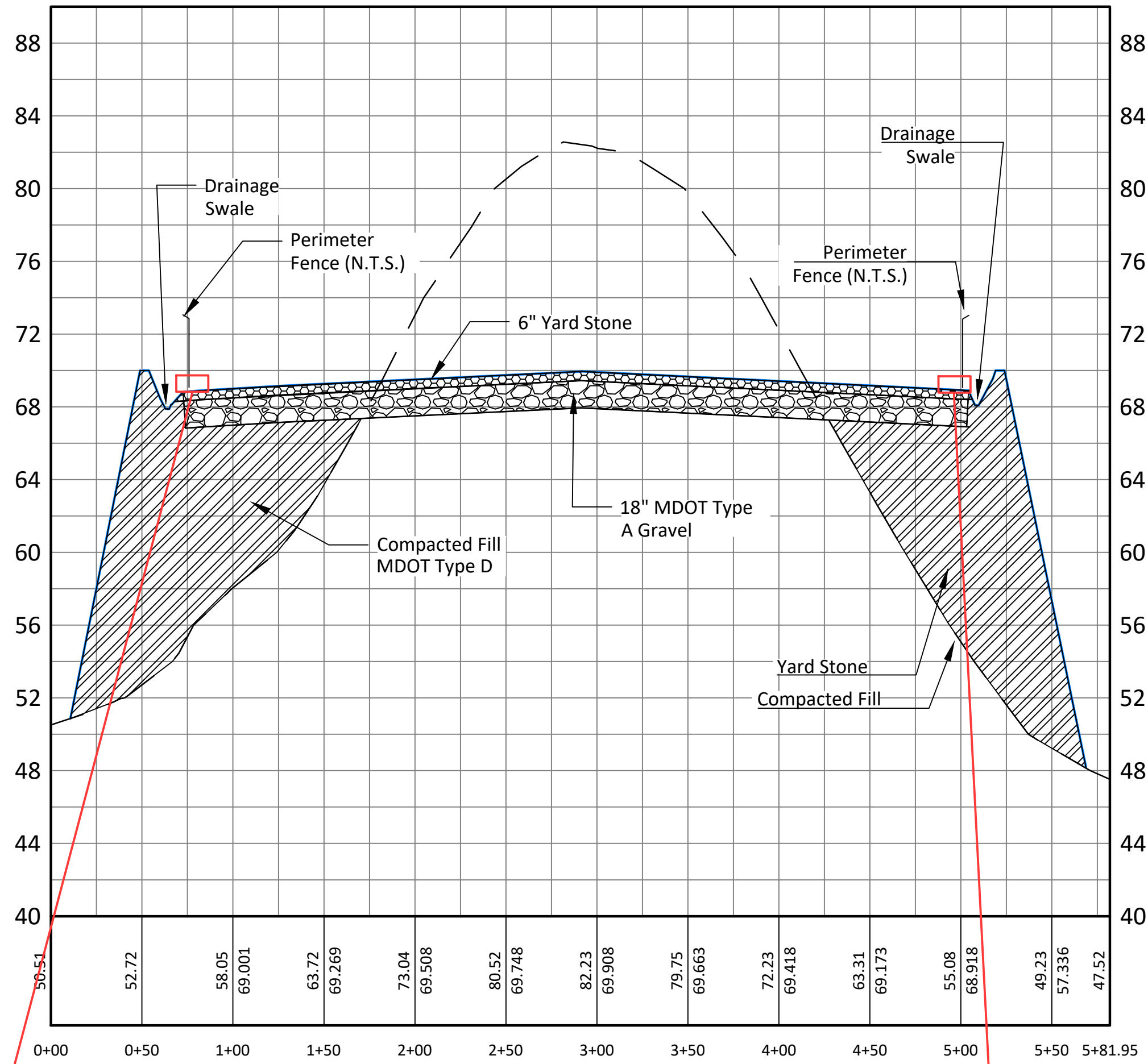
Section A Substation PROFILE



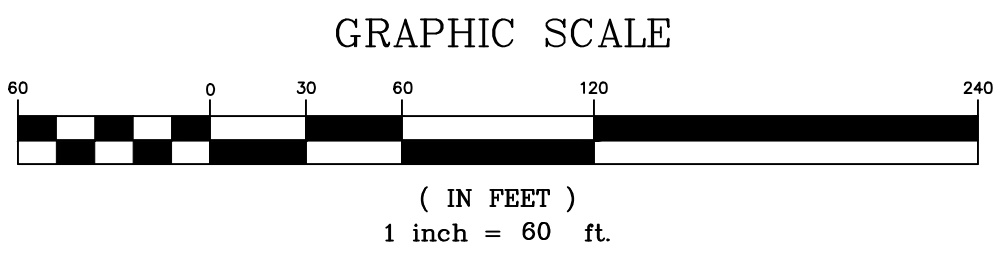
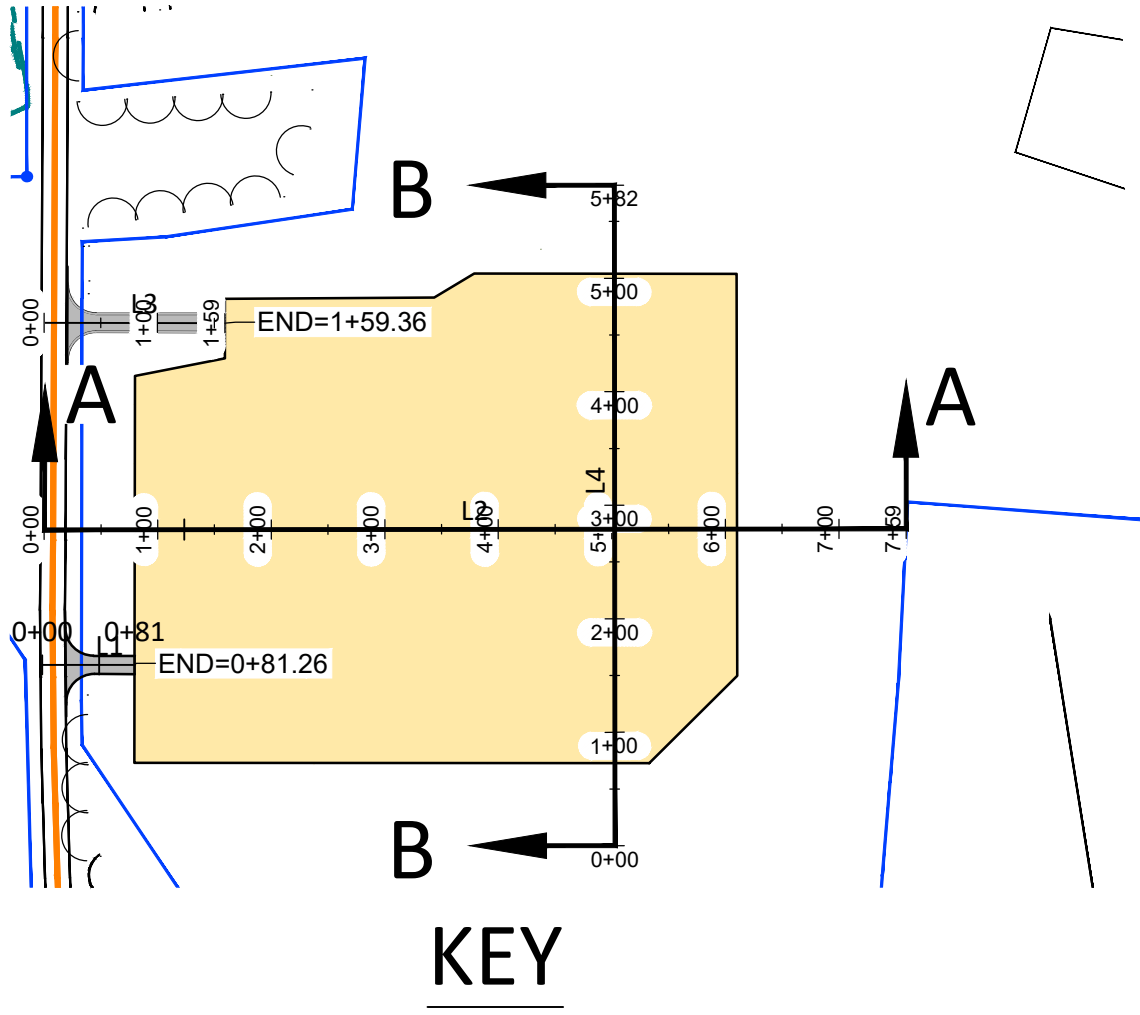
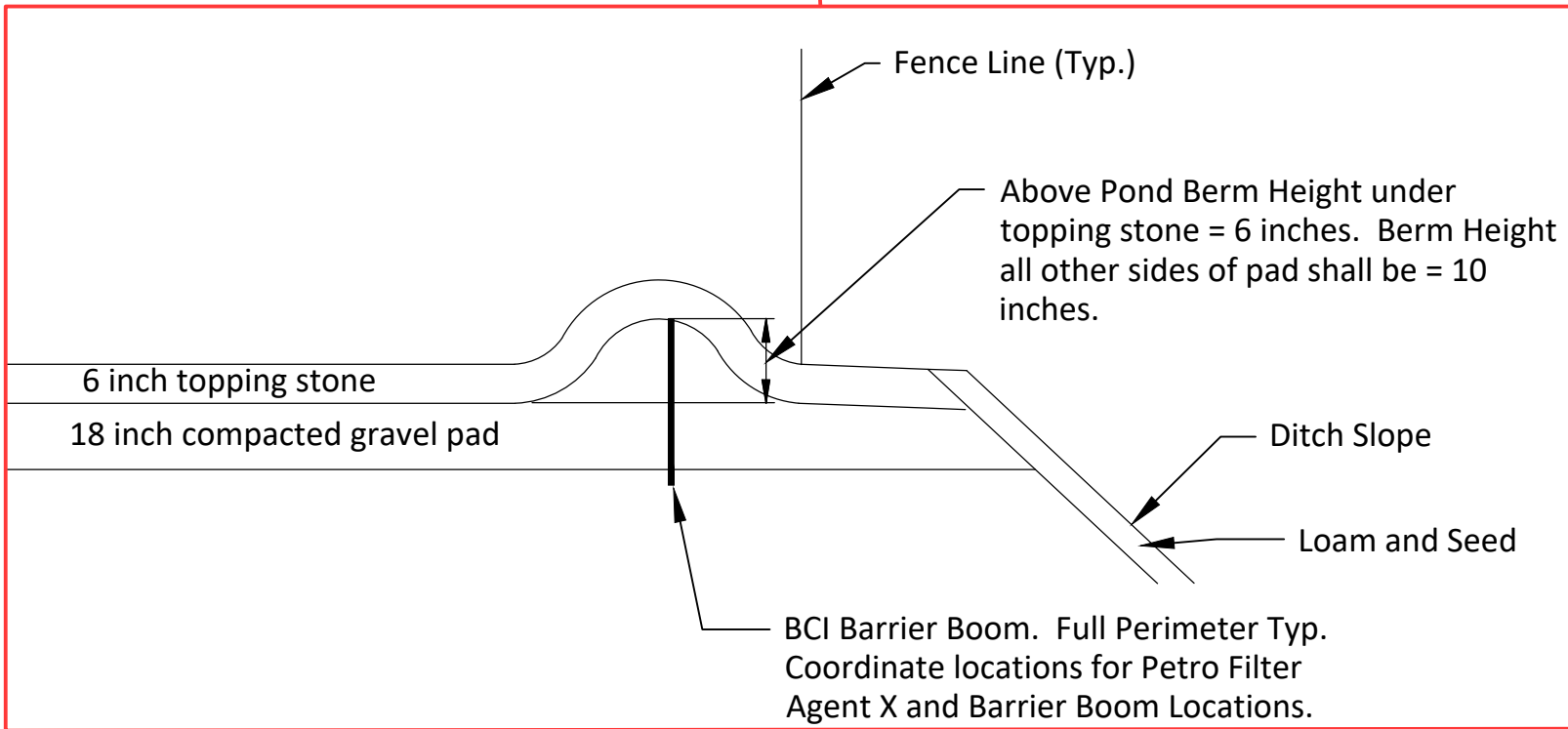
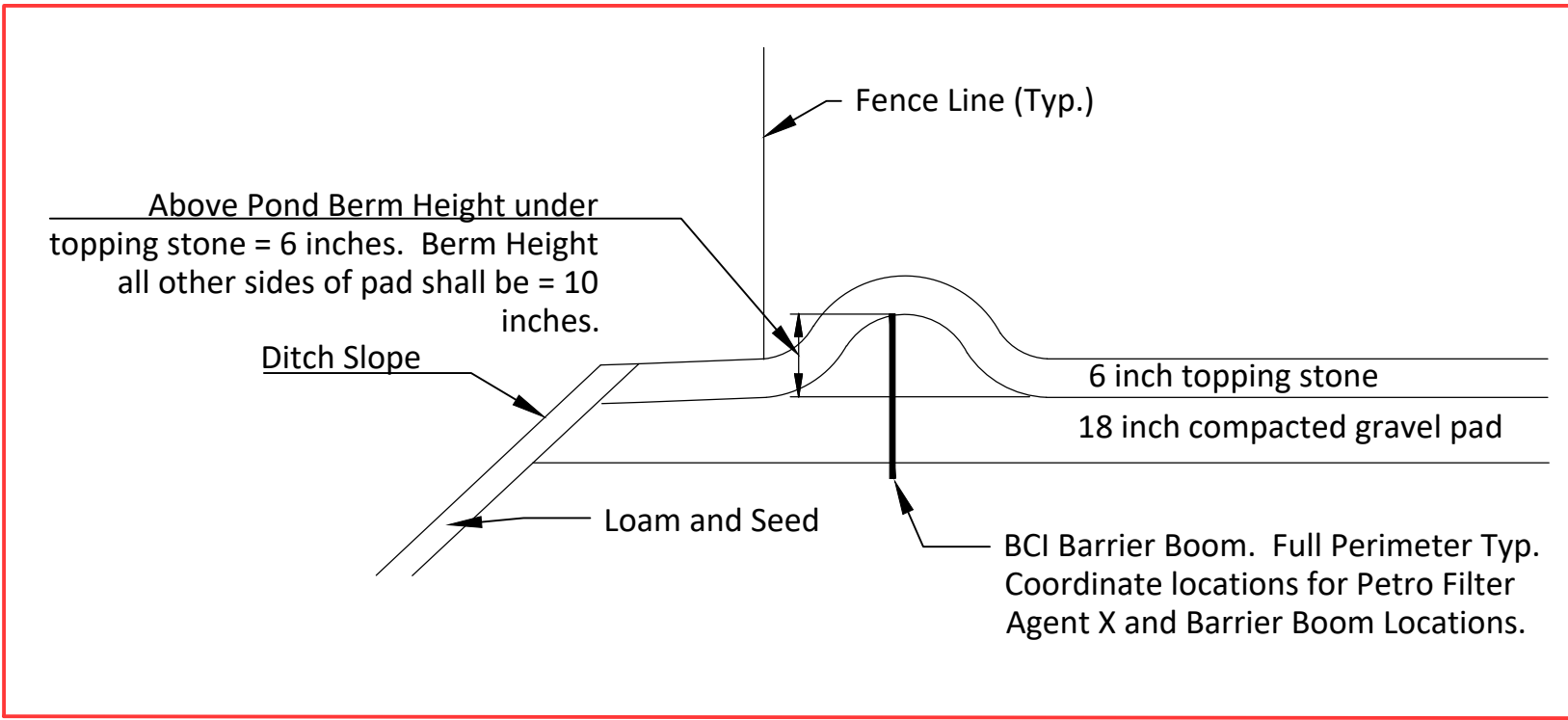
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1"=6' Vertical



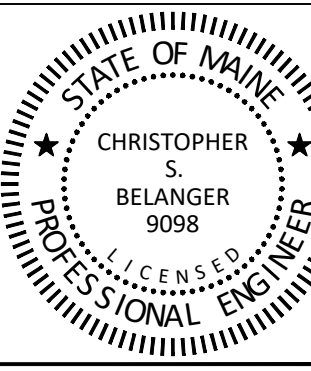
Section B Substation PROFILE



Scale:
1"=60' Horizontal
1"=6' Vertical



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AVANGRID ENGINEERING CONFIDENTIAL, PROPRIETARY and TRADE SECRET INFORMATION Property of AVANGRID					
BY	DATE	DESCRIPTION	DATE	DESCRIPTION	DATE
CK					
APP					
REV					

Pad Cross Section Bolt Hill Substation 305 Bolt Hill Road, Eliot, Maine	
Bolt Hill Substation and Switchyard	York County
NO	REV
1100-0003-004-SH 009	00

LOGO

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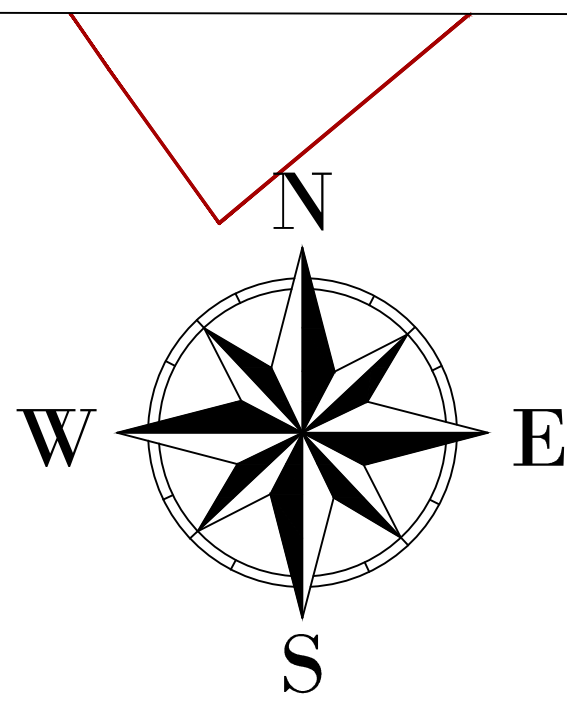
ANSI D 01/27/2026

REV	DESCRIPTION	DATE	BY	CK	APP

1-29-2026
Ch. Belanger

LOGO  **BELANGER ENGINEERING** CONSULTING INC. **INFO** Belanger Engineering - Chris Belanger P.E.
 83 Second Avenue, Augusta, Maine 04301
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 E-Mail: info@belangerengineeringmaine.com
 Web Site: belangerengineeringmaine.com

Ch B. L. 1-29-2026



STORMWATER LEGEND

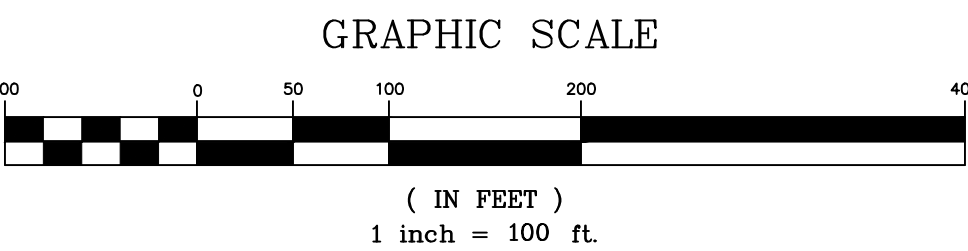
- HYDROCAD POND
- HYDROCAD SUBAREA
- HYDROCAD REACH
- TC FLOW PATH
- REACH
- WATERSHED BOUNDARY
- SOILS BOUNDARY
- WmB
- SOIL DESCRIPTION

FLOODING STANDARD RESULTS Subareas 1R				
Storm	PRE C.F.S.	POST C.F.S.	DIFFERENCE %	
2 YEAR	6.4	4.64	-38%	
10 YEAR	16.86	12.67	-33%	
25 YEAR	26.79	20.4	-31%	
50 YEAR	35.79	27.42	-31%	
100 YEAR	47.73	36.78	-30%	

FLOODING STANDARD RESULTS Subareas 4R				
Storm	PRE C.F.S.	POST C.F.S.	DIFFERENCE %	
2 YEAR	6.88	5.21	-32%	
10 YEAR	18.51	13.51	-37%	
25 YEAR	29.66	21.72	-37%	
50 YEAR	39.7	30.06	-32%	
100 YEAR	53.64	40.57	-32%	

CMP Bolt Hill Substation Pre-Development Watershed Areas					
Subarea	Total Area	Total Area	Exempt Off Site		Existing
			Existing Area	Existing Area	
	sf	Acres	sf	sf	sf
1S	657236	15.09	0	0	657236
2S	605000	13.89	0	0	605000
7S	531593	12.20	50000	21846	459747
Totals (s.f.)	1793829	41.18	50000	21846	1721983
Totals (Acres)			1.15		39.53

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REV	DESCRIPTION	DATE	BY	CK	APP

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LOGO

BELANGER ENGINEERING

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STATE OF MAINE
CHRISTOPHER S. BELANGER
9098
LICENSED PROFESSIONAL ENGINEER

AVANGRID ENGINEERING
CONFIDENTIAL, PROPRIETARY and
TRADE SECRET INFORMATION
Property of AVANGRID

Central Maine Power

An Avangrid Company

Pre Development Drainage Plan
Bolt Hill Substation and Switchyard
305 Bolt Hill Road, Eliot, Maine

Bolt Hill Substation and Switchyard

York County

BY: [Signature]
SCALE: 1"=100'
NO

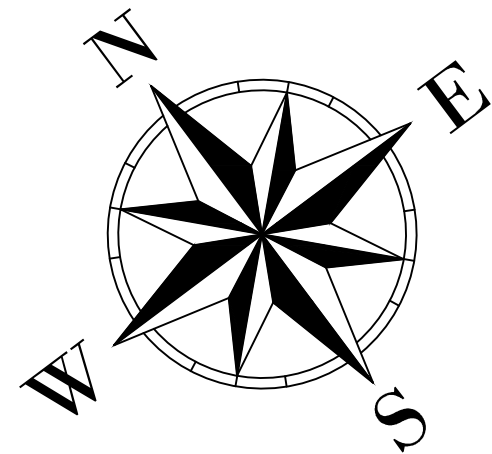
FILE: 2026 0129 238 - Bolt Hill Base.dwg
1100-0003-004-SH 011
00

1-29-2026
Chris Belanger

CMP Bolt Hill Road Post-Development Watershed Areas													
		Exempt Off Site		Exempt Off Site				Site 95%		Site 80%		Treatment BMP	Comments
Subarea	Total Area	Total Area	Existing Impervious Area	Existing Lawn	Existing Meadow / Brush Undeveloped	New Lawn Area	New Impervious Area	New Impervious Area Treated	New Developed Area	New Developed Area Treated			
	sf	Acres	sf	sf	sf	sf	sf	sf	sf	sf			
1S	520294	11.94	0	0	497713	21846	735	0	22581	21845	No Mow Fill Slopes, non exporter	CMP Pad provides treatment	
2S	425408	9.77	0	0	345728	78157	1523	0	79680	62727	No Mow Fill Slopes, non exporter		
3S	123920	2.84	0	0	0	744	123176	123176	123920	123920	Wet Pond 1P		
4S	24554	0.56	0	0	20222	2075	2257	0	4332	0	No Treatment		
5S	91851	2.11	0	0	0	0	91851	91851	91851	91851	CMP Pad Storage - Simon Letter		
6S	76134	1.75	0	0	1389	74745	0	0	74745	74745	Wet Pond 1P		
7S	531593	12.20	50000	21846	450870	5310	3567	0	8877	0	No Treatment		
Totals (s.f.)		1793754	41.18	50000	21846	1315922	182877	223109	215027	405986	375088		
Totals (Acres)			1.15		30.21		4.20	5.12		9.32			
		✓					✓	>95%	96%	>80%	92%	✓	

FLOODING STANDARD RESULTS Subareas 1R				
Storm	PRE C.F.S.	POST C.F.S.	DIFFERENCE %	
2 YEAR	6.4	4.64	-38%	
10 YEAR	16.86	12.67	-33%	
25 YEAR	26.79	20.4	-31%	
50 YEAR	35.79	27.42	-31%	
100 YEAR	47.73	36.78	-30%	

FLOODING STANDARD RESULTS Subareas 2R and 3R				
Storm	PRE (2R) C.F.S.	POST (2R+3R) C.F.S.	DIFFERENCE %	
2 YEAR	7.42	5.6	-33%	
10 YEAR	19.58	14.65	-34%	
25 YEAR	31.17	23.72	-31%	
50 YEAR	41.55	31.87	-30%	
100 YEAR	56.08	42.59	-32%	



STORMWATER LEGEND

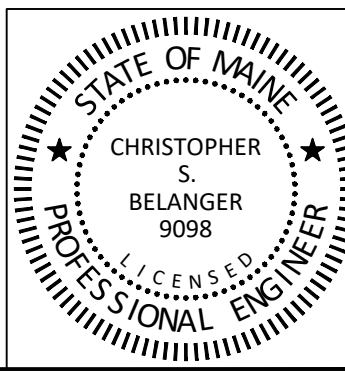
- PROPOSED LAWN DEVELOPED AREA
- PROPOSED GRAVEL
- HYDROCAD POND
- HYDROCAD SUBAREA
- HYDROCAD REACH
- TC FLOW PATH
- REACH
- WATERSHED BOUNDARY
- SOILS BOUNDARY
- SOIL DESCRIPTION

GRAPHIC SCALE



(IN FEET)
1 inch = 100 ft.

PRELIMINARY
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NOT FOR CONSTRUCTION



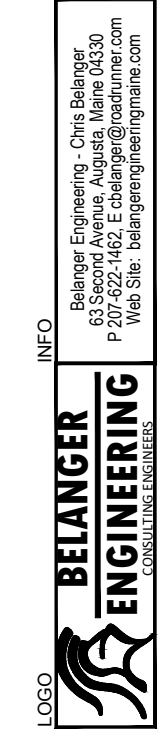
AVANGRID ENGINEERING CONFIDENTIAL, PROPRIETARY and TRADE SECRET INFORMATION Property of AVANGRID					
REV	DESCRIPTION	DATE	BY	CK	APP

Post Development Drainage Plan Bolt Hill Substation and Switchyard 305 Bolt Hill Road, Eliot, Maine			
Bolt Hill Substation and Switchyard		York County	
BY	SCALE: 1"=100'	FILE: 2026 0129 238 - Bolt Hill Base.dwg	REV
CK	NO		
APP			
DATE: 01-29-2026		1100-0003-004-SH 012	00

1-29-2026
Ch. B. Belanger

Bolt Hill Road Switchyard Wet Pond Design Criteria - Hydrocad Pond 1P2			
acres	s.f.		
Impervious Area Draining to Pond 1P2	2.83	123176	
Lawn Area draining to Pond 1P2	1.73	75489	
Permanent Pool Elevation	50		
95% Treatment Volume	Above Pool	1" X Impervious Area + 0.4" X Lawn ((0.083 (123176)) + (0.033(75489)))	12715 c.f.
	Below Pool	2" X Impervious Area + 0.8" X Lawn ((0.167 (123176)) + (0.067(75489)))	25855 c.f.
Pond Storage Provided	Above Pool		44220 ✓
	Below Pool		26392 ✓
Mean Depth	Volume of Permanent Pool / Surface Area 1' below pool =		4.4 ft.
	Volume of Permanent Pool	26392 c.f.	>3 ✓
	Surface Area 1' below Pool	6058 s.f.	
Gravel Filter Drain Sizing	3' per 1000 c.f. of channel protection volume: Channel Protection Volume	12715	38 max.
	4" wide X 2' deep, 6" slotted drain		
Length to Width Ratio	Required	3 to 1	Provided 3 to 1
			Measured at Permanent pool
Groundwater Impacts	GW Elev	59	See SW Cole Geotechnical Report Dated May 22, 2023 See Boring B-22-25
Ledge	Elev	None Observed	See SW Cole Geotechnical Report Dated May 22, 2023 See Boring B-22-25
Liner	A pond liner will be installed to protect groundwater mixing see details		
Pre-Treatment	Sanded Area (acres)	1 acres	
	10 storms per year		
	500 lbs per acre-storm		
	90 lbs/c.f.		
	Annual Sediment Load	55.56 c.f.	

REV	DESCRIPTION	DATE	BY	CK	APP



ANSI D 01/27/2026

REV	DESCRIPTION	DATE	BY	CHK	APP

INFO

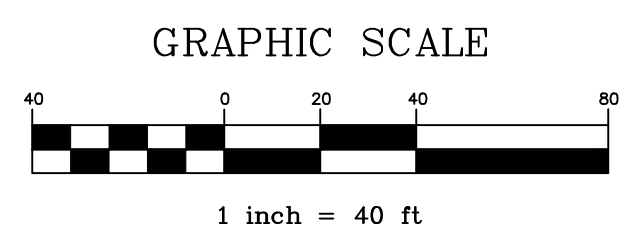
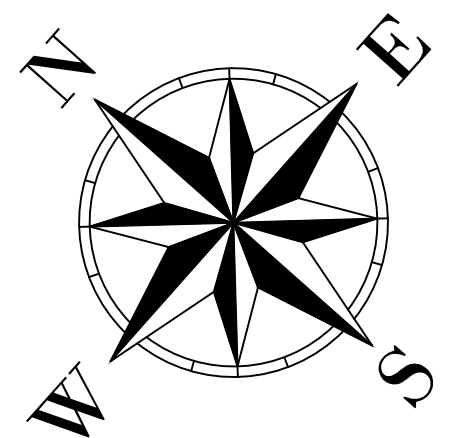
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ENGINEERING
CONSULTANTS INC.

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Web Site: www.belangerinc.com

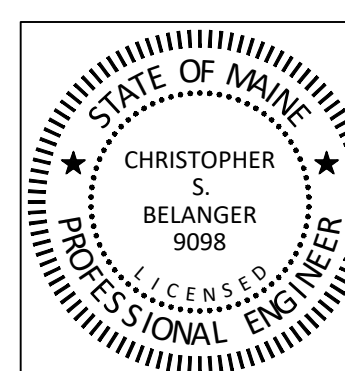
ANSI D 01/27/2026



- Install Stoned Bermed Level Spreader at Pipe Outlet. Elev=44.0
- 24" outlet Elev=44.0 (riprap outlet D50=6")
- Outlet control structure and filter pond outlet Top of Gate=55.0± 8" core = 51.5± 6" underdrain = 47.5 24" inv. out=47.0
- 3:1 Fill Slope (install erosion control blanket)
- Wet Pond Bottom of Pond = 43.0 Pond Permanent Pool = 50.0 Top of Berm = 57.0± (see details)
- Install Silt Fence at Toe of fill slope



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An Avangrid Company

Erosion Control Site Plan
Bolt Hill Substation
305 Bolt Hill Road, Eliot, Maine

Bolt Hill Substation and Switchyard York County

BY: NO: SCALE: 1"=40' FILE: 2026 0129 238 - Bolt Hill Base.dwg
CK: REV: 1100-0003-005-SH 001 00
APP: DATE: 01-29-2026

1-29-2026
Chris Belanger

EROSION AND SEDIMENTATION NOTES:

1. The Site Contractor shall follow the "Maine Erosion and Sediment Control BMPs" published by the Maine DEP in 2003 and the "Maine Erosion and Sediment Control Practices Field Guide for Contractors published in 2016 or most current update". The manuals can be found on the Maine DEP web site. A Link to the field guide is shown below:

<http://www.maine.gov/dep/land/erosion/escbmps/index.html>

THE CONTRACTOR SHALL ALSO FOLLOW THE GUIDELINES LISTED IN APPENDICES A, B, C IN MAINE DEP CHAPTER 500 RULES (2015 NOTES PROVIDED ON THIS SHEET).

GENERAL EROSION AND SEDIMENTATION CONTROL PRACTICES:

EROSION/SEDIMENT CONTROL DEVICES:

THE FOLLOWING EROSION SEDIMENTATION CONTROL DEVICES ARE PROPOSED FOR CONSTRUCTION ON THIS PROJECT. INSTALL THESE DEVICES AS INDICATED ON THE PLANS.

1. SILT FENCE: SILT FENCE WILL BE INSTALLED ALONG THE DOWN GRADING EDGES OF DISTURBED AREAS TO TRAP RUNOFF BORNE SEDIMENTS UNTIL THE SITE IS STABILIZED. IN AREAS WHERE STORMWATER DISCHARGES THE SILT FENCE WILL BE REINFORCED WITH HAY BALES TO HELP MAINTAIN THE INTEGRITY OF THE SILT FENCE AND TO PROVIDE ADDITIONAL TREATMENT.

2. HAY BALES: HAY BALES TO BE PLACED IN LOW FLOW DRAINAGE SWALES AND PATHS TO TRAP SEDIMENTS AND REDUCE RUNOFF VELOCITIES. DO NOT PLACE HAY BALES IN FLOWING WATER OR STREAMS.

3. RIPRAP: PROVIDE RIPRAP IN AREAS WHERE CULVERTS DISCHARGE OR AS SHOWN ON THE PLANS.

4. LOAM, SEED & MULCH: ALL DISTURBED AREAS, WHICH ARE NOT OTHERWISE TREATED, SHALL RECEIVE PERMANENT SEEDING AND MULCH TO STABILIZE THE DISTURBED AREAS. THE DISTURBED AREAS WILL BE REVEGETATED WITHIN 5 DAYS OF FINAL GRADING. SEEDING REQUIREMENTS ARE PROVIDED AT THE END OF THIS SPECIFICATION.

5. STRAW AND HAY MULCH: USED TO COVER DENUDED AREAS UNTIL PERMANENT SEED OR EROSION CONTROL MEASURES ARE IN PLACE. MULCH BY ITSELF CAN BE USED ON SLOPES LESS THAN 15% IN SUMMER AND 8% IN WINTER. JUTE MESH IS TO BE USED OVER MULCH ONLY. CURLEX II AND EXCELSIOR MAY BE USED IN PLACE OF JUTE MESH OVER MULCH.

6. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%.

TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES:

PROVIDE THE FOLLOWING TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION OF THE DEVELOPMENT:

1. SILTATION FENCE ALONG THE DOWNGRADIENT SIDE OF THE PARKING AREAS AND OF ALL FILL SECTIONS. THE SILTATION FENCE WILL REMAIN IN PLACE UNTIL THE SITE IS 90% REVEGETATED. REMOVE SILTATION FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENT AND STABILIZE.

2. HAY BALES PLACED AT KEY LOCATIONS TO SUPPLEMENT THE SILT FENCE.

3. PROTECT TEMPORARY STOCKPILES OF STUMPS, GRUBBINGS, OR COMMON EXCAVATION AS FOLLOWS:
A. SOIL STOCKPILE SIDE SLOPES SHALL NOT EXCEED 2:1.
B. AVOID PLACING TEMPORARY STOCKPILES IN AREAS WITH SLOPES OVER 10 PERCENT, OR NEAR DRAINAGE SWALES. SEE ITEM 3 IN CONSTRUCTION PHASE NOTES BELOW.
C. STABILIZE STOCKPILES WITHIN 15 DAYS BY TEMPORARILY SEEDING WITH A HYDROSEED METHOD CONTAINING AN EMULSIFIED MULCH TACKIFIER OR BY COVERING THE STOCKPILE WITH MULCH.
D. SURROUND STOCKPILE SOIL WITH SILTATION FENCE AT BASE OF PILE.

4. ALL DENUDED AREAS WHICH HAVE BEEN ROUGH GRADED AND ARE NOT LOCATED WITHIN THE BUILDING PAD, OR PARKING AND DRIVEWAY SUBBASE AREA THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS SHALL RECEIVE MULCH OR NON-ERODABLE COVER. STABILIZE AREAS WITHIN 75 FEET OF A WETLAND OR WATERBODY WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OR THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST. IN THE EVENT THE CONTRACTOR COMPLETES FINAL GRADING AND INSTALLATION OF LOAM AND SOIL WITHIN THE TIME PERIODS PRESENTED ABOVE, INSTALLATION OF MULCH AND NETTING, WHERE APPLICABLE, IS NOT REQUIRED.

5. IF WORK IS CONDUCTED BETWEEN OCTOBER 15 AND APRIL 15, ALL DENUDED AREAS ARE TO BE COVERED WITH HAY MULCH, APPLIED AT TWICE THE NORMAL APPLICATION RATE, AND ANCHORED WITH FABRIC NETTING. THE PERIOD BETWEEN FINAL GRADING AND MULCHING SHALL BE REDUCED TO A 15 DAY MAXIMUM.

6. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE HAS BEEN STABILIZED OR IN AREAS WHERE PERMANENT EROSION CONTROL MEASURES HAVE BEEN INSTALLED.

PERMANENT EROSION CONTROL MEASURES:

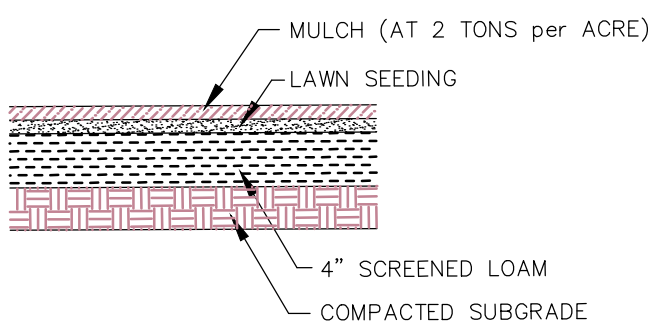
THE FOLLOWING PERMANENT EROSION CONTROL MEASURES ARE REQUIRED BY THIS EROSION/SEDIMENTATION CONTROL PLAN:

1. ALL AREAS DISTURBED DURING CONSTRUCTION, BUT NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, ETC.), WILL BE LOAMED, LIMED, FERTILIZED AND SEEDED. NATIVE TOPSOIL SHALL BE STOCKPILED AND REUSED FOR FINAL RESTORATION WHEN IT IS OF SUFFICIENT QUALITY.

2. IF AN AREAS WILL NOT BE WORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO FINAL GRADE, THEN PERMANENTLY STABILIZE THE AREA WITHIN 7 DAYS BY PLANTING VEGETATION, SEEDING, SOIL, OR THROUGH THE USE OF PERMANENT MULCH, OR RIPRAP, OR ROAD SUB-BASE. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, SOIL, AND MOISTURE CONDITIONS; AMEND AREAS OF DISTURBED SUBSOILS WITH TOPSOIL, COMPOST, OR FERTILIZERS; PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY, EROSION CONTROL BLANKETS; AND SCHEDULE SODDING, PLANTING, AND SEEDING TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS. NEWLY SEED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL ESTABLISHED. IF NECESSARY, AREAS MUST BE SEED AND MULCHED AGAIN IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT. ONE OR MORE OF THE FOLLOWING MAY APPLY TO A PARTICULAR SITE.

- Seeded areas. For seeded areas, permanent stabilization means a 90% cover of healthy plants with no evidence of washing or rilling of the topsoil.
- Sodded areas. For sodded areas, permanent stabilization means the complete binding of the sod roots into the underlying soil with no slumping of the sod or die-off.
- Permanent Mulch. For mulched areas, permanent mulching means total coverage of the exposed area with an approved mulch material. Erosion control mix may be used as mulch for permanent stabilization according to the approved application rates and limitations.
- Riprap. For areas stabilized with riprap, permanent stabilization means that slopes stabilized with riprap have an appropriate backing of a well-graded gravel or approved geotextile to prevent soil movement from behind the riprap. Stone must be sized appropriately. It is recommended that angular stone be used.
- Agricultural use. For construction projects on land used for agricultural purposes (e.g., pipelines across crop land), permanent stabilization may be accomplished by returning the disturbed land to agricultural use.
- Paved areas. For paved areas, permanent stabilization means the placement of the compacted gravel subbase is completed.
- Ditches, channels, and swales. For open channels, permanent stabilization means the channel is stabilized with a 90% cover of healthy vegetation, with a well-graded riprap lining, or with another non-erosive lining such as concrete or asphalt pavement. There must be no evidence of slumping of the channel lining, undercutting of the channel banks, or down-cutting of the channel.

3. SLOPES GREATER THAN 2:1 WILL RECEIVE RIPRAP.



LOAM AND SEED
NOT TO SCALE

GRASSED DITCH CROSS SECTION
NOT TO SCALE

POST-CONSTRUCTION REVEGETATION:

THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION AS SOON AS AN AREA IS READY TO UNDERGO FINAL GRADING.

1. A MINIMUM OF 4" OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND GRADED TO A UNIFORM DEPTH AND NATURAL APPEARANCE, OR STONE WILL BE PLACED ON SLOPES TO STABILIZE SURFACES.

2. IF FINAL GRADING IS REACHED DURING THE NORMAL GROWING SEASON (4/15 TO 9/15), PERMANENT SEEDING WILL BE DONE AS SPECIFIED BELOW. PRIOR TO SEEDING, LIMESTONE SHALL BE APPLIED AT A RATE OF 138 LBS/1000 SQ. FT. AND 10-20-20 FERTILIZER AT A RATE OF 18.4 LBS/1000 SQ.FT WILL BE APPLIED. BROADCAST SEEDING AT THE FOLLOWING RATES:

LAWNS	SWALES
KENTUCKY BLUEGRASS 0.46 LBS/1000 SF.	RED TOP 0.05 LBS/1000 SF.
CREeping RED FESCUE 0.46 LBS/1000 SF.	TALL FESCUE 0.46 LBS/1000 SF.
PERENNIAL RYE GRASS 0.11 LB/1000 SF.	

3. AN AREA SHALL BE MULCHED IMMEDIATELY AFTER IT HAS BEEN SEED. MULCHING SHALL CONSIST OF HAY MULCH, HYDRO-MULCH, JUTE NET OVER MULCH, PRE-MANUFACTURED EROSION MATS OR ANY SUITABLE SUBSTITUTE DEEMED ACCEPTABLE BY THE DESIGNER.

A. HAY MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. HAY MULCH SHALL BE SECURED BY EITHER: (NOTE: SOIL SHALL NOT BE VISIBLE)

I. BEING DRIVEN OVER BY TRACKED CONSTRUCTION EQUIPMENT ON GRADES OF 5% AND LESS.

II. BLANKETED BY TACKED PHOTODEGRADABLE/BIODEGRADABLE NETTING, OR WITH SPRAY, ON GRADES GREATER THAN 5%.

III. SEE NOTE 6, GENERAL NOTES, AND NOTE 8, WINTER CONSTRUCTION.

B. HYDRO-MULCH SHALL CONSIST OF A MIXTURE OF EITHER ASPHALT, WOOD FIBER OR PAPER FIBER AND WATER SPRAYED OVER A SEED. HYDRO-MULCH SHALL NOT BE USED BETWEEN 9/15 AND 4/15.

4. CONSTRUCTION SHALL BE PLANNED TO ELIMINATE THE NEED FOR SEEDING BETWEEN SEPTEMBER 15 AND APRIL 15. SHOULD SEEDING BE NECESSARY BETWEEN SEPTEMBER 15 AND APRIL 15 THE FOLLOWING PROCEDURE SHALL BE FOLLOWED. ALSO REFER TO NOTE 9 OF WINTER CONSTRUCTION.

A. ONLY UNFROZEN LOAM SHALL BE USED.

B. LOAMING, SEEDING AND MULCHING WILL NOT BE DONE OVER SNOW OR ICE COVER. IF SNOW EXISTS, IT MUST BE REMOVED PRIOR TO PLACEMENT OF SEED.

C. WHERE PERMANENT SEEDING IS NECESSARY, ANNUAL WINTER RYE (2.6 LBS/1000 SQ. FT) SHALL BE ADDED TO THE PREVIOUSLY NOTED AREAS.

D. WHERE TEMPORARY SEEDING IS REQUIRED, ANNUAL WINTER RYE (2.6 LBS/1000 SQ. FT.) SHALL BE SOWN INSTEAD OF THE PREVIOUSLY NOTED SEEDING RATE.

E. FERTILIZING, SEEDING AND MULCHING SHALL BE APPLIED TO LOAM THE DAY THE LOAM IS SPREAD BY MACHINERY.

F. ALTERNATIVE HAY MULCH SHALL BE SECURED WITH PHOTODEGRADABLE/BIODEGRADABLE NETTING. TRACKING BY MACHINERY ALONE WILL NOT SUFFICE.

5. FOLLOWING FINAL SEEDING, THE SITE WILL BE INSPECTED EVERY 30 DAYS UNTIL 90% COVER HAS BEEN ESTABLISHED. RESEEDING WILL BE CARRIED OUT BY THE CONTRACTOR WITHIN 10 DAYS OF NOTIFICATION BY THE ENGINEER THAT THE EXISTING CATCH IS INADEQUATE.

MONITORING SCHEDULE:

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING, MONITORING, MAINTAINING, REPAIRING, REPLACING AND REMOVING ALL OF THE EROSION AND SEDIMENTATION CONTROLS OR APPOINTING A QUALIFIED SUBCONTRACTOR TO DO SO. MAINTENANCE MEASURES WILL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, A VISUAL INSPECTION WILL BE MADE OF ALL EROSION AND SEDIMENTATION CONTROLS AS FOLLOWS:

1. HAY BALE BARRIERS, SILT FENCE, AND STONE CHECK DAMS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK OR IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REDISTRIBUTED TO AREAS UNDERGOING FINAL GRADING. SHOULD THE HAY BALE BARRIERS PROVE TO BE INEFFECTIVE, THE CONTRACTOR SHALL INSTALL SILT FENCE BEHIND THE HAY BALES.

2. VISUALLY INSPECT RIPRAP ONCE A WEEK OR AFTER EACH SIGNIFICANT RAINFALL AND REPAIR AS NEEDED. REMOVE SEDIMENT TRAPPED BEHIND THESE DEVICES ONCE IT ATTAINS A DEPTH EQUAL TO 1/2 THE HEIGHT OF THE DAM OR RISER. DISTRIBUTE REMOVED SEDIMENT OFF-SITE OR TO AN AREA UNDERGOING FINAL GRADING.

3. REVEGETATION OF DISTURBED AREAS WITHIN 25' OF DRAINAGE-COURSE/STREAM WILL BE SEED WITH THE "MEADOW AREA MIX" AND INSPECTED ON A WEEKLY BASIS OR AFTER EACH SIGNIFICANT RAINFALL AND RESEED AS NEEDED. EXPOSED AREAS WILL BE RESEED AS NEEDED UNTIL THE AREA HAS OBTAINED 100% GROWTH RATE. PROVIDE PERMANENT RIPRAP FOR SLOPES IN EXCESS OF 3:1 AND WITHIN 25' OF DRAINAGE COURSE.

EROSION CONTROL DURING WINTER CONSTRUCTION:

1. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.

2. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.

3. EXPOSED AREA SHALL BE LIMITED TO THOSE AREAS TO BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. AT THE END OF EACH WORK WEEK NO AREAS MAY BE LEFT UNSTABILIZED OVER THE WEEKEND.

4. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.

5. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1000 S.F. (WITH OR WITHOUT SEEDING) OR DORMANT SEED, MULCHED AND ANCHORED SUCH THAT SOIL SURFACE IS NOT VISIBLE THROUGH THE MULCH. NOTE: AN AREA IS ALSO CONSIDERED STABLE IF SODDED, COVERED WITH GRAVEL (PARKING LOTS) OR STRUCTURAL SAND.

6. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1 AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW, DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY, SILT FENCE OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS SHOWN ON THE DESIGN DRAWINGS. NOTE: DORMANT SEEDING SHOULD NOT BE ATTEMPTED UNLESS SOIL TEMPERATURE REMAINS BELOW 50 DEGREES AND DAY TIME TEMPERATURES REMAIN IN THE 30'S.

7. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%. VEGETATED DRAINAGE SWALES SHALL BE LINED WITH EXCELSIOR OR CURLEX.

8. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH SLOPES GREATER THAN 15%. AFTER OCTOBER 1 THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.

9. BETWEEN THE DATES OF OCTOBER 15 TO NOVEMBER 1, WINTER RYE IS RECOMMENDED FOR STABILIZATION. AFTER NOVEMBER 1, WINTER RYE IS NOT EFFECTIVE. AROUND NOVEMBER 15 OR LATER, ONCE TEMPERATURES OF THE AIR AND SOIL PERMIT, DORMANT SEEDING IS EFFECTIVE.

10. IN THE EVENT OF SNOWFALL (FRESH OR CUMULATIVE) GREATER THAN 1 INCH DURING WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM THE AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.

Construction Plan

CONSTRUCTION OF THE PROJECT IS EXPECTED TO COMMENCE IN JANUARY 2027 FOLLOWING ISSUE OF TOWN AND DEP PERMITS. THE CONSTRUCTION OF THE ROAD AND UTILITY INFRASTRUCTURE IS EXPECTED TO CONTINUE INTO LATE 2028. CONSTRUCTION SEQUENCING WILL INCLUDE THE FOLLOWING:

- TREE CLEARING AND STUMP REMOVAL.
- ROUGH GRADING AND STORMWATER SYSTEMS.
- FINISH GRAVELS AND SURFACES
- LOAM, SEED AND STABILIZATION.

CONSTRUCTION PHASE:

THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION DURING CONSTRUCTION OF THIS PROJECT.

1. ONLY THOSE AREAS UNDER ACTIVE CONSTRUCTION WILL BE CLEARED AND LEFT IN AN UNTREATED OR UNVEGETATED CONDITION. IF FINAL GRADING, LOAMING AND SEEDING WILL NOT OCCUR WITHIN 7 DAYS, SEE ITEM NO. 4.

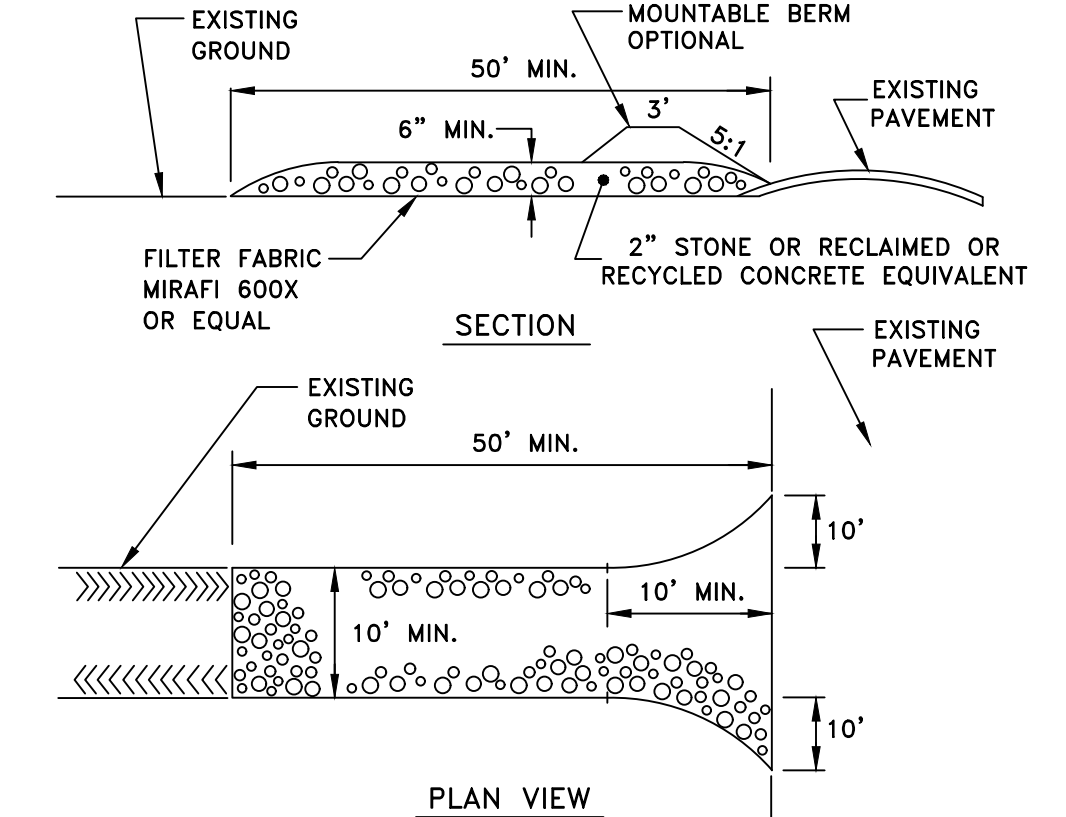
2. PRIOR TO THE START OF CONSTRUCTION IN A SPECIFIC AREA, SILT FENCING AND/OR HAY BALES WILL BE INSTALLED AT THE TOE OF SLOPE AND IN AREAS AS LOCATED ON THE PLANS TO PROTECT AGAINST ANY CONSTRUCTION RELATED EROSION. IMMEDIATELY FOLLOWING CONSTRUCTION OF CULVERTS AND SWALES, RIP RAP APRONS SHALL BE INSTALLED, AS SHOWN ON THE PLANS.

3. TOPSOIL WILL BE STOCKPILED WHEN NECESSARY IN AREAS WHICH HAVE MINIMUM POTENTIAL FOR EROSION AND WILL BE KEPT AS FAR AS POSSIBLE FROM THE EXISTING DRAINAGE COURSE. NO STOCKPILE SHALL BE CLOSER THEN 100' OF A RESOURCE INCLUDING, BUT NOT LIMITED TO, WETLANDS, STREAMS, AND OPEN WATER BODIES. ALL STOCKPILES SHALL HAVE A SILTATION FENCE BELOW THEM REGARDLESS OF TIME OF PRESENCE. ALL STOCKPILES EXPECTED TO REMAIN LONGER THAN 15 DAYS SHALL BE:
A. TREATED WITH ANCHORED MULCH (WITHIN 5 DAYS OF THE LAST DEPOSIT OF STOCKPILED SOIL).
B. SEED WITH CONSERVATION MIX AND MULCHED IMMEDIATELY.
C. INSTALL SILT FENCE AROUND STOCKPILE AT BASE OF PILE. STOCKPILES TO HAVE SILT FENCE INSTALLED AT TIME OF ESTABLISHMENT AT BASE OF PILE.

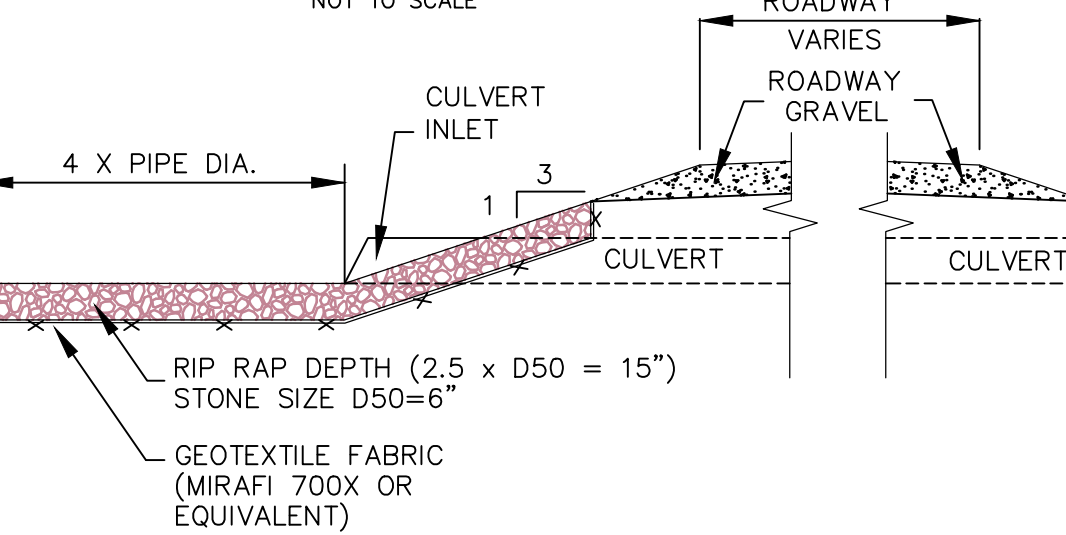
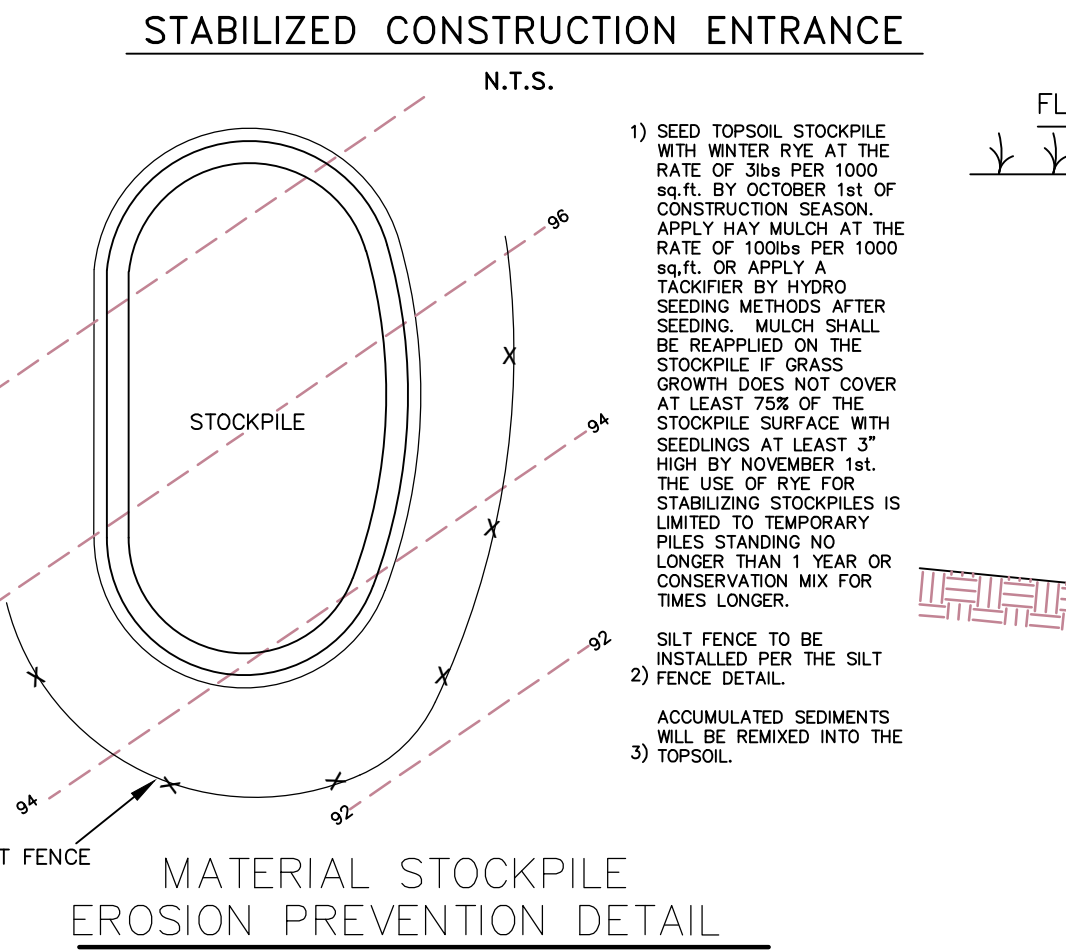
4. ALL DISTURBED AREAS THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS SHALL BE EITHER:
A. TREATED WITH ANCHORED MULCH IMMEDIATELY, OR
B. SEED WITH CONSERVATION MIX OF ANNUAL RYE GRASS (0.9 LBS/1000 SQ. FT) AND MULCHED IMMEDIATELY.

5. ALL GRADING WILL BE HELD TO A MAXIMUM 2:1 SLOPE WHERE PRACTICAL. ALL SLOPES WILL BE STABILIZED WITH PERMANENT SEEDING, OR WITH STONE, WITHIN 7 DAYS AFTER FINAL GRADING IS COMPLETE. (SEE POST-CONSTRUCTION REVEGETATION FOR SEEDING SPECIFICATION.)

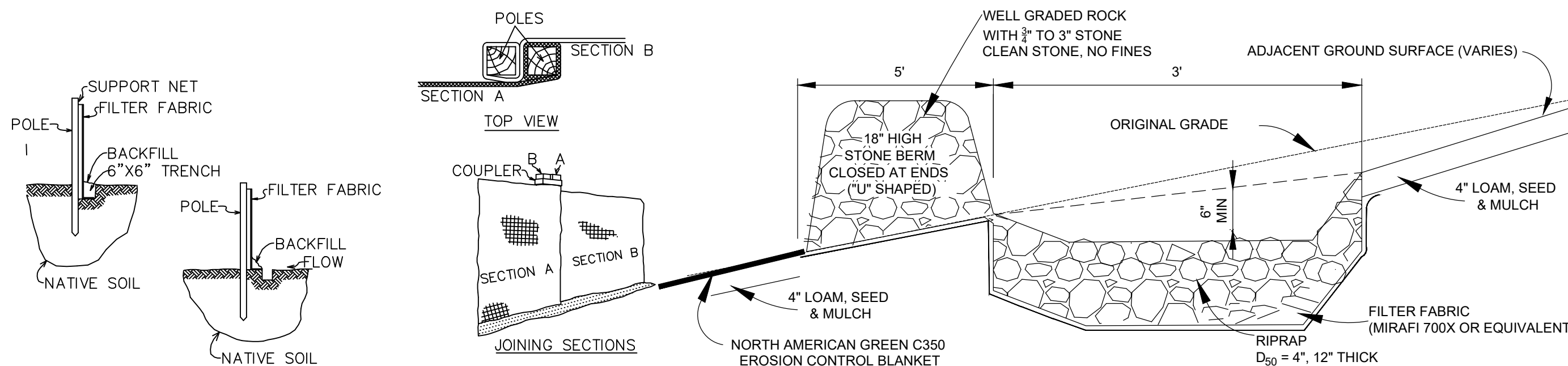
6. ALL CULVERTS WILL BE PROTECTED WITH STONE RIPRAP (D50 = 6" UNLESS OTHERWISE SPECIFIED) AT INLETS AND OUTLETS.



STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



TYPICAL CULVERT INLET & OUTLET DETAIL
NOT TO SCALE



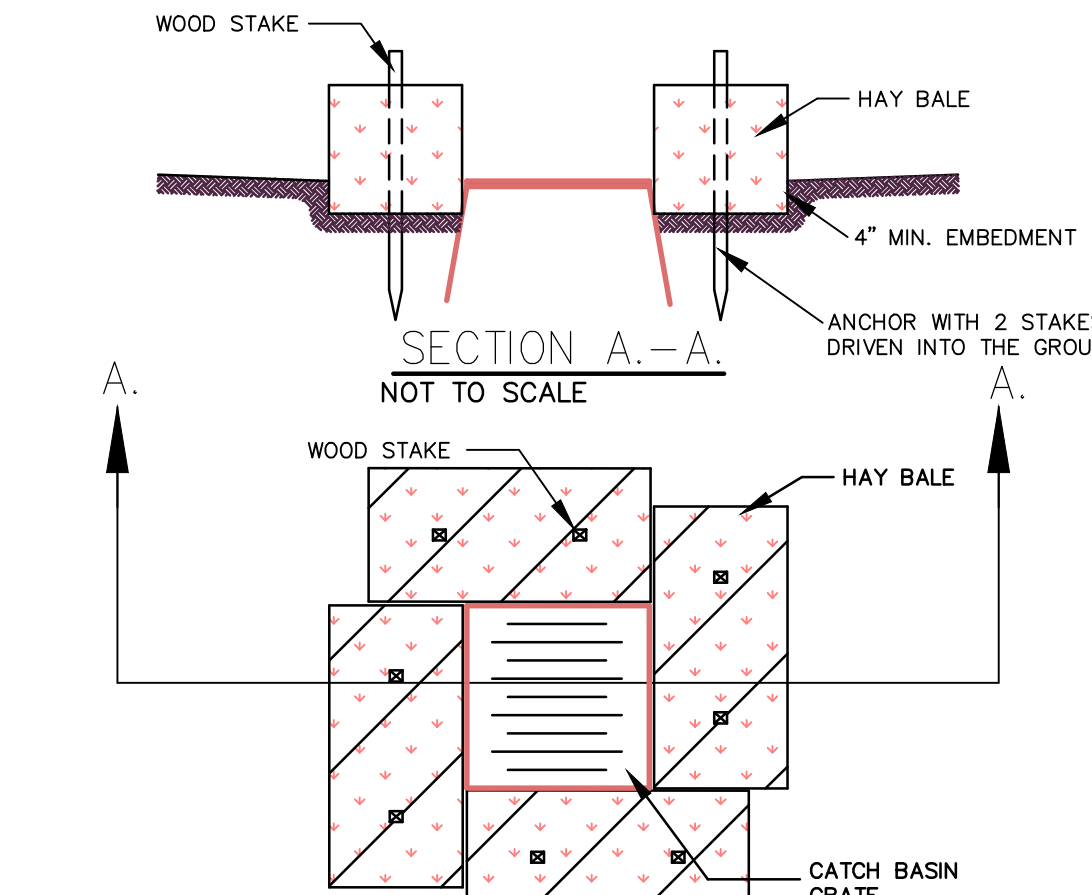
TOE-IN METHODS

SILTATION FENCING

1. INSTALL DOWNSLOPE OF ALL CONSTRUCTION ACTIVITIES AS NECESSARY.

2. INSPECTION SHOULD BE FREQUENT AND REPAIR OR REPLACEMENT MADE PROMPTLY AS NEEDED. CHECK AFTER EACH RAINFALL.

3. BARRIERS SHOULD BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS, BUT NOT BEFORE THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.



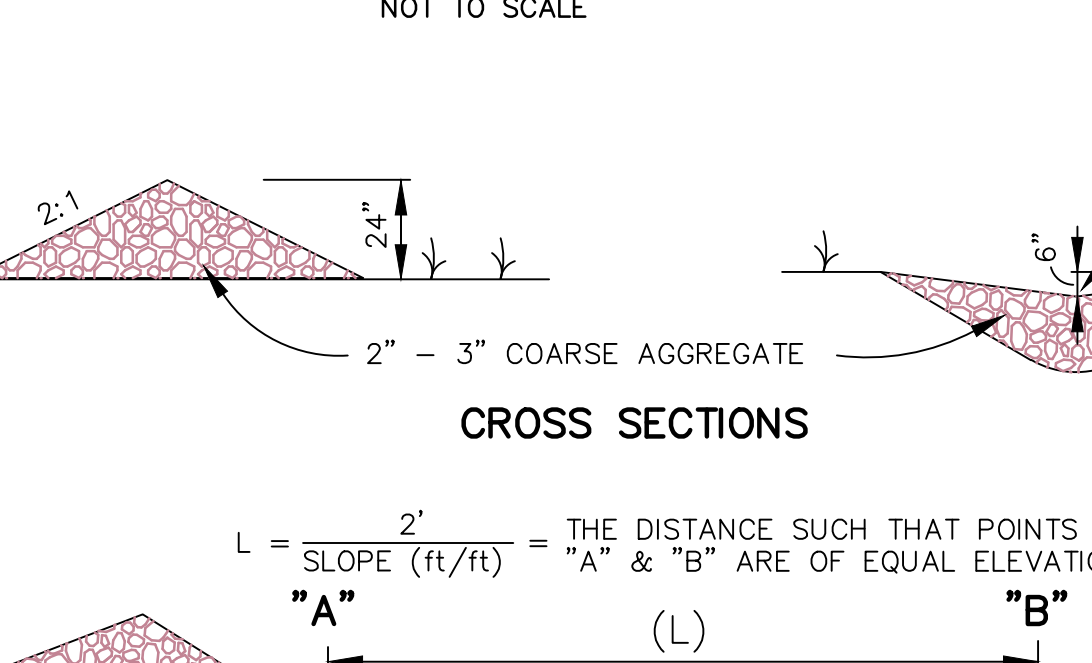
CATCH BASIN HAY BALE BARRIER DETAIL

SPACING DETAIL

NOT TO SCALE

STONE CHECK DAM DETAILS

NOT TO SCALE



KEY PERMANENT CHECK DAMS INTO BANK SLOPE (BOTH SIDES) TO PREVENT CHECK DAM FROM ERODING ON THE SIDES AND SHORT CIRCUITING

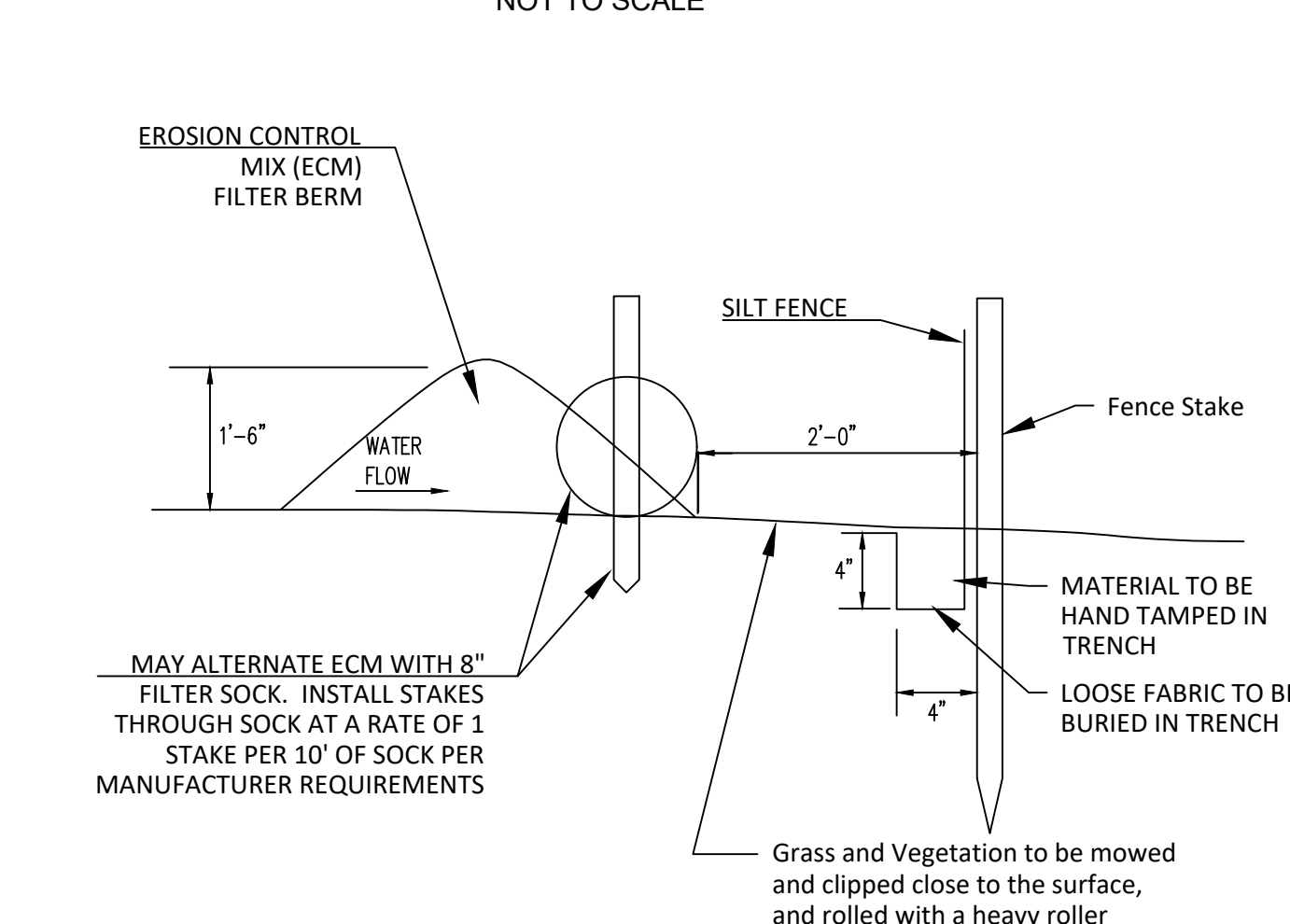
L = SLOPE (ft/ft) = "A" & "B" ARE OF EQUAL ELEVATION

SPACING DETAIL

NOT TO SCALE

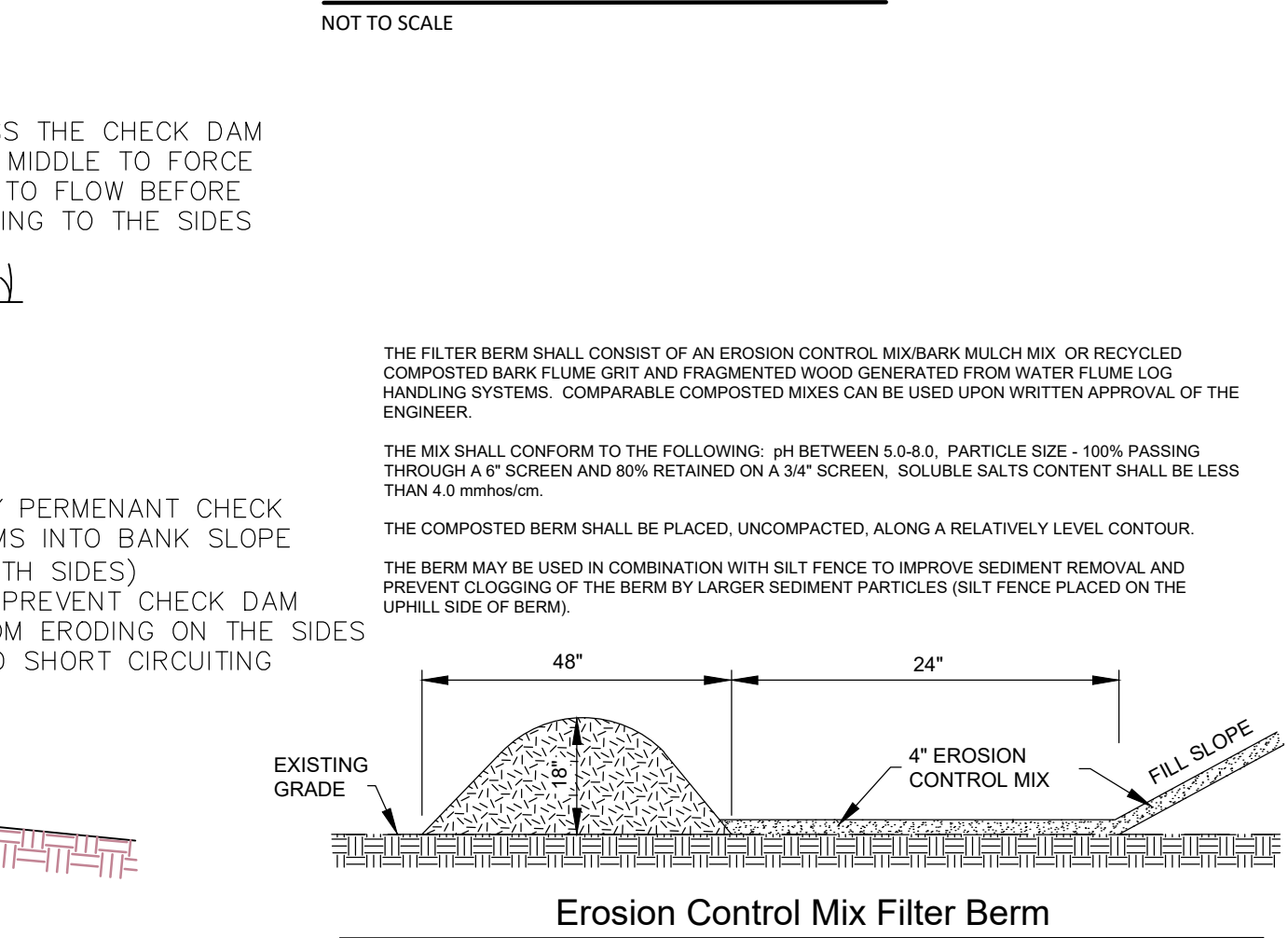
STONE BERM LEVEL SPREADER

NOT TO SCALE



EROSION CONTROL DOUBLE BMP BARRIER DETAIL

NOT TO SCALE



Erosion Control Mix Filter Berm
NOT TO SCALE

PRELIMINARY

ISSUED FOR REVIEW
NOT FOR CONSTRUCTION

NOT TO SCALE

NOT TO SCALE

NOT TO SCALE

NOT TO SCALE

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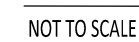
NOT TO SCALE

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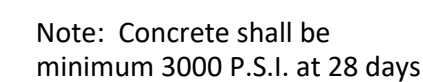
1. SECONDARY OR SERVICE CABLES AND COMMUNICATION CABLES MAY BE PLACED IN THE SAME TRENCH AT THE SAME DEPTH WITHOUT A REQUIRED CLEARANCE OR SEPARATION BETWEEN THE CABLES.
2. INSTALLATION SHOULD NOT ALLOW THE INTER-TWING OF CABLES.
3. BEDDING AND BACKFILL SHALL BE FREE OF ROCKS, STUMPS AND OTHER DEBRIS.

Typical Electrical Trench

Not to Scale



not to scale



Access Road Gate

Not to Scale

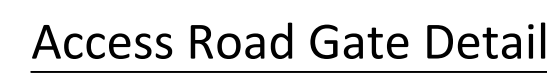


Not to Scale



2" Pipe Slider Detail

Not to Scale

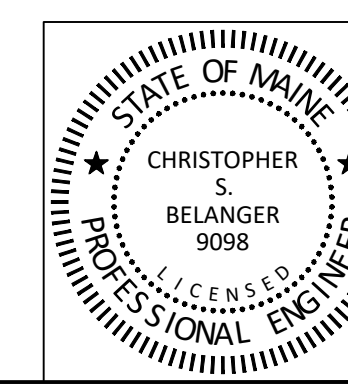


Not to Scale


BELANGER ENGINEERING
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ANSI D 01/27/2026

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AVANGRID ENGINEERING
CONFIDENTIAL, PROPRIETARY &
TRADE SECRET INFORMATION
Property of AVANGRID



Civil Details

Bolt Hill Substation and Switchyard

305 Bolt Hill Road, Eliot, Maine

Bolt Hill Substation and Switchyard	York County
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						BY		SCALE: Not to Scale	FILE: 2026 0129 238 - Bolt Hill Base.dwg	
						CK		NO.		REV
						APP				
REV	DESCRIPTION	DATE	BY	CK	APP	DATE	01-29-2026	1100-0003-005-SH 003		00

1-29-2026

1.3. **Impacts to Protected Natural Resources**

The Project is designed to address the standards set forth in the Maine Natural Resources Protection Act, 38 M.R.S.A. §480-D:

- The activity will not unreasonably interfere with existing scenic, aesthetic, recreational or navigational uses (§480-D(1)).
- The activity will not cause unreasonable erosion of soil or sediment nor unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment (§480-D(2)).
- The activity will not unreasonably harm significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic or adjacent upland habitat, travel corridor, freshwater, estuarine or marine fisheries or other aquatic life (§480-D(3)).
- The activity will not unreasonably interfere with the natural flow of surface or subsurface waters (§480-D(4)).
- The activity will not violate state water quality law, including those governing the classification of the State's waters (§480-D(5)).
- The activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties (§480-D(6)).

Additionally, the Project has addressed the requirements of NRPA in Assessing and Mitigating Impacts to Existing Scenic and Aesthetic Uses (06-096 C.M.R. Ch. 315) as well as Significant Wildlife Habitat (06-096 C.M.R. Ch. 335). These efforts are further discussed in the Project's Site Law application, within Section 6 (Visual Quality and Scenic Character) and Sections 7 and 9 (Wildlife and Fisheries, Unusual Natural Areas), respectively. In accordance with the NRPA requirements, the MDEP Field Survey Visual Evaluation Checklist is provided with the required forms at the beginning of this application package.

Approximately nine acres of developed land area will be required to construct the new Bolt Hill substation. Clearing of forested upland area will also be required for the proposed access road and switchyard.

- A total of 34,724 square feet (0.8 acre) of direct impacts will be required to clear, grub, and grade in freshwater wetlands for the new Bolt Hill substation.
- Approximately 65,946 square feet (1.5 acres) of indirect impacts are being proposed to convert forested and scrub-shrub wetland to emergent wetland for the new Bolt Hill substation.
- In addition, approximately 1.5 acres of clearing will be required for the construction of new lines and realignment of existing lines associated with the new Bolt Hill substation and switchyard. The sections N133A and N133B transmission lines will connect the new Bolt Hill substation to the switchyard, located across Bolt Hill Road. The section N133 transmission line will connect the switchyard to existing infrastructure, owned by Eversource Energy.
- Four lines are proposed to connect the new substation to the existing as well as new transmission infrastructure, (i.e., sections 136, 176, 177, 178), owned by CMP.
 - Sections 136 and 178 will require clearing as well as an aerial crossing of a perennial stream, located on the east side of the new Bolt Hill substation.

Natural Resources Protection Act Permit Application

Project location maps are provided as Figures 1-1 through 1-3, within Attachment 3. Project plans are provided within Attachment 5.

Table 1-1 below summarizes the impacts to wetlands due to construction of the Project. Impacts are depicted on Figure 7-1 in Attachment 3. A description of the impact avoidance and minimization strategies employed by the Project is included in Attachment 2 – Alternatives Analysis. Attachment 9 provides a site conditions' report which details the natural resources present with the Project area.

Table 1-1. Summary of Impacts for the Bolt Hill Substation Project

Impact ID	Location (Lat., Long.)	Resource ID	Resource Type ^{a/}	Wetland of Special Significance ^{b/}	Clearing Impact		Direct fill Impact		Total Impact	
					square feet	acres	square feet	acres	square feet	acres
1	43.114151, -70.767736	W-KMN-1 and S-KMN 1	PFO/PSS	Yes, portions within 25 feet of a river, stream, or brook	39,940	0.9	9,326	0.2	49,266	1.1
2	43.113729, -70.769713	W-KMN-2	PFO/PSS	Yes, portions within 25 feet of a river, stream, or brook	3,614	0.1	25,229	0.6	28,843	0.7
3	43.1133, -70.766809	W-KMN-3	PFO	Yes, portions within FEMA 100-year flood zone	128	0.0	168	0.0	296	0.0
4	43.115623, -70.76918	W-KMN-5	PSS/PEM	No	20,169	0.5	0	0.0	20,169	0.5
5	43.1162, -70.769708	W-CWF-2	PSS	No	2,095	0.0	0	0.0	2,095	0.0
Total Wetland Impacts					65,946	1.5	34,723	0.8	100,669	2.3

^{a/}Palustrine Forested (PFO), Palustrine Scrub-Shrub (PSS), Palustrine Emergent (PEM) per Cowardin et. al. (available online: <https://www.fws.gov/wetlands/documents/Classification-of-Wetlands-and-Deepwater-Habitats-of-the-United-States-2013.pdf>)

^{b/}Per NRPA Chapter 310 (4)(A)(1)-(8)

Attachment 2. Alternatives Analysis

The NRPA wetlands rules (06-096 CMR Chapter 310) require that an applicant evaluate less environmentally damaging practicable alternatives to the proposed wetland alteration, which meets the project purpose (06-096 CMR 310.9.A). The Maine regulations define practicable as, “available and feasible considering cost, existing technology and logistics based on the overall purpose of the project,” (06-096 CMR 310.2.R). This Alternatives Analysis and the information set forth in Section 7.0 of the Project’s Site Location of Development Act permit application demonstrate there are no less environmentally damaging practical alternatives that achieve the Project’s goals. The following details the process by which the Applicant developed and evaluated various alternatives to arrive at a design solution that meets the Project purpose and need, while avoiding and minimizing environmental impacts to the extent practicable.

As demonstrated in this analysis the proposed alternative was selected due to its relative ease of construction, feasibility, fast delivery timeline, standard design, and comparable cost to other alternatives considered.

2.1 Project Purpose and Need

Central Maine Power Company (CMP or Applicant) proposes to build a new 115/34.5/12kV Bolt Hill Substation and associated transmission structures on land in Eliot and Kittery, Maine, as well as remove the existing Bolt Hill and Eliot Substations and approximately one mile of transmission infrastructure (Project). The Project solves multiple existing area reliability and distribution system needs and facilitates the planned future large customer load growth. The existing Bolt Hill 114/34.5/12.5kV Substation is located at 299 Bolt Hill Road, Eliot Maine, with nearly 2,400 customers being fed by the station distribution circuits.

The objective of the Project is to construct an electrical substation to support the growing demand for electricity by Southern Maine customers. The Project was initiated due to existing reliability needs and new customer load growth expected in the vicinity of the existing Bolt Hill and Eliot Substations. The specific concerns have been provided to the Maine Public Utilities Commission¹, which has classified these submittals as Critical Energy Infrastructure Information (CEII) and therefore, confidential. The Project also includes demolition and removal of parts and components of the existing Bolt Hill and Eliot substations and associated transmission structures.

The Project is urgently needed to address multiple existing area reliability and distribution needs. The 2025 Eliot Comprehensive Plan identifies a new mixed-use zone, located along Route 236². After a recent discussion with planning board members, the Town anticipates that this new zone will increase opportunities for commercial development with the inclusion of road, water, and sewer improvements. The new substation will also help support an increase in commercial use along the Route 236 corridor. In

¹ Request for a Certificate of Public Convenience and Necessity was submitted to the Public Utilities Commission in April 2024.

² Town of Eliot, Maine: Mixed Use Zone. No date. Available online at: <https://eliotme.gov/470/Mixed-Use-Zone-Route-236>. Accessed February 26, 2026.

addition to this anticipated commercial growth, the 2025 Comprehensive Plan suggests that the town will require an increased capacity of 940 new housing units, all of which will utilize local electricity, by 2040. In addition, the Applicant is also aware that one contributor to the expected load growth (i.e., approximately 41.2 MW by 2045), in this area will involve significant expansion at a nearby industrial facility in Kittery, Maine.

The Coastal Region consists of one 115 kV source at Bolt Hill Substation via section N133 which is owned by Eversource, and one 115 kV source at Quaker Hill via sections 197 and 140 which are owned by CMP. The “Coastal Loop” is 34.5 kV network tied to Bolt Hill via section 178 and to Quaker Hill via section 119. Additionally, Bolt Hill substation supplies two large industrial and residential customers via 34.5 kV sections 176 and 177. Tapped off section 176 represents the section 176A tap towards the Eliot substation. The load served in the Coastal Region is approximately 100 MW.

Economic Benefits

CMP is a regulated electric transmission and distribution utility serving approximately 615,000 customers in central, western, and southern Maine. CMP’s is an Avangrid company whose transmission services are regulated by the Federal Energy Regulatory Commission (FERC), and its distribution services are regulated by the Maine Public Utilities Commission (MPUC). CMP will construct, own, and operate the Project.

The Project will provide substantial local and regional economic benefits including but not limited to eliminating the need for a mobile substation unit to be deployed during peak summer load, saving costs over time, reducing the chances for voltage collapse or thermal overloads that have occurred in the area in recent years and accommodate economic growth in the area. Community Benefits

The Project will provide substantial local and regional community benefits including the nearly 2,400 customers rely on the distribution circuits at this time. Bolt Hill Substation has two existing 12.47kV circuits (685D1, & 685D2). These two circuits serve area distribution customers in the towns of Eliot, Kittery, York, and South Berwick.

The Project would support additional residential and industrial electric needs. A large industrial customer located in Kittery, Maine and supplied radially through a 3.5 mi 34.5 kV line from Bolt Hill 115/34.5/12 kV Substation as a primary 115 kV source with no additional 115 kV sources available within the proximity of the facility. The current contractual load agreement with the facility is 19 MW, 11 MVAR. The customer is proposing to increase the load to a total of 41.2 MW, 10.4 MVAR through 2045. There are currently two 5.3 MW behind-the-meter combustng turbine generators (CTG) at the facility. In addition, the customer is planning to install 7.5MW CTG and 1 MW Battery Energy Storage System (BESS).

There are three Distributed Generation (DG) projects (solar) totaling 7.49 MW proposed to interconnect to Eliot’s distribution circuit. A multi-family housing complex totaling 2.33 MVA located on the Bolt Hill Substation recently constructed in the last several years. Multiple growing facilities are looking to increase their load or interconnect to Eliot, supplied by Circuit 687D1, with an additional total load greater than 3 MVA. The interconnection of the projects listed above would be compromised due to the thermal overloads of distribution feeders and transformers at Bolt Hill and Eliot supplying these facilities.

The Project would address reliability needs in the Southern-Coastal Area. The multiple thermal overloads and voltage violations were identified. Voltage violations are identified with PT for post transient voltages (taps fixed) and PC for post contingency voltages (taps adjusting). The major driver for the needs was a section N133 contingency that resulted in a voltage collapse and thermal overloads in the area increased reliability in the Southern Area Coastal Region and replacing antiquated equipment with modern equipment and infrastructure. Project Siting and Layout

A recent assessment of the electric infrastructure in the area resulted in the identification of numerous deficiencies that require upgrades. Due to the extent of upgrades required, the threshold for significant modifications per AVANGRID TM2 Standard was reached. Significant Modifications are defined as:

“The complete replacement of all major equipment at a single voltage level within a station, possibly but not necessarily including the re-location to another physical site. The addition of any number of transmission elements to a station where some existing equipment remains intact shall not be considered Significant Modification.”

Therefore, four alternatives were developed and evaluated. Three alternatives involve the complete rebuild of the substation. One alternative involves a partial rebuild of the substation.

Properly siting electric infrastructure is a complex process involving many interrelated criteria such as environmental constraints, engineering design needs, proximity to currently established transmission and distribution lines and equipment requirements.

2.2 Alternatives

CMP considered four alternatives, taking into account the Project purpose and need, environmental constraints, engineering design needs, and equipment requirements. The placement of various lines, transformers, substation, and distribution circuit arrangements were analyzed. The Alternatives are described below.

Alternative 1 (Proposed alternative)

Alternative 1 considered a north to south arrangement, with a total Project Area of 75 acres, located within a parcel owned by CMP and two new residential parcels. This alternative requires a real estate acquisition which was completed in 2025. Alternative 1 involves the complete rebuild of the 115/34.5/12.47 kV Bolt Hill substation. The substation proposed shall be comprised of:

- Station layout is a 115/34.5/12kV (4) bays breaker and half layout with 115kV buses 1 & 2.
 - Approximate site dimensions 600 feet by 320 feet.
 - Approximate gravel driveway access 200 feet.
- Six new power transformers
 - Four new 115 / 34.5 kV 30/56 MVA LTC Transformers.
 - Two new 115 / 12.47 kV 22.4/37 MVA LTC Transformers.
- Four 34kV line termination box structures with cable risers.
- One large control building fully dressed.
- One power house to house the switchgear.

- Two 15 kV gas-insulated switchgear lineups with six 15 kV feeder Circuit Breakers, one bus-tie circuit breaker, one bus tie riser position, two 15 kV bus potential transformers cubicles, two station service transformer positions, two mobile/spare cubicles, and two 15kV transformer circuit breakers cubicles.
- Four 34 kV gas-insulated switchgear lineups with eight 34 kV feeder Circuit Breakers, two bus-tie circuit breaker, two bus tie riser position, four 34 kV bus potential transformers cubicles, two station service transformer positions, four mobile/spare cubicles, four capacitor bank cubicles, and four 34kV transformer circuit breakers cubicles.
- Rerouting and splitting Section N133 into the new station making new Section N133A and Section N133B (This includes rebuilding PSNH tie switch 133J9).
- Reroute/Relocate Sections 177 and 178 into the new Bolt Hill SS.
- Reroute/Relocate Sections 176 and build out a new 136 for PNSY.
- Two 15 kV underground distribution cables for existing for Distribution circuit #685D1, 685D2. One new 685D3 to pick up Elliot's Substation distribution circuit load. Two new 685D4 & 685D5 to pick up additional load in the area. One spare circuit position. Installation of the five 15 kV underground distribution will be rerouted to roadside risers.

This alternative is preferred due to its ease of construction, feasibility, fast delivery timeline, standard design, and comparable cost to the other alternatives.

The cost estimate for Alternative 1 is \$183.30 M (+50/-25%) with a planned in-service date of November 2028.

This alternative presents the least impact to natural resources and cost to develop compared to the other design alternatives. No direct impacts to the stream are proposed with this alternative. Additionally, Alternative 1 provides more MVA headroom and its N-1 redundancy is achieved directly at Bolt Hill without limiting other area substations through a direct distribution tie connection.

Alternative 2

Alternative 2 considered an east to west arrangement. The Project area would be similar to that proposed in Alternative 1, however, situated perpendicular to the proposed alignment. One parcel of land might be required to be purchased, located at 266 Bolt Hill Road. The station would be orientated west to east. The station layout is a four bay breaker and half layout with transformers 115 to 34.5/12kV GIS line ups. Future space will be included for a 5th future 115kV bay. This alternative would require a full rebuild of lines, new lines, new distribution circuits, and new transformers.

Rebuild Bolt Hill Substation on an adjacent property owned by CMP to achieve the following conditions listed below. The preferred station layout is a 115/34.5/12kV (4) bay breaker and half layout with transformers. Six GIS line ups will be installed including (4) 34kV GIS line ups and (2) 15kV GIS lines ups.

- Re-Rate and extend Substation leads N133A & N133B to 180F sag clearance to new Bolt Hill SS location.
- Relocate Sections 177 and 178 into the new Bolt Hill SS.
- Configure switch 133J9 as Normally Open between sections N133A and N133B.

- Increase size of transformers T2, T3, T4 at Bolt Hill Substation to 30/56 MVA each.
- Add a new 115/34.5 kV 30/56 MVA transformer T6 at Bolt Hill Substation.
- Add two new 22/37 MVA 115/12 kV transformers at Bolt Hill Substation to feed Distribution including Eliot Substation Circuit.
- Configure distribution buses to accommodate five circuit positions and one spare.
- Remove 115/34/12 kV transformers at Bolt Hill Substation.

Eliot Substation will be de-energized and removed once the load is shifted to the New Bolt Hill Substation. 658D4 will be routed across Interstate 95 to pick up some load in Kittery.

The benefits of this alternative are that it requires the acquisition of only one residential property and has a more streamlined arrangement that would make interconnections easier. The costs and impacts to natural resources in this alternative are higher than Alternative 1. This design option requires building on and relocating a stream. Based on decades of experience permitting projects with the Maine Department of Environmental Protection under the Natural Resources Protection act, this would not be considered a desirable design alternative.

Alternative 3

Alternative 3 considered a “Brownfield” design, to rebuild and expand in the existing Bolt Hill substation site which totals approximately 1.3 acres. This design would require the disconnection of power to its 2,400 customers while the site was rebuilt and expanded. The existing substation, built in 1983, has significant deficiencies which makes reutilizing the existing structures unfeasible, including

- Evidence of rodents in the control building with urine and corrosion which caused SCADA RTU to fail at Bolt Hill leading to outages on Bolt Hill D1, D2; Eliot D1 and Bragdon Commons;
- One of the breakers is rated in “Fair” condition;
- All steel structures have varying degrees of cosmetic rust and corrosion;
- Many transformers are original and some are lacking in secondary oil containment with stained surfaces below;
- A temporary AC unit was installed to avoid overheating equipment in the summer. Temporary fans have been installed to avoid SCADA issues caused by overheating;
- Obsolete equipment is forcing Operations to order replacement parts off sites such as eBay. The Substation Supervisor has tried to preemptively order as many parts as possible as a precaution;
- The foundations of the 115kV dead-end structures show signs of concrete degradation with exposed rebar. Several other foundations show signs of cosmetic repairs; and
- All existing relays are electromechanical and are recommended for replacement as outlined in the Avangrid Minimum Criteria for Evaluation of T&S Brownfield Facilities.

Additionally, the Control Building does not have adequate space for expansion of the building nor room to expand equipment on the interior. No design or arrangement would allow all six transformers to fit into the footprint of the existing Bolt Hill Substation.

This alternative was deemed to be not feasible given the need to disconnect the power grid to customers while a rebuild in place was completed and the lack of space available to appropriately upgrade the system.

Alternative 4

Alternative 4 considered a west to east arrangement, located on an adjacent property currently owned by CMP. This alternative would require a full rebuild of lines, new lines, new distribution circuits, and new transformers.

The station layout is a 115/34.5/12kV, 115kv GIS (4) bay breaker and half layout with six transformers. Six GIS line ups will be installed with (4) 34kV GIS line ups and (2) 15kV GIS lines ups.

- Re-Rate and extend Substation leads N133A & N133B to 180F sag clearance to new Bolt Hill SS location.
- Relocate Sections 177 and 178 into the new Bolt Hill SS.
- Configure switch 133J9 as Normally Open between line sections N133A and N133B.
- Increase size of transformers T2, T3, T4 at Bolt Hill Substation to 30/56 MVA each.
- Add a new 115/34.5 kV 30/56 MVA transformer T6 at Bolt Hill Substation.
- Add two new 22/37 MVA 115/12 kV transformers at Bolt Hill Substation to feed Distribution including the Eliot Substation circuit.
- Configure distribution buses to accommodate five circuit positions and one spare.
- Remove 115/34/12 kV transformers at Bolt Hill Substation.

Eliot Substation will be de-energized and removed once the load is shifted to the New Bolt Hill Substation. 658D4 will be routed across Interstate 95 to pick up some load in Kittery.

The benefits of this alternative are that it does not require purchase of additional land, minimal to no wetland impacts, and smallest footprint. However, this alternative is cost prohibitive at approximately \$59.01 million higher than the lowest cost solution and required impacts to the stream.

No Action Alternative

The “no-action / no-build” alternative refers to not building the Project, which would mean there would be no solution for multiple existing area reliability and distribution system needs and there would be no plan for future large customer load growth. The objective of the Project, to construct an electrical substation to support the electrical needs of Southern Maine customers, would not be achieved.

By comparison, the “no action” alternative would avoid the limited potential short-term construction impacts and long-term clearing and wetland impacts but would not create the Project’s identified long-term benefits or provide critical infrastructure. Additionally, the environmental benefits anticipated from the removal of the former substation would not take place. Ultimately the benefits of the proposed Project will outweigh the impacts.

2.3 Avoidance and Minimization

2.4 Project Impacts

The Applicant has reduced the proposed direct and indirect impacts on natural resources to the maximum extent practicable through avoidance, minimization and a thorough review of potential alternatives. The construction and maintenance of the proposed Project will have both permanent and temporary effects

on the existing habitats and associated ecological communities. Permanent effects will be the clearing and fill within an existing forest and freshwater wetland. Temporary effects will include noise, ground disturbance and construction activity on wildlife species which may cause them to leave the immediate area until construction activities cease. Please see Figure 7-1: Natural Resources and Impact Type Map for an overview of proposed Project activities and associated impact types.

In the northern section of the Project area is the existing Eliot Substation, which is a developed and maintained area. Proceeding to the south is an existing utility ROW owned by Eversource which is predominantly mowed grasslands and wetlands. The midportion of the Project area consists of the existing Bolt Hill substation, which is located at 299 Bolt Hill Road and bordered by Bolt Hill Road to the south and the transmission ROW to the west and north. A residential area along Langley Farm Road is located to the east. As with the Eliot Substation, this area is developed and maintained. The two existing substations will be demolished once the proposed new substation is operational. Wildlife are expected to leave the area due to noise and equipment presence and return following construction or demolition. The overall extent of wildlife habitat in the area of the two existing substations is expected to improve following demolition.

Table 1 Estimated Natural Resource Impacts (Alternative 1)

Impact Type	Total Square feet	Total Acres
Indirect Impacts (Conversion in wetlands ¹)	65,946	1.51
Direct Impacts (Grubbing/grading in wetlands)	34,724	0.80
Temporary Construction Mats ²	56,475	1.29

1 Wetland conversion includes clearing in forested wetlands resulting in scrub-shrub or emergent wetlands.

2 Temporary construction mat impacts occur within existing ROW. It is the Applicant's understanding that temporary construction mats are not considered a jurisdictional impact by the MDEP.

ATTACHMENT 13. COMPENSATION

NRPA Chapter 310's rules require compensatory mitigation for wetland impacts in excess of 15,000 square feet. In addition, MDEP's *Guidance for Evaluating Wetland Conversion Impacts* requires compensatory mitigation to be provided for wetland conversion associated with solar development. Although compensation for wetland impacts is evaluated by MDEP on a case-by-case basis, the Department generally assumes that half of the functions and values of the impacted wetlands will be lost by converting from forested or shrub cover to meadow. Accordingly, compensation is typically required at the full rate for wetland loss and at half the full rate for wetland conversion. As such, CMP proposes to provide an In Lieu Fee (ILF) Payment to compensate for direct and indirect impacts to protected natural resources, as outlined in Table 13-1.

Per the MDEP Fact Sheet for the ILF Compensation Program⁴, a wetland credit equals one acre (43,560 square feet) and the credit cost per square foot in York County is \$6.13. The credit calculation is: Wetland Credits Required = SF impact x Multiplier / 43,560, where the resource multiplier used depends on the type of activity and the resource. The total ILF payment per credit is then multiplied by credit cost of one credit in York County, which is \$267,022.80. Table 13-1 outlines the proposed payment to the ILF Program based on the impacts detailed in Table 13-1.

Table 13-1. Proposed Impacts and ILF Payment for the Bolt Hill Substation Project

Impact Type	Wetland Impact (square feet)	Wetland Credits Required	Credit Cost in York County	ILF Payment
Wetland Fill	34,724	0.797	\$267,022.80	\$212,817.17
Wetland Conversion	65,946	0.757 ^{a/}	\$267,022.80	\$202,136.26
Total ILF Payment				\$414,953.43

^{a/} 50% of standard rate per the Maine Department of Environmental Protection's In Lieu Fee Compensation Program Fact Sheet

⁴ Effective January 1, 2026 to December 31, 2027.

WETLAND & WATERBODY DELINEATION & WETLAND FUNCTIONAL ASSESSMENT

Central Maine Power Company
Proposed Bolt Hill Substation Project
Eliot, Maine

June 2025



Prepared By:



Flycatcher LLC 106 Lafayette Street, Yarmouth, ME, 04096
<http://www.flycatcherllc.com/>

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ATTACHMENT C WETLAND DETERMINATION DATA FORMS

1.0 INTRODUCTION

On behalf of Central Maine Power Company (CMP) Flycatcher conducted an environmental review of approximately 54 acres of land located south of Bolt Hill Road in Eliot, Maine (Survey Area). The purpose of this review was to identify wetlands, streams, and vernal pools within the Survey Area. Surveys were mainly completed during the spring and summer of 2024 with follow-up surveys occurring in the spring of 2025. The results of this survey will be used to inform natural resource impact avoidance and minimization measures during the design and permitting of an electrical substation and portions of the associated transmission lines. This report provides a description of the methods and findings of the survey effort including a functional assessment of these resources.

2.0 SURVEY AREA DESCRIPTION

2.1 *Location & Access*

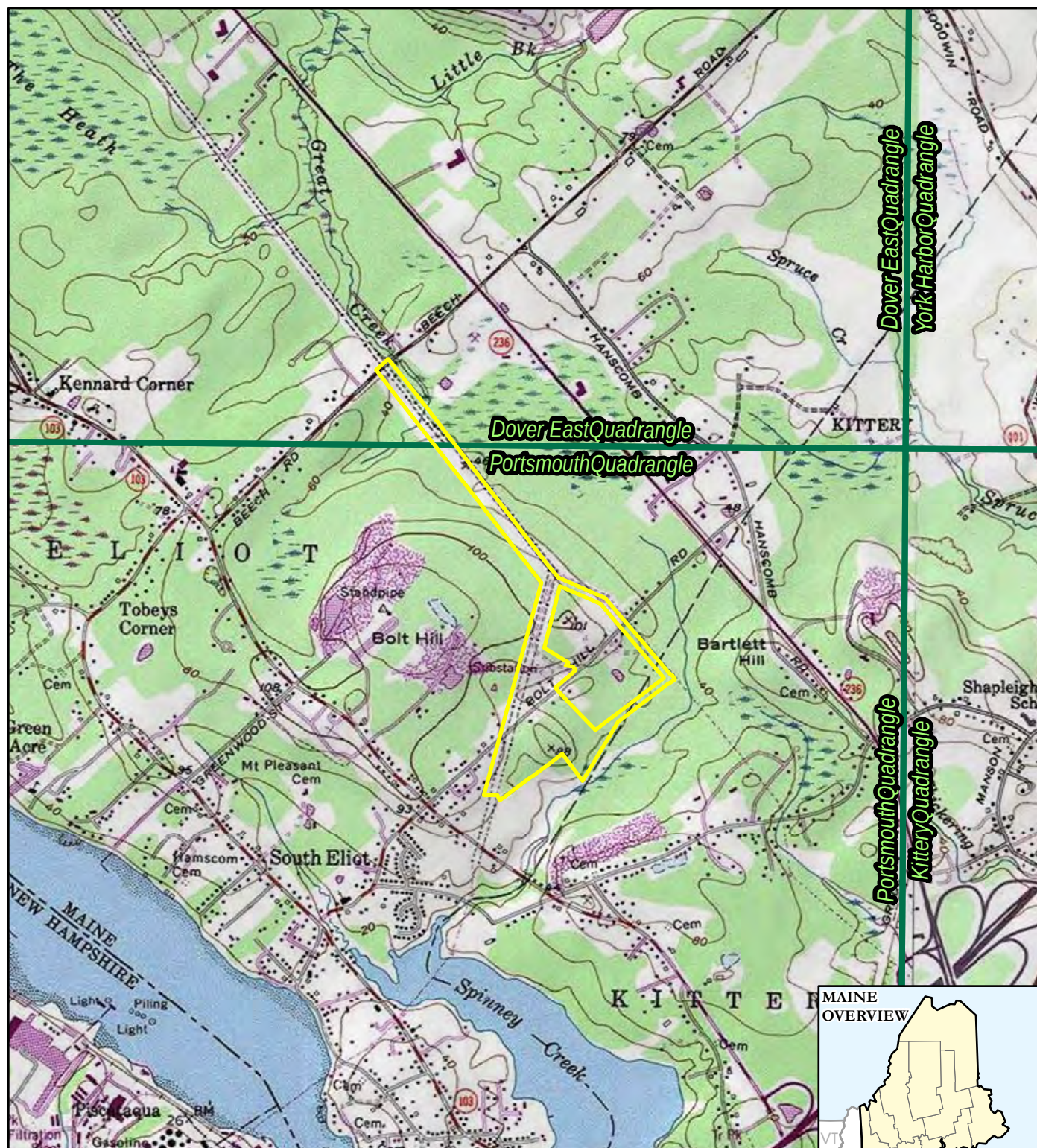
The Survey Area is located on property owned or leased by CMP within the generally rural, southern end of the Town of Eliot. Access to the Survey Area is mainly from Bolt Hill Road. Electric transmission lines run northwest to southeast within the Survey Area.

2.2 *General Description & Land Use*

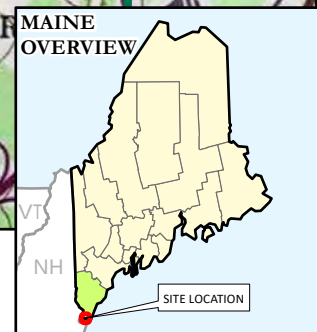
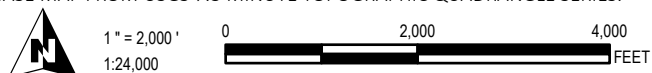
The Survey Area includes approximately 54 acres, consisting of a mixture of wetland and forested areas. Stone walls within the Survey Area indicate that this area was historically used as pasture, however, the older age of the trees within forested areas indicate that it has not been used for that purpose for a long time. There are three single-family residences immediately adjacent to portions of the Survey Area along the south side of Bolt Hill Road. Portions of the Survey Area occur within a maintained electrical transmission right of way with shrubs and herbaceous plants as the dominant covertype.

2.3 *Watersheds*

Most of the surface flow within the Survey Area drains to the southeast, into Spinney Creek, a tributary to the Piscataqua River, approximately 1.3 miles south of the Survey Area.



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.



PROJECT:

**CENTRAL MAINE POWER
PNSY PRP BOLT HILL SUBSTATION
ELIOT & KITTELY, YORK COUNTY, MAINE**

LEGEND:



DATA REQUEST AREA

USGS 7.5' QUADRANGLE BOUNDARY

DRAWN BY:

D. KENWORTHY

CHECKED BY:

K. NICKERSON

MONTH:

NOVEMBER

YEAR:

2024

PROJ. NO.:

21V-016

CLIENT:

CMP

FIGURE 1 - USGS LOCATION MAP

Plot Date: 11/17/2024, 1:56:14 PM by DREWKENWORTHY -- LAYOUT: ANSI B(11"x17")
Path: C:\FLYCATCHER\Projects\CMP\CMP_21V016_PNSY_BoltSub_Delin_Fig2_Aerial_11x17L.mxd

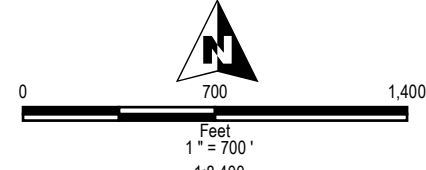
Coordinate System: NAD 1983 2011 StatePlane Maine West FIPS 1802 Ft US (Foot US)
Map Rotation: 0



LEGEND
 SURVEY AREA



NOTES:
1. BASEMAP IMAGERY FROM ESRI/NAIP, "WORLD IMAGERY" WEB BASEMAP SERVICE LAYER.



PROJECT:		CENTRAL MAINE POWER PNSY PRP BOLT HILL SUBSTATION ELIOT & KITTERY, YORK COUNTY, MAINE	
TITLE:		AERIAL PROJECT LOCATION MAP	
DRAWN BY:	D. KENWORTHY	PROJ NO.:	21V-016
CHECKED BY:	K. NICKERSON	FIGURE 2	
MONTH:	NOVEMBER		
YEAR:	2024		
			
FILE NO.:		CMP_21V016_PNSY_BoltSub_Delin_Fig2_Aerial_11x17L.mxd	

3.0 METHODS

3.1 Desktop Review

Prior to the site visits, Flycatcher reviewed existing, publicly available data sources, including:

- United States Geological Survey (USGS) topographic mapping;
- United States Fish and Wildlife Service (USFWS) national wetland inventory (NWI) mapping;
- Natural Resources Conservation Service (NRCS) medium-intensity soil survey mapping;
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs); and
- Recent and historic aerial photography.

3.2 Natural Resource Agency Correspondence

Flycatcher reached out to the Maine Department of Inland Fisheries and Wildlife (MDIFW) and the Maine Natural Areas Program (MNAP) for information on known or potential state-listed rare, threatened, endangered, or special concern species or habitats within or proximal to the Survey Area. The Maine Historic Preservation Commission (MHPC) was contacted for information on known archaeological areas or structures within the Survey Area. Flycatcher also requested an official species list from the USFWS Information for planning and Consultation (IPaC) web service to determine whether there are any known threatened, endangered, candidate, and proposed species and designated or proposed critical habitats listed under the Federal Endangered Species Act (ESA) within the Survey Area.

3.3 Wetland and Waterbody Delineation

3.3.1 Wetlands

Wetlands are defined by the federal government as: *“Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas”* (Federal Register, 1982). The State of Maine also utilizes this definition.

Wetland delineations were conducted in accordance with the US Army Corps of Engineers (USACE) Wetland Delineation Manual¹ and the Northcentral and Northeast Regional Supplement. The manual and supplement provide a repeatable methodology to identify potential wetland areas and are the accepted wetland delineation methodology of the MDEP and the USACE.

The Survey Area was investigated by a team of two people walking in parallel transects across the site. When a location appeared to have the requisite three factors that constitute a wetland (i.e. hydrophytic vegetation, indicators of hydrology, and the presence of hydric soils) an investigation was undertaken by the wetland scientist. The wetland scientist analyzed site-specific data to determine if the area met the criteria to be considered a wetland.

¹ Environmental Laboratory. 1987. United States Army Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineers Waterways Experiment Station, Vicksburg, MS.

When wetlands were identified, the boundaries of the wetlands were marked with survey flagging emblazoned with the words “*Wetland Delineation*”. Each flag was geo-located using a mapping grade global positioning system (GPS) unit (Juniper Systems’ Geode GPS Antenna and ESRI’s ArcGIS Collector software). The data were collected using real-time correction and standards specified by the manufacturer to achieve sub-meter accuracy.

3.3.1.1 Wetlands of Special Significance

Chapter 310 of the Maine Natural Resource Protection Act (NRPA) defines a subset of wetlands that provide a high level of functions and/or values to the surrounding and regional environment. Freshwater wetlands of special significance (WOSS) has one or more of the following characteristics:

1. *The freshwater wetland contains a natural community that is critically imperiled (S1) or imperiled (S2) as defined by the Natural Areas Program.*
2. *The freshwater wetland contains significant wildlife habitat as defined by 38 M.R.S.A. § 480-B(10).*
3. *The freshwater wetland area is located within 250 feet of a coastal wetland.*
4. *The freshwater wetland area is located within 250 feet of the normal high water line, and within the same watershed, of any lake or pond classified as GPA under 38 M.R.S.A. § 465-A.*
5. *The freshwater wetland contains under normal circumstances at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation or open water, unless the 20,000 or more square foot area is the result of an artificial ponds or impoundment.*
6. *The freshwater wetland area is inundated with floodwater during a 100-year flood event based on flood insurance maps produced by the Federal Emergency Management Agency or other site-specific information.*
7. *The freshwater wetland is or contains peatlands, except that the department may determine that a previously mined peatland, or portion thereof, is not a wetland of special significance.*
8. *The freshwater wetland area is located within 25 feet of a river, stream or brook.*

As important ecological resources, WOSS are afforded additional protection and a generally more rigorous permitting oversight if a permittee’s project will result in unavoidable impacts to WOSS. WOSS were identified based on on-site resources noted during the delineation and results from agency outreach.

3.3.2 Streams

Stream identification followed the Maine Natural Resources Protection Act (NRPA) definition of a “river, stream or brook”. According to the NRPA (Section 480B), “*River, stream or brook’ means a channel between defined banks, created by the action of surface water and having 2 or more of the following characteristics:*

- A. *It is depicted as a solid or broken blue line on the most recent edition of the U.S. Geological Survey 7.5-minute series topographic map or, if that is not available, a 15-minute series topographic map. [1995, c. 92, §2 (NEW).]*
- B. *It contains or is known to contain flowing water continuously for a period of at least 6 months of the year in most years. [2001, c. 618, §1 (AMD).]*
- C. *The channel bed is primarily composed of mineral material such as sand and gravel, parent material or bedrock that has been deposited or scoured by water. [1995, c. 92, §2 (NEW).]*

- D. *The channel contains aquatic animals such as fish, aquatic insects or mollusks in the water or, if no surface water is present, within the stream bed. [1995, c. 92, §2 (NEW).]*
- E. *The channel contains aquatic vegetation and is essentially devoid of upland vegetation. [1995, c. 92, §2 (NEW).]*
- F. *"River, stream or brook" does not mean a ditch or other drainage way constructed, or constructed and maintained, solely for the purpose of draining storm water or a grassy swale.*

3.3.3 Non-Jurisdictional Drainages

Non-jurisdictional drainages (NJD) are features that convey surface water across the site, but which do not otherwise meet the MDEP or USACE definition of wetland or stream. These features generally include dug ditches, quick-flowing surface drainage swales, rock-filled drainages on slopes, and other areas that convey water but do not hold water for periods long enough to develop the three factors required to be a wetland and/or do not have criteria sufficient to be classified as a stream. While not regulated, Flycatcher attempts to geo-locate as many NJDs as practical to support eventual stormwater and civil engineering design for projects, as these features may affect drainage and/or create erosion/sedimentation concerns during construction.

3.3.4 Vernal Pools

A vernal pool survey was conducted during the amphibian breeding season in the spring of 2024 with additional surveys being conducted within the Survey Area in the spring of 2025. Vernal pools are temporarily/seasonally flooded wetlands that provide the primary breeding habitat for vernal pool indicator species, and a host of secondary faunal species. Wood frogs (*Lithobates sylvaticus*), spotted salamanders (*Ambystoma maculatum*), blue spotted salamanders (*Ambystoma laterale*), and fairy shrimp (*Eubrachyopus spp.*) are vernal pool indicator species that depend on vernal pools for breeding habitat. Because they are generally judged by the regulatory authorities based on productivity of breeding vernal pool species, vernal pools must be assessed during the breeding season (generally mid-April to mid-June).

In Maine, a subset of vernal pools are regulated as “*Significant Vernal Pools*” and are afforded protection under the NRPA and Site Location of Development Act (Site Law). To be considered a “significant vernal pool”, the feature must be of natural origin and show a high level of breeding activity by the indicator amphibian species. For significant vernal pools, the Maine DEP regulates the pool basin plus an area of 250-feet surrounding the pool together as “significant vernal pool habitat” (NRPA Chapter 335).

In addition, if a project triggers USACE jurisdiction the USACE also may regulate certain vernal pool habitats. The definition of “vernal pool” in the USACE’s Maine General Permit does not specify a level of breeding productivity required to be regulated, and the definition includes manmade features that occur in wetlands. For pools over which it takes jurisdiction, the USACE may regulate the pool basin and all areas (including uplands) within 750 feet of the vernal pool as critical terrestrial habitat.

3.4 Wetland Functional Assessment

A wetland functional assessment was performed pursuant to the approach described by the USACE Highway Methodology Workbook Supplement: Wetland Functions and Values². In this “Descriptive Approach” to functional assessment, the evaluators first determine if particular functions and values are present, followed by a determination of what functions and values are considered principal. Functions and values can be considered “principal” if they are an important physical component of a wetland ecosystem (function only), and/or are considered of special value to society, from a local, regional and/or national perspective. When making determinations, evaluators determine whether the wetland has the potential to serve the functions and values as well.

Functions are self-sustaining properties of a wetland ecosystem that exist in the absence of society and that result from both living and non-living components of a specific wetland resource. These include all processes necessary for the self-maintenance of the wetland ecosystem such as primary productivity and nutrient cycling, among others. Therefore, functions relate to the ecological significance of wetland properties without regard to subjective human values.

Values are benefits that derive from one or more functions and the physical characteristics associated with a wetland. Most wetlands have corresponding societal value. The value of a particular wetland function, or combination of functions, is based on human judgment of the worth, merit, quality or importance attributed to those functions.

Groundwater Recharge/Discharge - This function considers the potential for the wetland to serve as a groundwater recharge and/or discharge area. It refers to the fundamental interaction between wetlands and aquifers, regardless of the size or importance of either.

Floodflow Alteration (Storage & Desynchronization) - This function considers the effectiveness of the wetland in reducing flood damage by attenuation of floodwaters for prolonged periods following precipitation events and the gradual release of floodwaters. It adds to the stability of the wetland ecosystem or its buffering characteristics and provides social or economic value relative to erosion and/or flood prone areas.

Fish and Shellfish Habitat - This function considers the effectiveness of seasonal or permanent watercourses associated with the wetland in providing fish and shellfish habitat.

Sediment/Toxicant/Pathogen Retention - This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland as a trap for sediments, toxicants or pathogens in runoff water from surrounding uplands, or upstream erosive wetland areas.

Nutrient Removal/Retention/Transformation - This function considers the effectiveness of the wetland as a trap for nutrients in runoff water from surrounding uplands or contiguous wetlands and the ability of the wetland to process these nutrients into other forms or trophic levels. One aspect of this function is

² United States Army Corps of Engineers. 1999. The Highway Methodology Workbook Supplement. NAEPP-360-1-30a, New England District.

to prevent ill effects of nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers or estuaries.

Production Export - This function evaluates the effectiveness of the wetland to produce food or usable products for humans or other living organisms.

Sediment/Shoreline Stabilization - This function considers the effectiveness of the wetland in stabilizing stream banks and shorelines against erosion.

Wildlife Habitat - This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge. Both resident and migrating species are considered.

Recreation - This value considers the suitability of the wetland and associated watercourses to provide recreational opportunities such as hiking, canoeing, boating, fishing, hunting and other active or passive recreational activities.

Educational/Scientific Value - This value considers the suitability of the wetland as a site for an “outdoor classroom” or as a location for scientific study or research.

Uniqueness/Heritage - This value considers the effectiveness of the wetland or its associated waterbodies to provide certain special values, including archaeological sites, critical habitat for endangered species, its overall health and appearance, its role in the ecological system of the area, or its relative importance as a typical wetland class for the geographic location.

Visual Quality/Aesthetics - This value considers the visual and aesthetic quality or usefulness of the wetland.

Endangered Species Habitat - This value considers suitability of the wetland to support threatened or endangered species.

4.0 FINDINGS

4.1 Desktop Review

The results of the desktop review are provided Figures 1-3. Figure 1 depicts the Survey Area on a USGS topographic map. Figure 2 shows the survey Area overlain on a recent aerial image of the site, and Figure 3 depicts the NWI, NRCS soils information and FEMA floodplain information mapped within the Survey Area.

4.2 Natural Resource Agency Correspondence

Natural resource agency feedback is provided in Attachment B and brief descriptions of findings are provided below.

4.2.1 MDIFW

A response to a request for information from MDIFW was received on October 2, 2024. In this response (Attachment B), MDIFW provided a list of species that are known or have the potential to occur in the vicinity of the Project. Specifically, MDIFW identified the eight species of bats that are known to occur in

Maine, four of which are listed as State Endangered or Threatened with the remaining four species listed as Species of Special Concern on the State of Maine’s Endangered Species Act (MESA). MDIFW also listed the Blandings turtle (*Emydoidea blandingii*) and Spotted turtle (*Clemmys guttata*) as having the potential to occur in the Study Area. Spicebush swallowtail (*Papilio troilus*), and New England cottontail (*Sylvilagus transitionalis*) are also identified as having the potential to occur. MDIFW indicated there is no known presence of significant vernal pools in the Study area and encouraged the Applicant to conduct an in-season survey.

Regarding bats, MDIFW noted that there is historical evidence of several protected species occurring in the Survey Area, but they do not anticipate significant impacts to any of the bat species as a result of this Project.

MDIFW also indicated the potential presence of both Blanding’s (State Endangered) and Spotted (State Threatened) turtles in the Study Area and the immediate vicinity. For both species, “development projects that lead to significant increases in local traffic volume will likely lead to increased roadkill and possible extirpation of the local population.” If Blanding’s turtle habitat is determined, MDIFW recommends a buffer of “250 feet of undisturbed, natural vegetation with no new development or permanent habitat conversion within this zone.”

MDIFW noted that the proposed project location is in proximity to one of the 15 known Spicebush Swallowtail butterfly populations in Maine, which is a MESA species of Special Concern. Comprehensive surveys for northern spicebush (*Lindera benzoin*) are recommended. If spicebush or sassafras (*Sassafras albidum*) are found in the Survey Area, MDIFW recommends that a 100-foot-wide forested buffer be maintained in perpetuity between forested areas with spicebush or sassafras and any development proposed at this location.

MDIFW noted the presence of New England cottontail (State Endangered) in the vicinity of the proposed Project, and recommended to contact the MDIFW small mammal biologist, for site-specific data and to schedule a visit to assess potential cottontail presence and habitat suitability.

Lastly, MDIFW recommended 100-foot undisturbed vegetated buffers be maintained along streams, and any necessary instream work occur between July 15 and October 1. Prior to any site disturbance, MDIFW recommended additional consultation with the municipality, MNAP, and MDEP to avoid and minimize disturbance of natural resources.

Since receiving the consultation letter from MDIFW, Flycatcher hosted a project introduction meeting with MDIFW on November 5, 2024 and the team completed a site visit in the spring of 2025. Any additional surveys required for this Project will be described in a separate report. However, if identification of listed species or habitat within the Study Area affects the evaluation of wetland functions and values, that section of this report will be updated accordingly.

4.2.2 MNAP

A response to a request for information was received from MNAP on July 8, 2024. In the response, MNAP indicated that there are two listed plant species with the potential to occur in the Survey Area (Attachment B). Awned sedge (*Carex atherodes*) is a State Threatened species that occurs along the right-of-way associated with the Bolt Hill Substation. This species is commonly found in wet, open areas. For

this species, MNAP recommends no additional disturbance beyond the right-of-way where maintenance typically occurs.

Additionally, MNAP recommends surveys of wet, wooded areas within the Study Area for northern spicebush, a MESA Species of Special Concern that is known to occur in the vicinity of the Project. If Spicebush is found to be present in the Survey Area, MNAP requests that the Project further consult so they can provide feedback on avoidance and conservation strategies.

Flycatcher completed a survey for spicebush during the flowering season in the spring of 2025. This species was not observed in the Survey Area. A survey for Awned sedge is scheduled for the summer of 2025.

4.2.3 USFWS

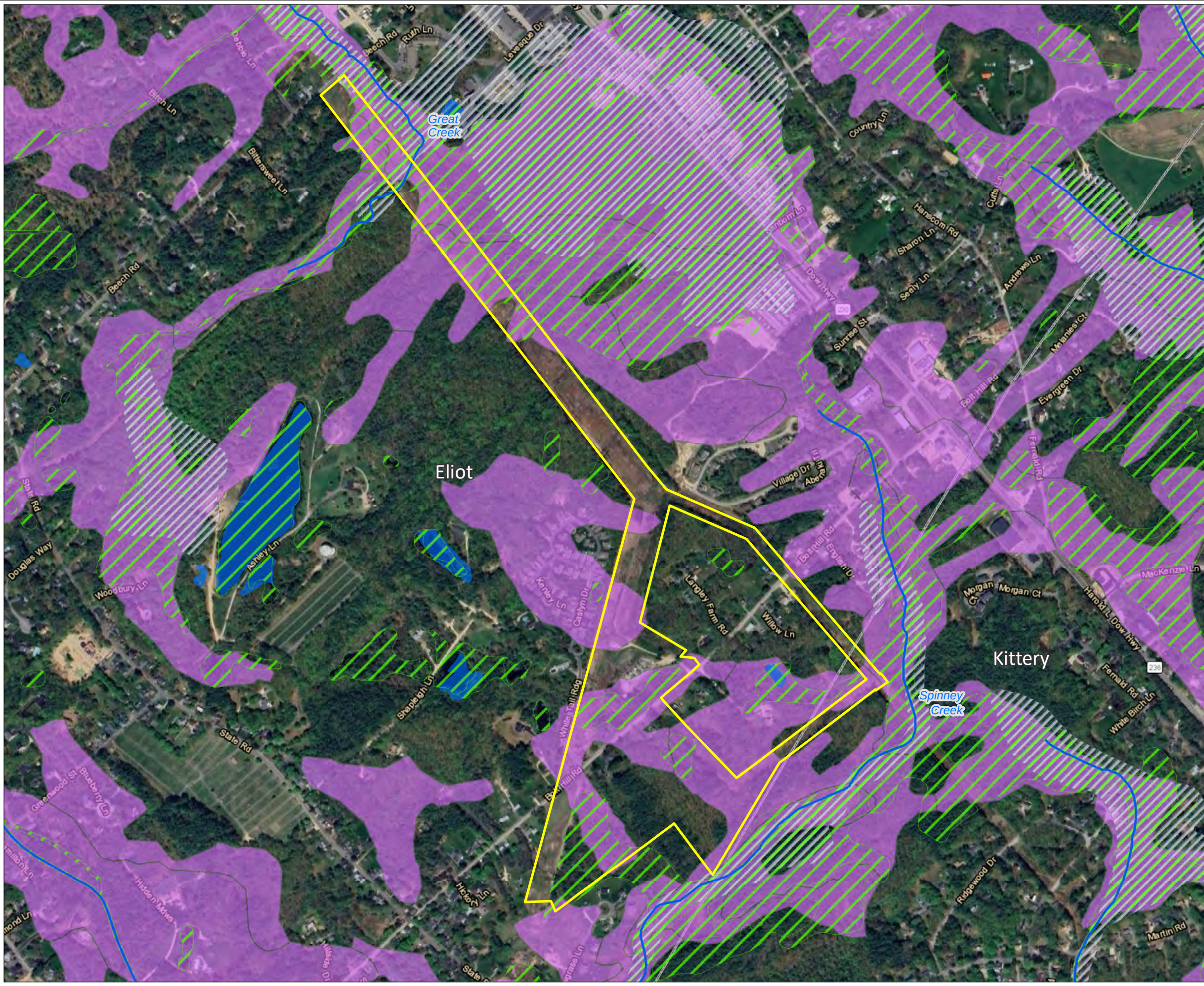
The official species list obtained from the IPaC database identifies the monarch butterfly (*Danaus Plexippus*), northern long eared bat (*Myotis septentrionalis*), and the tricolored bat (*Perimyotis subflavus*) as having the potential to occur within the Survey Area (Attachment B). Further consultation through the Determination Key (D-key) the USFWS made the determination of “no effect” for northern long-eared bat. Tricolored bat is a proposed endangered species and monarch butterfly is a candidate species for listing under the Federal Endangered Species Act, and no mitigation is required for these species at this time. The Project will pursue further consultation with USFWS if updates are made to the listing/status of these species.

4.2.4 MHPC

MHPC recommends a historic archaeological survey be conducted due to the potential presence of two historic properties in the Survey Area. This survey was completed in the summer and fall of 2024. The results of the survey are provided in separate reports.

Plot Date: 11/17/2024, 14:03:28 PM by DREWKENWORTHY -- LAYOUT: ANSI B(11"x17")
Path: C:\FLYCATCHER\Projects\CMP\CMP_21V016_PNSY_BoltSub_Delin_Fig3_Desktop_11x17L.mxd

Coordinate System: NAD 1983 2011 StatePlane Maine West FIPS 1802 Ft US (Foot US)
Map Rotation: 0



LEGEND

- SURVEY AREA
- NHD STREAM/RIVER
- SIGNIFICANT VERNAL POOL
- NWI WETLAND
- NHD LAKE/POND
- FEMA FLOODPLAIN
- NRCS HYDRIC SOILS

NOTES:

1. BASEMAP IMAGERY FROM ESRI/NAIP, "WORLD IMAGERY" WEB BASEMAP SERVICE LAYER.

PROJECT:		CENTRAL MAINE POWER PNSY PRP BOLT HILL SUBSTATION ELIOT & KITTERY, YORK COUNTY, MAINE	
TITLE:		DESKTOP ASSESSMENT MAP	
DRAWN BY:	D. KENWORTHY	PROJ NO.:	21V-016
CHECKED BY:	K. NICKERSON	FIGURE 3	
MONTH:	NOVEMBER		
YEAR:	2024		
FILE NO.:		CMP_21V016_PNSY_BoltSub_Delin_Fig3_Desktop_11x17L.mxd	

4.3 Wetlands and Waterbody Delineation

4.3.1 Wetlands

The results of the wetland delineation are provided in Table 1 and Figure 4. Wetland locations and identification codes are indicated in Attachment A, Figures 4-1 through 4-7. Table 1, below, provides a description for each wetland, and representative photographs are included in Attachment B. Additionally, representative US Army Corps of Engineer's Wetland Delineation Data Sheets ("paired plot data") are included in Attachment C.

4.3.1.1 WOSS

WOSS designations for wetlands are indicated in Table 1. Six wetlands were determined to have areas considered WOSS (areas within 25 feet of stream). As noted in this report, if biologists determine that listed plants or wildlife or wildlife habitat occur within mapped wetlands, the WOSS determinations and functional assessment will be updated to reflect these findings.

4.3.2 Streams

Five streams were identified within the Survey Area. Stream locations are indicated in Attachment A, Figure 4. Table 2, below, provides a description for each stream identified, and representative photographs are included in Attachment B.

4.3.3 NJDs

No NJDs were observed within the Survey Area.

4.3.4 Vernal Pools

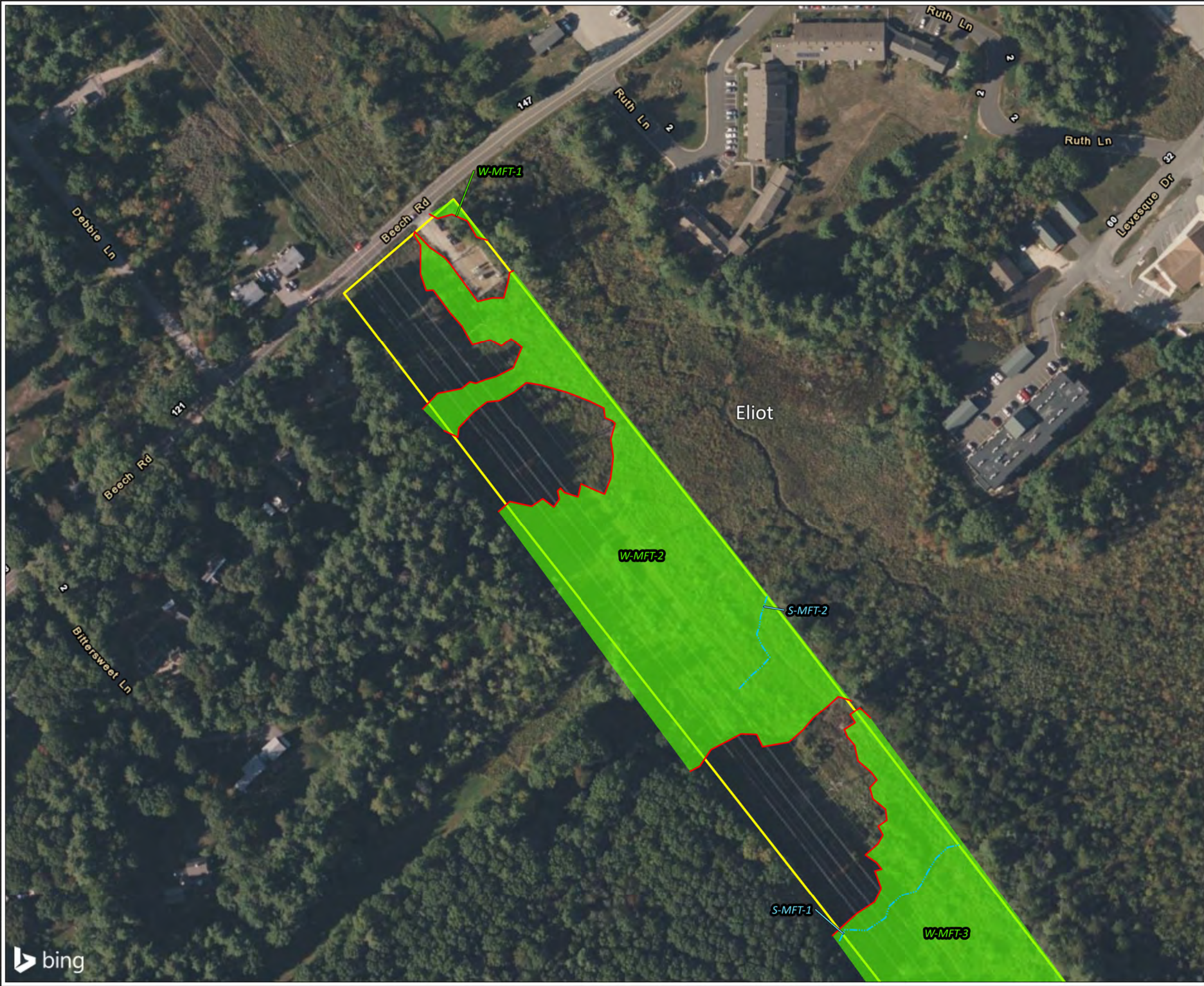
Results of the vernal pool survey are presented in Table 3 and Appendix A, Figure 1. A total of five vernal pools were observed within the Survey Area.

4.4 Functional Assessment

Results of the functional assessment, including principal function and value determinations, are provided in Table 1 for each wetland. Most of the wetlands within the Survey Area were determined to have principal functions of Floodflow alteration and wildlife habitat.

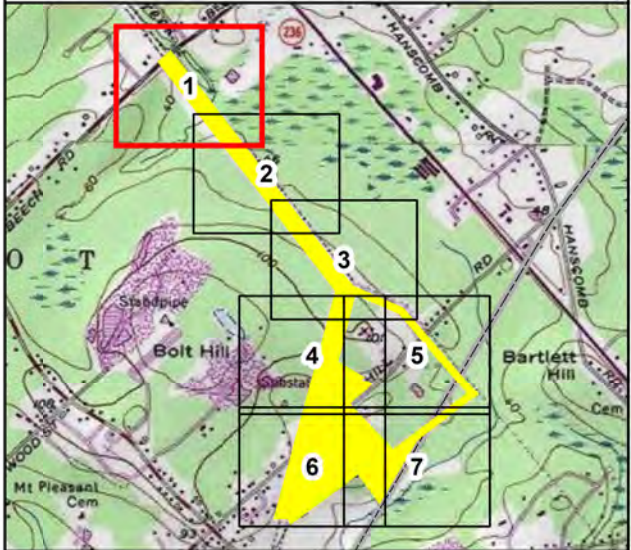
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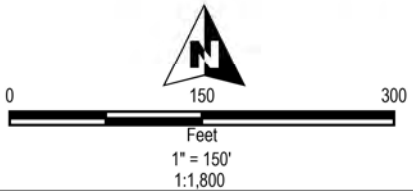


LEGEND

- SURVEY AREA
- DELINEATED STREAM, INTERMITTENT
- DELINEATED WETLAND BOUNDARY
- DELINEATED WETLAND



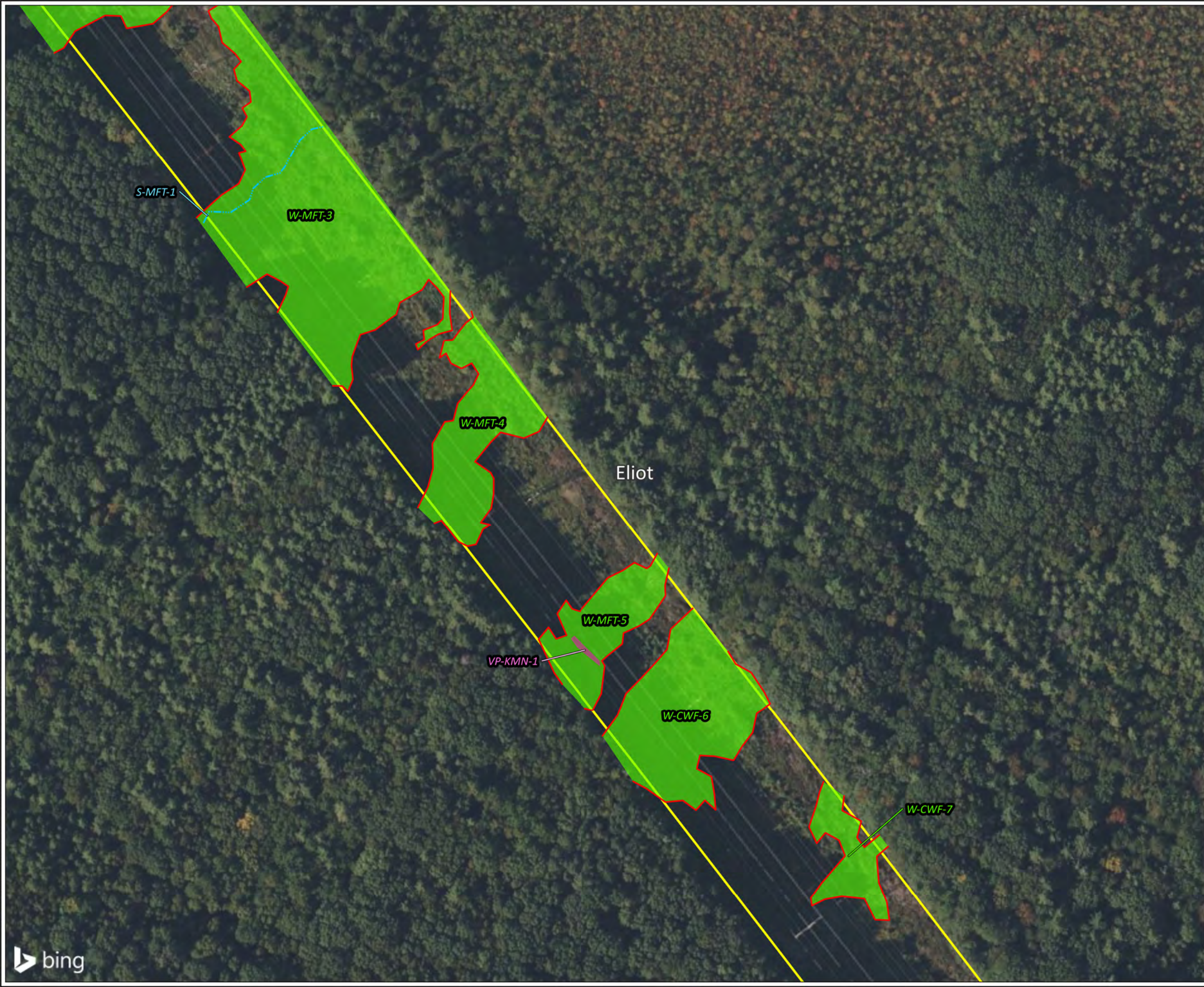
NOTES:
1. BASEMAP IS FROM BING AERIAL IMAGERY.
2. RESOURCE DELINEATIONS WERE CONDUCTED BY FLYCATCHER BETWEEN JUNE 2021 AND APRIL 2025; AND ALSO BY STANTEC IN THE FALL OF 2023.



PROJECT: CENTRAL MAINE POWER PNSY PRP BOLT HILL SUBSTATION ELIOT & KITTELY, YORK COUNTY, MAINE		
TITLE: DELINEATED WETLANDS, WATERBODIES, AND VERNAL POOLS		
DRAWN BY: D. KENWORTHY	PROJ NO.: 21V-016	
CHECKED BY: K. NICKERSON		
MONTH: JUNE		
YEAR: 2025		
Flycatcher LAND • SCIENCE • PEOPLE		FIGURE 2 Page 1 of 7
CENTRAL MAINE POWER		
FILE NO.: CMP_21V016_BoltHill_PNSV.mxd		

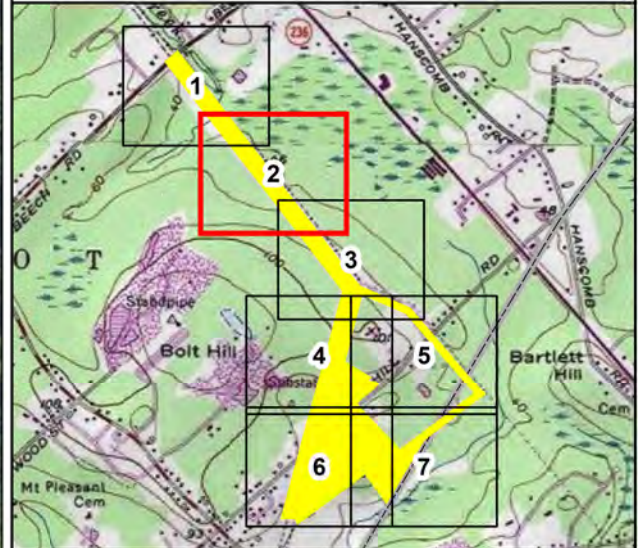
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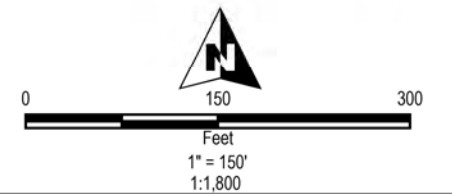
LEGEND

- SURVEY AREA
- DELINEATED STREAM, INTERMITTENT
- DELINEATED WETLAND BOUNDARY
- DELINEATED WETLAND
- DELINEATED VERNAL POOL BASIN



NOTES:

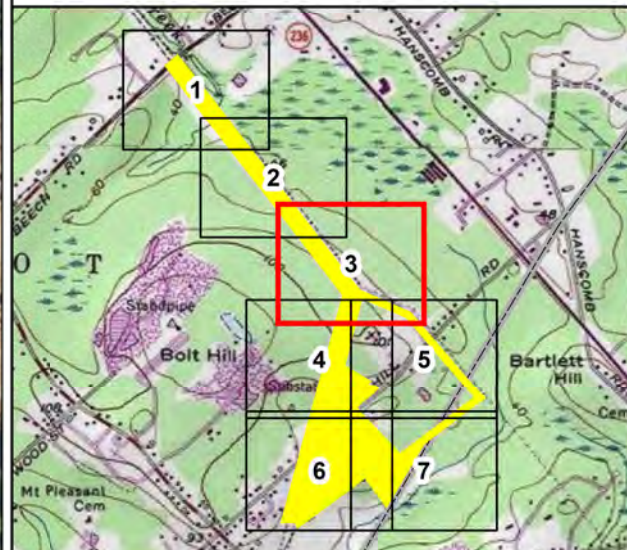
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2. RESOURCE DELINEATIONS WERE CONDUCTED BY FLYCATCHER BETWEEN JUNE 2021 AND APRIL 2025; AND ALSO BY STANTEC IN THE FALL OF 2023.



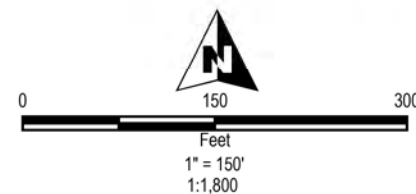
PROJECT:		CENTRAL MAINE POWER PNSY PRP BOLT HILL SUBSTATION ELIOT & KITTELY, YORK COUNTY, MAINE	
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CHECKED BY:	K. NICKERSON	FIGURE 2 Page 2 of 7	
MONTH:	JUNE		
YEAR:	2025		
FILE NO.:		CMP_21V016_BoltHill_PNSV.mxd	



- LEGEND**
- SURVEY AREA
 - DELINEATED WETLAND BOUNDARY
 - DELINEATED WETLAND
 - DELINEATED VERNAL POOL BASIN



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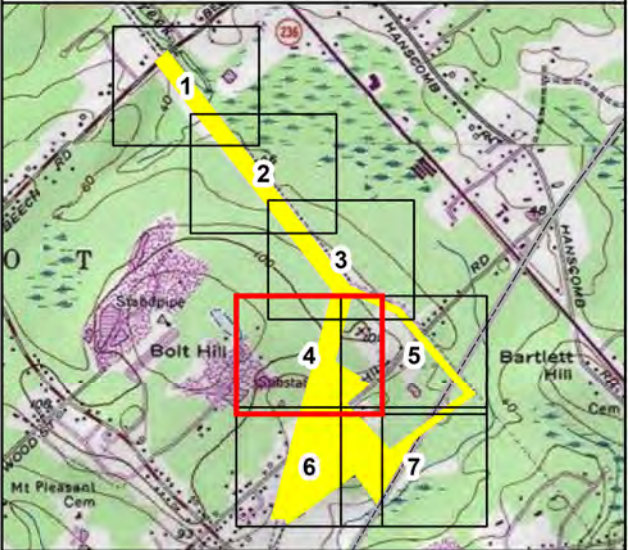


PROJECT:		CENTRAL MAINE POWER PNSY PRP BOLT HILL SUBSTATION ELIOT & KITTELY, YORK COUNTY, MAINE	
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CHECKED BY:	K. NICKERSON	FIGURE 2 Page 3 of 7	
MONTH:	JUNE		
YEAR:	2025		
FILE NO.:		CMP_21V016_BoltHill_PNSV.mxd	



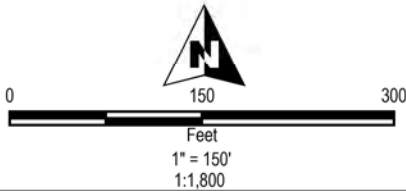
LEGEND

- SURVEY AREA
- DELINEATED WETLAND BOUNDARY
- DELINEATED WETLAND
- DELINEATED VERNAL POOL BASIN



NOTES:

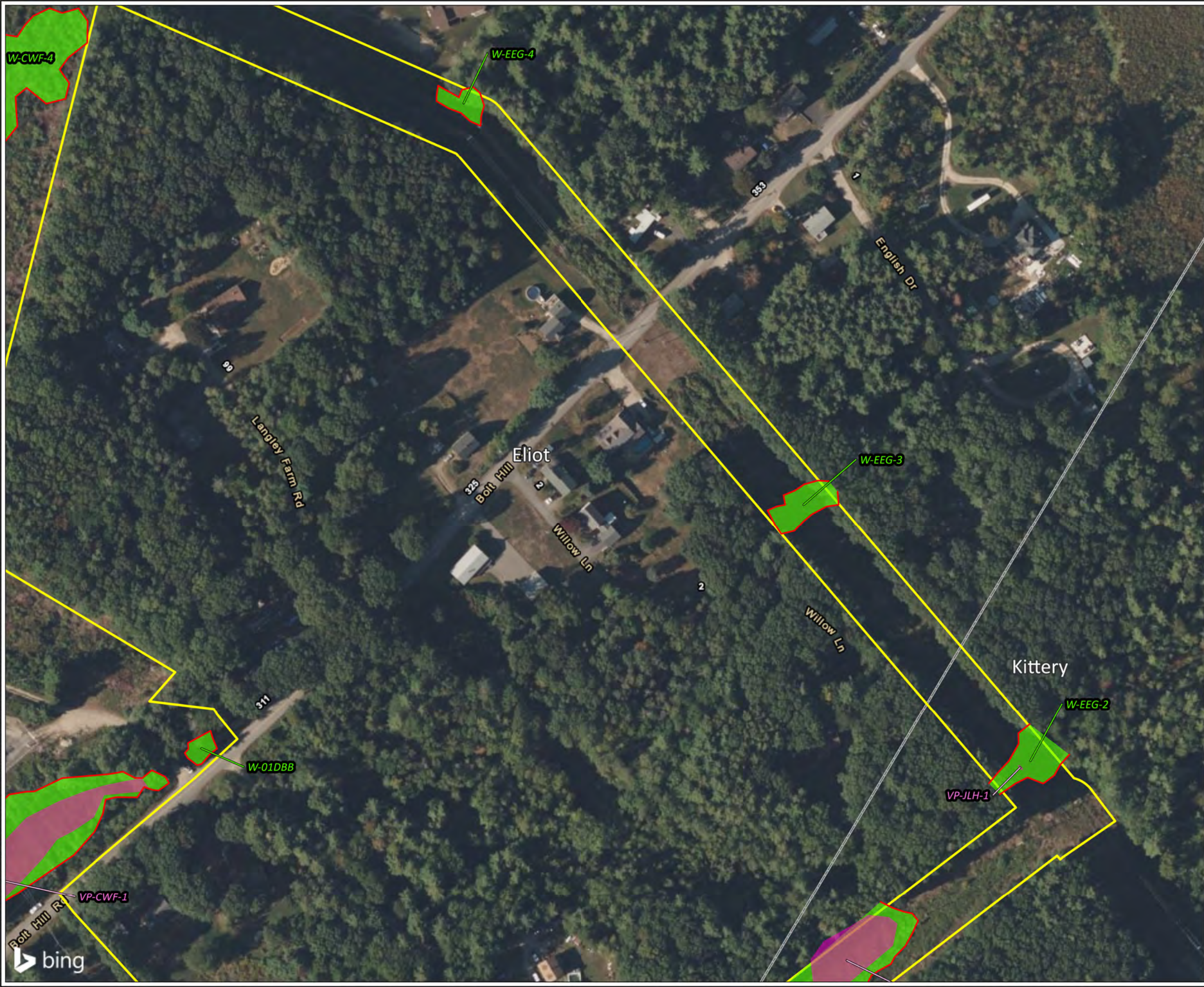
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CHECKED BY:	K. NICKERSON	FIGURE 2 Page 4 of 7	
MONTH:	JUNE		
YEAR:	2025		
Flycatcher LAND • SCIENCE • PEOPLE		CENTRAL MAINE POWER	
FILE NO.:		CMP_21V016_BoltHill_PNSV.mxd	

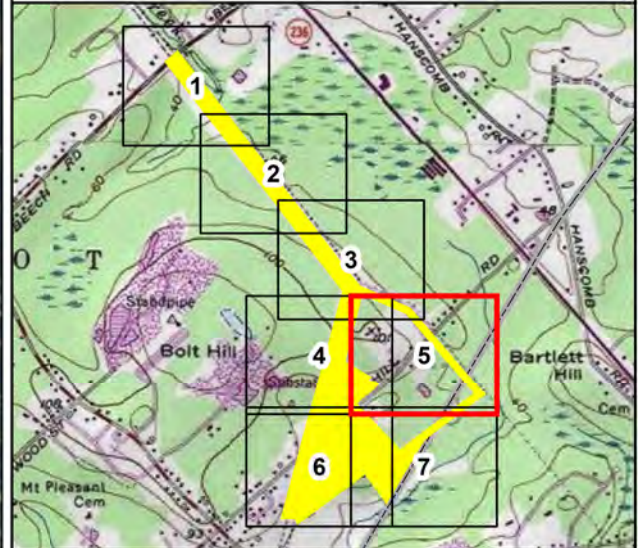
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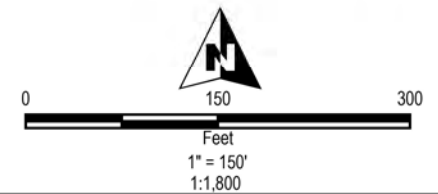
LEGEND

- SURVEY AREA
- DELINEATED WETLAND BOUNDARY
- DELINEATED WETLAND
- DELINEATED VERNAL POOL BASIN



NOTES:

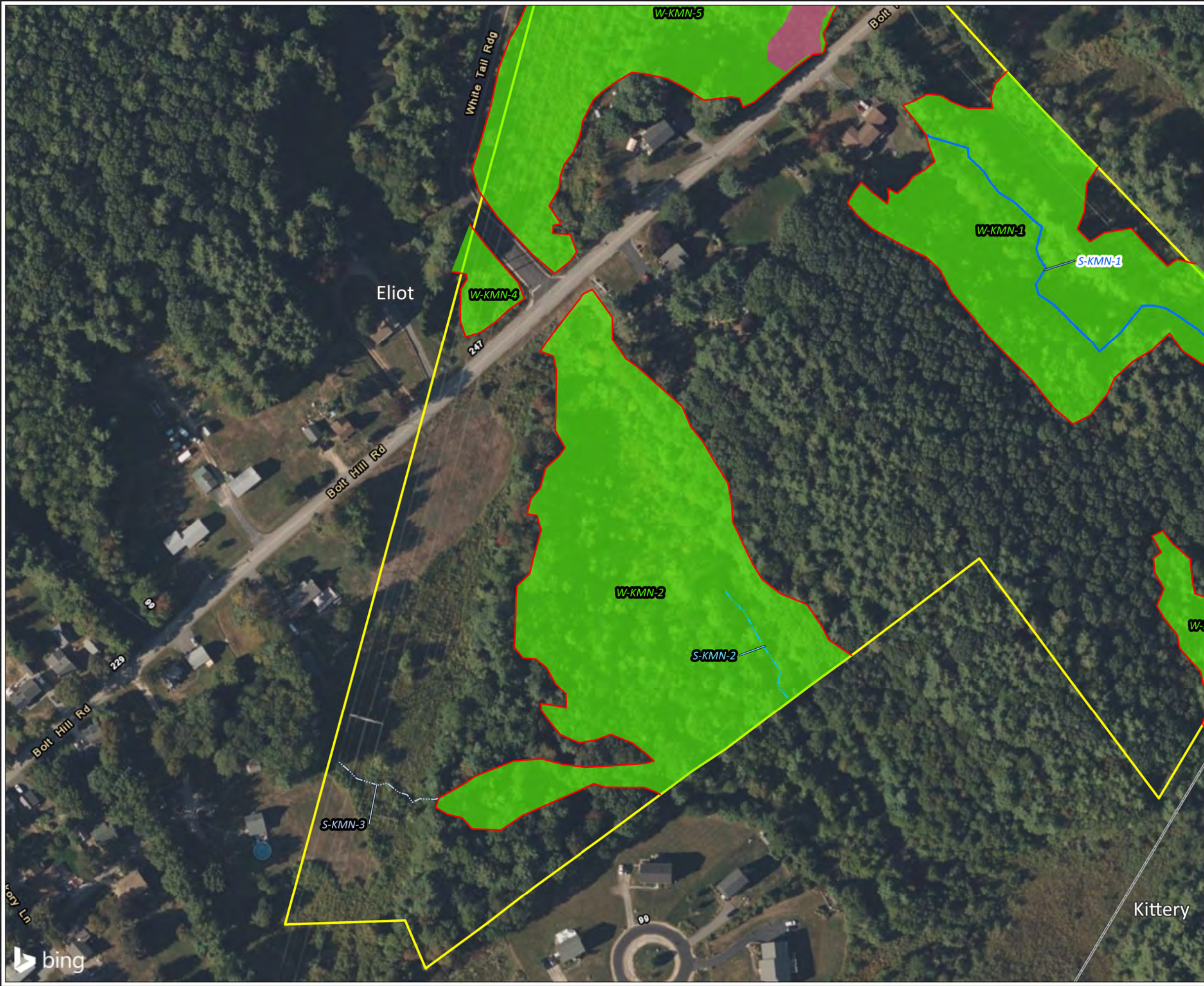
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DRAWN BY:	D. KENWORTHY	PROJ NO.:	21V-016
CHECKED BY:	K. NICKERSON	FIGURE 2 Page 5 of 7	
MONTH:	JUNE		
YEAR:	2025		
Flycatcher LAND • SCIENCE • PEOPLE		CENTRAL MAINE POWER	
FILE NO.:		CMP_21V016_BoltHill_PNSV.mxd	

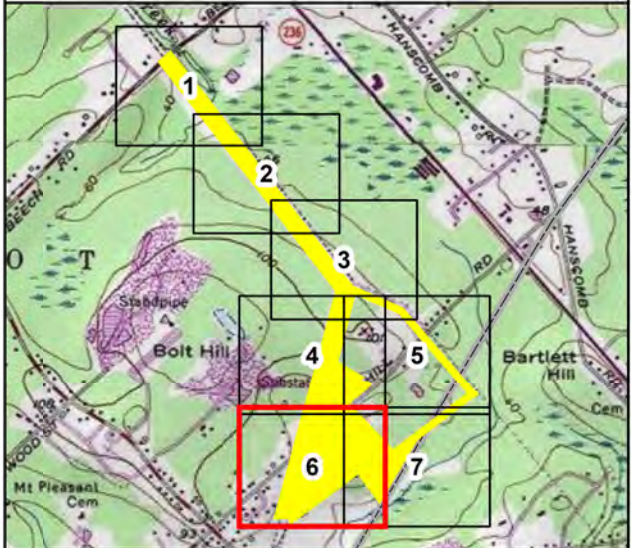
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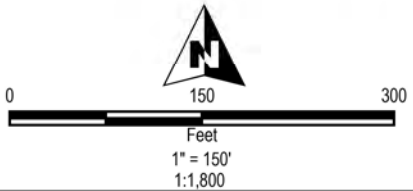


LEGEND

- SURVEY AREA
- DELINEATED STREAM, EPHEMERAL
- DELINEATED STREAM, INTERMITTENT
- DELINEATED STREAM, PERENNIAL
- DELINEATED WETLAND BOUNDARY
- DELINEATED WETLAND
- DELINEATED VERNAL POOL BASIN



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MONTH:	JUNE		
YEAR:	2025		
FILE NO.:		CMP_21V016_BoltHill_PNSV.mxd	

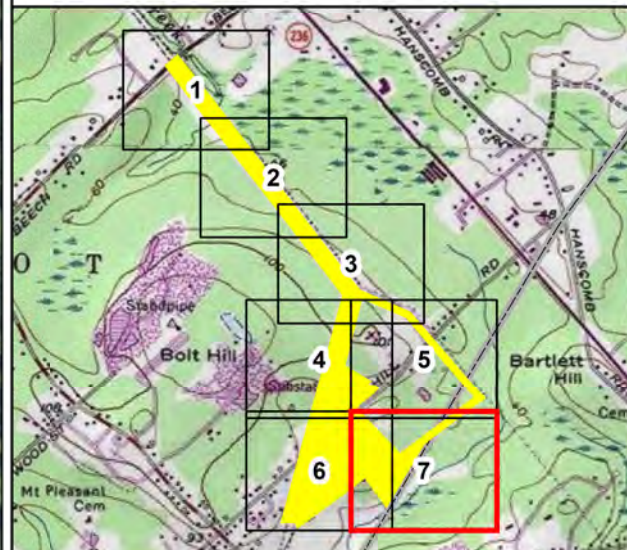
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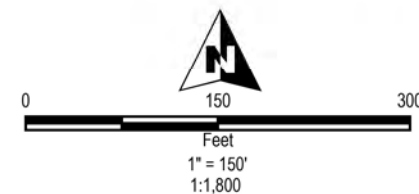
LEGEND

- SURVEY AREA
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CHECKED BY:	K. NICKERSON	FIGURE 2 Page 7 of 7	
MONTH:	JUNE		
YEAR:	2025		
FILE NO.:		CMP_21V016_BoltHill_PNSV.mxd	

Table 1. Wetland Descriptions, Functional Assessment and WOSS Determination

Resource ID	Dominant Covertypes ³	Hydrology Indicators	Dominant Vegetation	Hydric Soil Indicators	Description	Functions and Values	Rationale (Reference) ⁴	Principal Functions and Values	WOSS Determination	Reason(s)
W-KMN-1	PFO/PSS	A3. Saturation, D1. Stunted or stressed plants	Red maple (<i>Acer rubrum</i>), Yellow birch (<i>Betula alleghaniensis</i>), Northern red oak (<i>Quercus rubra</i>), Eastern white pine (<i>Pinus strobus</i>), Glossy buckthorn (<i>Frangula alnus</i>), Speckled alder (<i>Alnus incana</i>), Multiflora rose (<i>Rosa multiflora</i>), Sensitive fern (<i>Onoclea sensibilis</i>), Tussock sedge (<i>Carex stricta</i>), Common reed (<i>Phragmites australis</i>)	A11. Depleted below dark surface	Dense PFO/PSS partially in T-line, extends off site to the NE. Contains stream S-KMN-1	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; C. a) Fish and Shellfish Habitat (Freshwater); D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4, 7; B. 3, 5, 6, 9, 10, 13, 18; C (a). 4, 8, 12, 16; D. 4, 5, 6, 10; E. 3, 7, 9, 10; F. 1, 4, 6, 12; H. 5, 6, 7, 8, 11, 14, 15; I. 3; K. 14, 19; L. 1, 5	B. Floodflow Alteration; C.a) Fish and Shellfish Habitat (Freshwater); H. Wildlife Habitat	Yes	Portions within 25 ft of a river stream or brook
W-KMN-2	PFO/PSS	A3. Saturation, D1. Stunted or stressed plants	American elm (<i>Ulmus americana</i>), Red maple, Eastern white pine, Glossy buckthorn, Mountain holly (<i>Ilex mucronata</i>), Highbush blueberry (<i>Vaccinium corymbosum</i>), Red-osier dogwood (<i>Swida sericea</i>), Reed canary grass (<i>Phalaris arundinacea</i>), Sensitive fern	A11. Depleted below dark surface	Contains stream S-KMN-2. Ephemeral stream S-KMN-3 flows into southwest portion of wetland.	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4, 7; B. 2, 5, 6, 9, 10, 11, 13, 18; D. 4, 5, 6, 10; E. 3, 7, 9, 10; F. 1, 4, 7, 12; H. 1, 5, 6, 7, 8, 15; I. 3; K. 14, 19; L. 1, 5, 12	B. Floodflow Alteration; H. Wildlife Habitat	Yes	Portions within 25 ft of a river stream or brook
W-KMN-3	PFO	B9. Water-stained leaves, A3. Saturation	Red maple, Eastern white pine, Yellow birch, Glossy buckthorn, Arrowwood viburnum, Highbush blueberry, Fowl manna grass (<i>Glyceria striata</i>), Evergreen wood fern (<i>Dryopteris intermedia</i>), Eastern poison ivy (<i>Toxicodendron radicans</i>), Sensitive fern, Swamp dewberry (<i>Rubus hispidus</i>), Greater bladder sedge (<i>Carex intumescens</i>)	F3. Depleted Matrix	PFO connects to a larger marsh wetland system offsite	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4; B. 2, 3, 5, 9, 10, 18; D. 4, 5, 6, 9; E. 3, 7, 10; F. 1, 4, 7, 12; H. 1, 3, 4, 5, 6, 7, 8, 11, 14, 15; I. 3; K. 19; L. 5, 12	B. Floodflow Alteration; H. Wildlife Habitat	Yes	Portions within Zone A FEMA flood layer

³ Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. FWS/OBS-79/31, Washington, D.C.

⁴ US Army Corps of Engineers, New England District. 2015. The Highway Methodology Workbook Supplement. Wetland Functions and Values, A Descriptive Approach.

Resource ID	Dominant Covertypes ³	Hydrology Indicators	Dominant Vegetation	Hydric Soil Indicators	Description	Functions and Values	Rationale (Reference) ⁴	Principal Functions and Values	WOSS Determination	Reason(s)
W-KMN-4	PEM	A3. Saturation, B9. Water-stained leaves, D2. Geomorphic position	Broad-leaf cattail (<i>Typha latifolia</i>), Sensitive fern, Wrinkle-leaf goldenrod (<i>Solidago rugosa</i>), Spotted touch-me-not (<i>Impatiens capensis</i>), Purple loosestrife (<i>Lythrum salicaria</i>), Cottongrass bulrush (<i>Scirpus cyperinus</i>), knotweed species (<i>Persicaria spp</i>)	F3. Depleted Matrix	PEM in right of way at corner of Bolt Hill Rd and Whitetail Rd	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 4; B. 5, 6, 8, 15; D. 4, 5, 6; E. 3, 7, 9, 10; F. 1, 4, 12; H. 7, 8, 13; I. 3; K. 19; L. 9	B. Floodflow Alteration	Unlikely	
W-KMN-5	PSS/PEM	A1. Surface water, A3. Saturation, B9. Water stained leaves	Red maple, Eastern white pine, Black willow (<i>Salix nigra</i>), Speckled alder, Morrow's Honeysuckle (<i>Lonicera morrowii</i>), Multiflora rose, Asian bittersweet (<i>Celastrus orbiculatus</i>), Glossy buckthorn, Common winterberry (<i>Ilex verticillata</i>), Broad-leaf cattail, Canadian goldenrod (<i>Solidago canadensis</i>), Purple loosestrife (<i>Lythrum salicaria</i>), Shallow sedge (<i>Carex lurida</i>), Sensitive fern, Common rush (<i>Juncus effusus</i>), Flat-top goldenrod (<i>Euthamia graminifolia</i>), Spotted joe-pye weed (<i>Eutrochium maculatum</i>), Tussock sedge, Reed canary grass	F3. Depleted Matrix	PSS/PEM starts at eastern corner of Bolt Hill Rd and Whitetail Rd, wraps around back of substation and continues into right of way. VP-CWF-1 is located within wetland.	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4; B. 1, 5, 6, 7, 8, 9, 11*, 15, 18; D. 4, 5, 6; E. 3, 7, 9, 10; F. 1, 4, 7, 12; H. 7, 8, 13, 15, 20; I. 3; K. 19; L. 1, 9	B. Floodflow Alteration; H. Wildlife Habitat	Unlikely	Contains VP but not significant
W-EEG-1	PSS/PEM	A3. Saturation, B9. Water-stained leaves, B 10. Drainage patterns	Glossy buckthorn, Speckled alder, Willow species (<i>Salix spp</i>), Southern arrowwood (<i>Viburnum dentatum</i>), Sensitive fern, Halberd-leaf tearthumb (<i>Persicaria arifolia</i>), Spotted touch-me-not, Mad dog skullcap (<i>Scutellaria lateriflora</i>), Fowl manna grass, Rice cut grass (<i>Leersia oryzoides</i>)	F6. Redox dark surface	PSS in right of way and PEM floodplain in forested area connects to stream S-KMN-1/ S-EEG-1	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; C. a) Fish and Shellfish Habitat (Freshwater); D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4, 7; B. 5, 6, 8, 9, 10, 13, 18; C (a). 4, 8, 12, 16; D. 4, 5, 6, 10; E. 3, 7, 9, 10; F. 1, 4, 6, 7, 12; H. 5, 6, 7, 8, 14, 15; I. 3; K. 14, 19; L. 1, 5, 12	B. Floodflow Alteration; C.a) Fish and Shellfish Habitat (Freshwater); H. Wildlife Habitat	Yes	Within 25 ft of a river stream or brook

Resource ID	Dominant Covertypes ³	Hydrology Indicators	Dominant Vegetation	Hydric Soil Indicators	Description	Functions and Values	Rationale (Reference) ⁴	Principal Functions and Values	WOSS Determination	Reason(s)
W-EEG-2	PSS/PEM	B9. Water-stained leaves, B16. Moss trim lines	Red maple, Possumhaw (<i>Viburnum nudum</i>), Common winterberry, Glossy buckthorn, Spotted touch-me-not, Sensitive fern, Broad-leaf cattail, Flat-top goldenrod, White meadowsweet (<i>Spiraea latifolia</i>), Arrow-leaf tearthumb (<i>Persicaria sagittata</i>), Wrinkle-leaf goldenrod	A11. Depleted below dark surface	PSS/PEM depression in ROW, continues offsite	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4; B. 5, 6, 9; D. 4, 5; E. 3, 7, 9, 10; H. 5, 7, 8; I. 3; K. 19; L. 1	B. Floodflow Alteration	Unlikely	A portion of the wetland just outside of the Survey Area is considered Zone A on FEMA flood map
W-EEG-3	PSS/PEM	B9. Water-stained leaves, B16. Moss trim lines	Possumhaw, Southern arrowwood, Common winterberry, White meadowsweet, Glossy buckthorn, Sensitive fern, Common rush, Purple loosestrife, Arrow-leaf tearthumb, Spotted joe-pye weed, fringed willowherb (<i>Epilobium ciliatum</i>)	S5. Sandy Redox	PSS/PEM depression in ROW, continues offsite	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 4; B. 3, 5, 6, 9, 11; D. 4, 5; E. 3, 7, 9, 10; H. 7, 8; I. 3; K. 19; L. 1	B. Floodflow Alteration	Unlikely	
W-EEG-4	PSS/PEM	Water-stained leaves	Possumhaw, Southern arrowwood, Multiflora rose, White meadowsweet, Glossy buckthorn, Purple loosestrife, Sensitive fern, fringed willowherb, Spotted touch-me-not, Arrow-leaf tearthumb	S5. Sandy Redox	PSS/PEM depression in ROW	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4; B. 3, 5, 6, 9, 11; D. 4, 5; E. 3, 7, 9, 10; H. 5, 7, 8; I. 3; K. 19; L. 1	B. Floodflow Alteration	Unlikely	

Resource ID	Dominant Covertypes ³	Hydrology Indicators	Dominant Vegetation	Hydric Soil Indicators	Description	Functions and Values	Rationale (Reference) ⁴	Principal Functions and Values	WOSS Determination	Reason(s)
W-EEG-5	PEM	B9. Water-stained leaves, B16. Moss trim lines	Broad-leaf cattail, Sensitive fern, Wrinkle-leaf goldenrod, Common rush, Cut-leaf water-horehound (<i>Lycopus americanus</i>), Arrow-leaf tearthumb, Flat-top goldenrod, Reed canary grass, Pointed broom sedge (<i>Carex scoparia</i>), Hop sedge (<i>Carex lupulina</i>)	F6. Redox Dark Surface	PEM in right of way connects to PFO offsite. Eastern edge of wetland ends adjacent to ROW access trail.	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage	A. 2, 4; B. 3, 5, 6, 9, 11; D. 4, 5, 6; E. 3, 7, 9, 10; H. 5, 7, 8, 13; I. 3; K. 19;	B. Floodflow Alteration; H. Wildlife Habitat	Unlikely	
W-CWF-1	PSS/PEM	B9. Water-stained leaves, B3. Drift deposits, B6. Surface soil cracks, B10. Drainage patterns	Red maple, Gray birch (<i>Betula populifolia</i>) Gray willow (<i>Salix bebbiana</i>), Common winterberry, Silky dogwood (<i>Cornus amomum</i>), White meadowsweet, Steeplebush (<i>Spiraea tomentosa</i>), Bluejoint (<i>Calamagrostis canadensis</i>), Broad-leaf cattail, Purple loosestrife, Hop sedge	F3. Depleted Matrix	Pit and mound microtopography PSS/PEM in T-line ROW	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4; B. 3, 5, 6, 9, 11; D. 4, 5; E. 3, 7, 9, 10; H. 7, 8; I. 3; K. 19; L. 1, 9	B. Floodflow Alteration	Unlikely	
W-CWF-2	PSS	A3. Saturation, B9. Water-stained leaves	Gray willow, Glossy buckthorn, Broad-leaf cattail, Sensitive fern	A11. Depleted below dark surface	PSS isolated drainage in ROW	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage	A. 2, 4; B. 5, 9, 11; D. 4, 5; E. 3, 7, 9, 10; H. 7, 8; I. 3; K. 19;	B. Floodflow Alteration	Unlikely	
W-CWF-3	PSS	Saturation, Water stained leaves	Common winterberry, Black willow, White meadowsweet, Purple loosestrife, Sallow sedge, Sensitive fern, Wrinkle-leaf goldenrod, Halberd-leaf tearthumb	S5. Sandy Redox	Isolated PSS within ROW	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4; B. 3, 5, 6, 9, 11; D. 4, 5; E. 3, 7, 9, 10; H. 5, 7, 8, 13, 14, 15; I. 3; K. 19; L. 9	B. Floodflow Alteration; H. Wildlife Habitat	Unlikely	

Resource ID	Dominant Coverture ³	Hydrology Indicators	Dominant Vegetation	Hydric Soil Indicators	Description	Functions and Values	Rationale (Reference) ⁴	Principal Functions and Values	WOSS Determination	Reason(s)
W-CWF-4	PSS	B9. Water-stained leaves, B6. Surface soil cracks	Black willow, Glossy buckthorn, White meadowsweet, Common winterberry	F3. Depleted Matrix	PSS in transmission line ROW	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage	A. 2, 4; B. 3, 5, 6, 9, 11, 18; D. 4, 5; E. 3, 7, 9, 10; H. 5, 7, 8; I. 3; K. 19;	B. Floodflow Alteration	Unlikely	
W-CWF-5	PEM	B9. Water-stained leaves, B4. Algal mat or crust, B6. Surface soil cracks	Bluejoint, broad-leaf cattail, Cottongrass bulrush, Common rush, White meadowsweet, Purple loosestrife	A11. Depleted below dark surface	PEM isolated depression. Contains vernal pool VP-KMN-1	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage	A. 2; B. 3, 5, 6, 7, 9, 11; D. 4, 5; E. 3, 7, 9, 10; H. 5, 7, 8, 13, 20; I. 3; K. 19;	H. Wildlife Habitat	Unlikely	
W-CWF-6	PSS/PEM	B10. Drainage patterns, B6. Soil surface cracks.	Glossy buckthorn, Common winterberry, Southern arrowwood, White meadowsweet, Steeplebush, Cottongrass bulrush, Common rush, Bluejoint, Broad-leaf cattail, Purple loosestrife, Tussock sedge, Fringed sedge (<i>Carex crinita</i>)	F3. Depleted Matrix	PSS/PEM side-slope seeps	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4; B. 5, 6, 9; D. 4, 5; E. 3, 7, 9, 10; H. 5, 7, 8, 11, 13; I. 3; K. 19; L. 1	H. Wildlife Habitat	Unlikely	

Resource ID	Dominant Covertypes ³	Hydrology Indicators	Dominant Vegetation	Hydric Soil Indicators	Description	Functions and Values	Rationale (Reference) ⁴	Principal Functions and Values	WOSS Determination	Reason(s)
W-CWF-7	PSS/PEM	B10. Drainage patterns, B6. Soil surface cracks.	Glossy buckthorn, Common winterberry, Southern arrowwood, White meadowsweet, Steeplebush, Cottongrass bulrush, Common rush, Bluejoint, Broad-leaf cattail, Purple loosestrife, Tussock sedge, Fringed sedge	F3. Depleted Matrix	PSS/PEM side-slope seeps	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4; B. 5, 6, 8, 9; D. 4, 5; E. 3, 7, 9, 10; H. 5, 7, 8; I. 3; K. 19; L. 1	B. Floodflow Alteration	Unlikely	
W-MFT-1	PSS/PFO	D2. Geomorphic position, C4. Presence of reduced iron, D5. FAC-neutral test, B9. Water-stained leaves, C9. Saturation visible on aerial imagery	Red maple, Speckled alder, Common winterberry, Glossy buckthorn, Sallow sedge, Sensitive fern, Broad-leaf cattail, Tussock sedge, Woodland horsetail (<i>Equisetum sylvaticum</i>), Nodding sedge (<i>Carex gynandra</i>)	A11. Depleted below dark surface	Toe of slope scrub shrub forested wetland, connects to W-MFT-2 offsite.	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4; B. 5, 6, 10, 11; D. 4, 5, 6; E. 3, 7, 9, 10; H. 7, 8; I. 3; K. 19; L. 1, 9	B. Floodflow Alteration	Yes	Portions within FEMA zone A
W-MFT-2	PEM/PSS	A1. Surface water, A3. Saturation, D2. Geomorphic position, C4. Presence of reduced iron, D5. FAC-neutral test, C9. Saturation visible on aerial imagery	Common winterberry, Glossy buckthorn, Speckled alder, Gray willow, Black willow, Steeplebush, Broad-leaf cattail, Sensitive fern, Tussock sedge, Sallow sedge	F3. Depleted Matrix	Cattail marsh side seeps. Intermittent stream S-MFT-2 flows north and west through wetland.	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4, 7; B. 5, 6, 9, 10, 11, 13; D. 4, 5, 6, 10; E. 3, 7, 9, 10; H. 6, 7, 8, 11, 13, 14, 20; I. 3; K. 14, 19; L. 1, 9	B. Floodflow Alteration; H. Wildlife Habitat	Yes	Portions of wetland within 25' of stream S-MFT-2 and mapped FEMA flood zone A

Resource ID	Dominant Coverture ³	Hydrology Indicators	Dominant Vegetation	Hydric Soil Indicators	Description	Functions and Values	Rationale (Reference) ⁴	Principal Functions and Values	WOSS Determination	Reason(s)
W-MFT-3	PEM/PSS	A1. Surface water, A3. Saturation, D2. Geomorphic position, C4. Presence of reduced iron, D5. FAC-neutral test, C9. Saturation visible on aerial imagery	Glossy buckthorn, Common winterberry, Steeplebush, Speckled alder, Broad-leaf cattail, Sensitive fern, Nodding sedge, Cottongrass bulrush, Common rush, Swamp dewberry, Parasol whitetop (<i>Doellingeria umbellata</i>), Flat-top goldenrod	F3. Depleted Matrix	Emergent/ scrub shrub marsh, cattail marsh, side seep. Intermittent stream S-MFT-1 located within.	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4, 7; B. 5, 6, 9, 10, 13; D. 4, 5, 6, 10; E. 3, 7, 9, 10; H. 5, 6, 7, 8, 9, 11, 13, 14, 20; I. 3; K. 14, 19; L. 1	B. Floodflow Alteration; H. Wildlife Habitat	Yes	State threatened <i>Carex atherodes</i> present within wetland; portions of wetland within 25' of stream S-MFT-1 and mapped FEMA flood zone A
W-MFT-4	PEM/PSS	D2. Geomorphic position, C4. Presence of reduced iron, C9. Saturation visible on aerial imagery	Glossy buckthorn, Common winterberry, Steeplebush, Speckled alder, Broad-leaf cattail, Sensitive fern, Nodding sedge, Cottongrass bulrush, Common rush, Swamp dewberry, Parasol whitetop, Flat-top goldenrod	F3. Depleted Matrix	Emergent/ scrub shrub marsh, cattail marsh within a side slope seep.	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4; B. 5, 6, 9; D. 4, 5; E. 3, 7, 9, 10; H. 5, 7, 8, 11, 13; I. 3; K. 19; L. 1	H. Wildlife Habitat	Unlikely	

Resource ID	Dominant Coverture ³	Hydrology Indicators	Dominant Vegetation	Hydric Soil Indicators	Description	Functions and Values	Rationale (Reference) ⁴	Principal Functions and Values	WOSS Determination	Reason(s)
W-MFT-5	PEM/PSS	A1. Surface water, A3. Saturation, D2. Geomorphic position, C4. Presence of reduced iron, D5. FAC-neutral test, C9. Saturation visible on aerial imagery	Spotted Joe-Pye weed, Glossy buckthorn, Common winterberry, Steeplebush, Speckled alder, Broad-leaf cattail, Sensitive fern, Nodding sedge, Cottongrass bulrush, Common rush, Swamp dewberry, Parasol whitetop, Flat-top goldenrod	F3. Depleted Matrix	Emergent/ scrub shrub marsh, cattail marsh within a side slope seep.	A. Groundwater Recharge/ Discharge; B. Floodflow Alteration; D. Sediment/ Toxicant/ Pathogen Retention; E. Nutrient Removal/ Retention/ Transformation; F. Production Export; H. Wildlife Habitat; I. Recreation; K. Uniqueness/ Heritage; L. Visual Quality/ Aesthetics	A. 2, 4; B. 5, 6, 9; D. 4, 5; E. 3, 7, 9, 10; H. 5, 7, 8, 11, 13; I. 3; K. 19; L. 1	H. Wildlife Habitat	Unlikely	

Table 2. Stream Summary Table

Resource ID	Name	Notes/Description	Flow Regime	Approx. Width (ft.)	Approx. Depth (in.)	Associated Wetland ID
S-KMN-1/ S-EEG-1	Unnamed tributary to Spinney Creek	Stream flows south and east out of a culvert on the south side of Bolt Hill Road. Substrate consists of sand, cobble, and gravel.	Perennial	3-4	3	W-KMN-1
S-KMN-2	Unnamed tributary to Spinney Creek	Stream S-KMN-2 is a low gradient stream that flows southeast within WKMN-2 and off site. Substrate consists of silt and sand.	Intermittent	2	2	W-KMN-2
S-KMN-3	Unnamed tributary to W-KMN-2	Stream S-KMN-3 starts in a flat, non-wetland area and flows east into the southeast corner of W-KMN-2. Likely only flows after heavy rain in spring. Substrate consists of cobble, gravel, and sand.	Ephemeral	1	0	W-KMN-2
S-MFT-1	Unnamed tributary to Great Creek	Stream S-MFT-1 flows east/northeast within wetland W-MFT-3. Weakly defined channel becomes eroded further to the east; substrate consists of silt.	Intermittent	3-4	1-2	W-MFT-3
S-MFT-2	Headwaters of Great Creek	Partially located within W-MFT-2 this stream flows northeast and continues outside of the Survey Area. Portions of the channel were dry during the time of survey. Substrate is dominated by silt.	Intermittent	3-4	0-2	W-MFT-2

Table 3 Vernal Pool Summary Table

Resource ID	Notes/Description	Pool Origin	Wood Frog Egg Masses	Spotted Salamander Egg masses	Evidence of Secondary Faunal Indicators	Likely NRPA Significant?
VP-CWF-1	Pool is located between the north side of Bolt Hill Road and the existing substation. It is a natural/modified pool with no inlet or outlet. No fish observed.	Natural Modified	0	3	none	no
VP-CWF-2	Pool is located within the CMP right-of-way, south and parallel to Bolt Hill Road. No inlet or outlet observed. Sphagnum and mineral substrate. No fish observed.	Natural Modified	15	29	none	Yes
VP-JLH-1	Pool in ruts in CMP right-of-way, wetland shrubs and herbaceous plants present. Muck substrate.	Unnatural	0	7	none	no
VP-KMN-1	Pool in ruts in CMP right-of-way, wetland herbaceous plants present.	Unnatural	0	13	Caddisfly larval observed	no
VP-KMN-2	Pool is located within W-CWF-5 in the CMP right-of-way. Wetland herbaceous plants and pit and mound topography. Mineral substrate.	Natural Modified	15	6	none	no

Attachment A
Agency Correspondence



STATE OF MAINE
DEPARTMENT OF
INLAND FISHERIES & WILDLIFE
353 WATER STREET
41 STATE HOUSE STATION
AUGUSTA ME 04333-0041



October 2, 2024

Sean Murphy
Flycatcher LLC
Lower Falls Landing, 106 Lafayette Street, Suite 2A
Yarmouth, ME 04096

RE: Information Request – Central Maine Power Bolt Hill Substation, Eliot (ER7834)

Dear Sean:

Per your request, we have reviewed current Maine Department of Inland Fisheries and Wildlife (MDIFW) information sources for known locations of Endangered, Threatened, and Special Concern (Rare) species; designated Essential and Significant Wildlife Habitats; inland fisheries and aquatic habitats; and other protected natural resource concerns within the vicinity of the *Central Maine Power Bolt Hill Substation Project* in Eliot, pursuant to MDIFW's authority. Please note that as project details are lacking, our comments should be considered preliminary.

Our Department has not mapped any Essential Habitats that would be directly affected by your project.

ENDANGERED, THREATENED, AND SPECIAL CONCERN SPECIES

Bat Species

Of the eight species of bats that occur in Maine, four species are afforded protection under Maines Endangered Species Act (MESA, 12 M.R.S 12801 et. seq.): little brown bat (State Endangered), northern long-eared bat (State Endangered), eastern small-footed bat (State Threatened), and tri-colored bat (State Threatened). The four remaining bat species are designated as Species of Special Concern: big brown bat, red bat, hoary bat, and silver-haired bat. While a comprehensive statewide inventory for bats has not been completed, based on historical evidence it is likely that several of these species occur within the project area during spring/fall migration, the summer breeding season, and/or for overwintering. However, our Agency does not anticipate significant impacts to any of the bat species as a result of this project.

Blanding's Turtle

Blanding's turtles, a State Endangered species, have been documented in the immediate vicinity of the proposed project area. In Maine, Blanding's turtles are found most frequently in vernal pools, acidic wetlands and larger marsh complexes, within blocks of forested habitat. They also use small streams, shrub swamps, wet meadows, bogs, and forested swamps. Development activity that compromises riparian integrity or migration permeability among seasonally critical wetlands can lead to degradation of habitat quality and potential loss of local populations.

Additionally, development projects that lead to significant increases in local traffic volume will likely lead to increased roadkill and possible extirpation of the local population. If these habitats are present in the project area, we recommend that they be avoided and buffered by 250 feet of undisturbed, natural vegetation with no new no development or permanent habitat conversion within this zone. Alternatively, we recommend that surveys be conducted for this species within the project area, conducted by qualified biologists with experience surveying for this species, following MDIFW's most recent survey protocol.

New England Cottontail

New England cottontail, a State Endangered species, have been documented in the vicinity of the proposed project. New England cottontails require areas of shrubs and densely growing young trees. Much of the area supporting the species in the Northeast has been fragmented and no longer provides habitat patches of suitable quality, size, or connectivity, increasing the importance of remaining habitats. We recommend that you contact Cory Stearns, MDIFW Small Mammal Biologist (cory.r.stearns@maine.gov, 207-592-1782), for any site-specific data for your project, as well as to schedule a site visit, if necessary, to assess potential cottontail presence and habitat suitability. MDIFW recommends avoidance of impacts to New England cottontail habitats to the extent practicable.

Spotted Turtle

Spotted turtles, a State Threatened species, have been documented in the proposed project area. Spotted turtles are most frequently found in southern and coastal Maine in forested settings with complexes of small acidic wetlands and vernal pools. They also use small streams, shrub swamps, wet meadows, bogs, and forested swamps. Development activity that compromises riparian integrity or migration permeability among seasonally critical wetlands can lead to degradation of habitat quality and potential loss of local populations. Additionally, development projects that lead to significant increases in local traffic volume can lead to increased roadkill and possible extirpation of the local population. If these habitats are present, we recommend they be avoided and buffered with 250-foot intact vegetated buffers. Alternatively, we recommend that surveys be conducted for this species within the project area, conducted by qualified biologists with experience surveying for this species, following MDIFW's most recent survey protocol.

Spicebush Swallowtail

The proposed location is nearby to 1 of only 15 known populations of Spicebush Swallowtail butterfly in Maine, a species of Special Concern. Habitat for this species consists of rich hardwood and mixed wood forests with slow streams or seepages, and which contain its host plants, northern spicebush or sassafras. Any impacts on populations of spicebush or sassafras could also have potential impacts to this rare butterfly species. MDIFW recommends that comprehensive surveys for Spicebush be conducted in conjunction with all wetland delineations. If the Spicebush host plant is found within the project footprint, we recommend that a 100-foot-wide intact forested buffer be maintained in perpetuity between forested areas with spicebush or

sassafras and any development proposed at this location, as well as keeping runoff from constructed areas from flowing into these forested areas.

SIGNIFICANT WILDLIFE HABITAT

Significant Vernal Pools

At this time MDIFW Significant Wildlife Habitat (SWH) maps indicate no known presence of Significant Vernal Pools (SVPs) in the project search area. However, a comprehensive statewide inventory for Significant Vernal Pools has not been completed. SVPs are not included on MDIFW maps until project areas have been surveyed using approved methods and the survey results confirmed. Therefore, their absence from resource maps is not necessarily indicative of an absence on the ground. We recommend that surveys for vernal pools be conducted within the project boundary by qualified wetland scientists prior to final project design to determine whether there are Significant Vernal Pools present in the area. These surveys should extend up to 250 feet beyond the anticipated project footprint because of potential performance standard requirements for off-site Significant Vernal Pools, assuming such pools are located on land owned or controlled by the applicant. Once surveys are completed, survey forms should be submitted to our Agency for review well before the submission of any necessary permits. Our Department will need to review and verify any vernal pool data prior to final determination of significance.

AQUATIC RESOURCES

Fish Habitat

We recommend that 100-foot undisturbed vegetated buffers be maintained along streams. Buffers should be measured from the edge of stream or associated fringe and floodplain wetlands. Maintaining and enhancing buffers along streams is critical to the protection of water temperatures, water quality, natural inputs of coarse woody debris, and various forms of aquatic life necessary to support conditions required by many fish species. Stream crossings should be avoided, but if a stream crossing is necessary, or an existing crossing needs to be modified, it should be designed to provide full fish passage. Small streams, including intermittent streams, can provide crucial rearing habitat, cold water for thermal refugia, and abundant food for juvenile salmonids on a seasonal basis and undersized crossings may inhibit these functions. Generally, MDIFW recommends that all new, modified, and replacement stream crossings be sized to span at least 1.2 times the bankfull width of the stream. In addition, we generally recommend that stream crossings be open bottomed (i.e., natural bottom), although embedded structures which are backfilled with representative streambed material have been shown to be effective in not only providing habitat connectivity for fish but also for other aquatic organisms. Construction Best Management Practices should be closely followed to avoid erosion, sedimentation, alteration of stream flow, and other impacts as eroding soils from construction activities can travel significant distances as well as transport other pollutants resulting in direct

impacts to fisheries and aquatic habitat. In addition, we recommend that any necessary instream work occur between July 15 and October 1.

This consultation review has been conducted specifically for known MDIFW jurisdictional features and should not be interpreted as a comprehensive review for the presence of other regulated features that may occur in this area. Prior to the start of any future site disturbance, we recommend additional consultation with the municipality, and other state resource and regulatory agencies including the Maine Natural Areas Program and Maine Department of Environmental Protection in order to avoid unintended protected resource disturbance.

Please feel free to contact my office if you have any questions regarding this information, or if I can be of any further assistance.

Best regards,

A handwritten signature in blue ink, appearing to read 'JPerry', with a stylized flourish at the end.

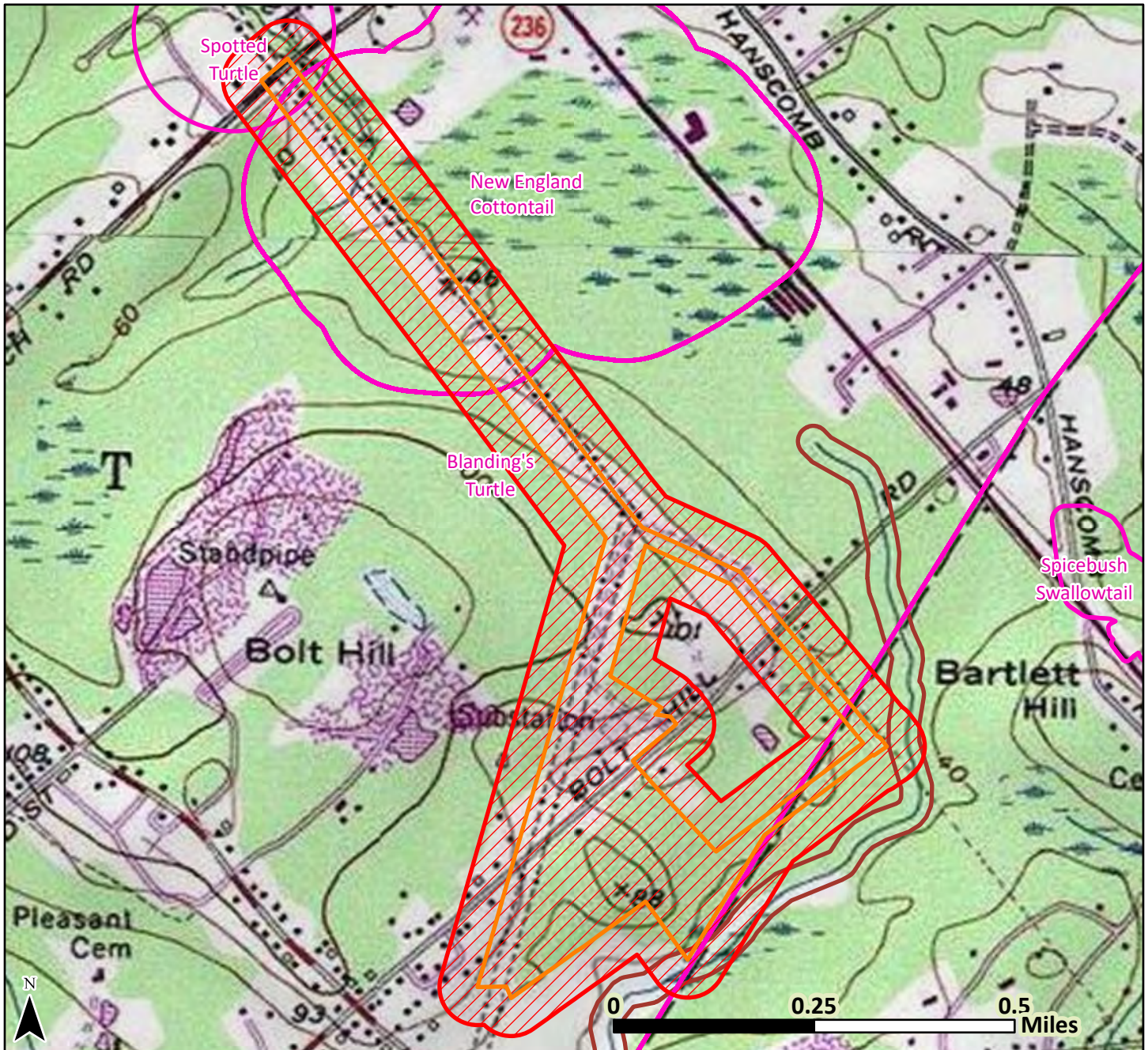
John Perry
Environmental Review Program Supervisor



Maine Department of Inland Fisheries and Wildlife
Project Area Review of Fish and Wildlife Observations and Priority Habitats

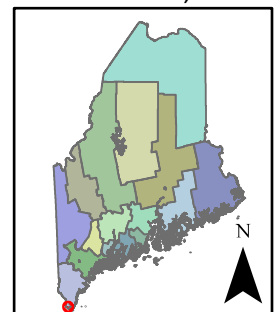
Bolt Hill Substation, Eliot

Project ID 7834_9586



- | | |
|-----------------------------|----------------------|
| County Boundary | E, T, & SC Species |
| Township Boundary | Special Concern Fish |
| Project Footprint (Polygon) | |
| Search Area | |

Date: 7/10/2024
Projection:
UTM Zone 19N, NAD83



Legend only lists resources visible in the map; see response letter for all resources that were evaluated.



Recommended Performance Standards for Inland Waterfowl and Wadingbird Habitats in Overhead Utility ROW Projects

March 26, 2012

Applicability: This document applies to linear right-of-way projects that cross or abut mapped moderate or high value Inland Waterfowl and Wading Bird Habitats (IWWH) as defined in Chapter 335 of Maine's Natural Resources Protection Act. By definition IWWH includes the non-forested wetland complex and a 250 ft wide zone surrounding the wetland complex. Maps of IWWH polygons regulated under Chapter 335 are available through the Maine Department of Environmental Protection or by contacting our offices.

General Project Alignment Recommendations: Where practicable, right-of-way alignment should be designed to avoid vegetation clearing within mapped IWWH areas. Where full avoidance is not an option, alignments must minimize fragmentation of the habitat by crossing as close to the outer edge as possible, or minimizing the length of the proposed disturbance by crossing narrow portions of the IWWH. The placement of structures within an IWWH must be avoided to the maximum extent practicable.

Defining Boundaries and Setbacks

The limits of an IWWH and setbacks defined in subsections of this document must be clearly marked in the field prior to the start of construction or subsequent maintenance work.

Specific Inland Waterfowl and Wadingbird Habitat Performance Standards

A. Arboricultural Management Practices

(1) Capable vegetation may be removed and controlled within the transmission line corridor portions of the development. Capable vegetation is defined as species that are capable of growing to a height that would reach the conductor safety zone. Most tree species in Maine are defined as capable vegetation.

(2) Where the practice is possible, the MDIFW encourages topping of large diameter (>12 inches diameter at breast height) capable trees to create snags to support waterfowl nesting cavities.

(3) When terrain conditions permit (e.g., ravines and narrow valleys) capable vegetation must be permitted to grow within an IWWH where maximum growing height can be expected to remain below the conductor safety zone. Narrow valleys are those that are spanned by a single section of transmission line, pole-to-pole.

(4) If a right-of-way crosses an IWWH we encourage close pole spacing to minimize line sagging and maximize allowed growing height of vegetation within the IWWH.

(5) When capable vegetation within an IWWH must be removed for the purpose of construction, natural re-generation of non-capable woody vegetation must be allowed within the IWWH. To facilitate the regeneration of natural vegetation, the contractor must separate the topsoil from the mineral soil when excavating during project construction. The excavated topsoil must be returned to its original place and position in the landscape and appropriate erosion control methods utilized.

(6) Within an IWWH impacts to scrub-shrub and herbaceous vegetation, and other non-capable species must be minimized to the maximum extent practicable.

(7) No clearing or vegetation maintenance work shall occur within the IWWH during the peak waterfowl and wading bird nesting season (April 15th to July 15th) unless approved in consultation with MDIFW.

(8) Provided they do not present a safety hazard and are naturally present, the permittee must leave undisturbed a minimum of 2-3 snags per 500 linear feet of corridor to provide nesting habitat for waterfowl. Snags must be a minimum of 12 inches diameter at breast height, larger diameter snags are preferred.

B. Heron Colony Surveys

Prior to initial transmission line clearing, the permittee must complete field investigations for the presence heron colonies within or immediately adjacent to IWWH. Surveys for great blue heron (State Special Concern) colonies must be conducted between April 20th and May 31st. In northern and downeast Maine where nesting tends to initiate later, surveys must not begin until the beginning of May. If heron colonies are noted, the permittee shall contact MDIFW to discuss avoidance measures and project timing considerations that would best minimize impacts to nesting herons.

C. Herbicide Application

(1) Herbicides may not be applied within 25-feet of any wetland (including forested wetlands) that is within an IWWH.

(2) Elsewhere in the IWWH herbicide usage must comply with all label requirements and standards established by the Maine Board of Pesticides Control (MBPC), as periodically

amended. Herbicide restrictions and approvals are governed by MBPC. Some key standards include the following:

- (a) Use of only trained applicators working under licensed supervisors.
- (b) Awareness of the impacts of climatic conditions prior to application.
- (c) Application is prohibited when wind speed exceeds 15 MPH as measured on-site at the time of application. The application must be administered such that drift is minimized to the maximum extent practicable.

(3) Products with low potential for mobility and low persistence in the environment must be selected for use in riparian buffers. When operating within an IWWH the following is required:

(a) Only the following herbicides may be used unless otherwise approved in consultation with MDIFW prior to application:

- (i) 2,4-D salt formulation, NOT the ester formulation,
- (ii) Glyphosate,
- (iii) Imazapyr,
- (iv) Fosamine Ammonium,
- (v) Aminopyralid Triisopropanolammonium, and
- (vi) Metsulfuron methyl

(b) Only the following surfactants may be used unless otherwise approved in consultation with MDIFW prior to application:

- (i) Agri-Dex,
- (ii) Competitor,
- (iii) Dyne-Amic,
- (iv) Clean Cut,
- (v) Cide-Kick,
- (vi) Nu-Film IR,
- (vii) Induce,
- (viii) Chemsurf90, and
- (viii) 41-A

(4) Herbicides must be applied in accordance with USEPA label requirements to minimize washoff.

(5) There may be no aerial or motorized application of herbicides.

(6) Pre-application planning meetings between the permittee and the pesticide applicator must be conducted.

(7) The permittee must closely supervise application and inspect application gear

(8) Low-pressure, manual backpack sprayers, with appropriate nozzles to minimize drift, must be used.

(9) Herbicide application must be specific to individual targeted species.

(10) The permittee must conduct post-treatment inspection.

(11) No herbicide may be stored, mixed or loaded within 100 ft of any wetland that is within an IWWH.

C. Spill Management

(1) Any spill or release of petroleum products or other hazardous material within a utility transmission line corridor must be managed in accordance with the Spill Contingency Plan as approved by the Maine Department of Environmental Protection.

(2) No fuel storage, vehicle/equipment parking and maintenance, and refueling activity may occur within 100 ft of any wetland that is within an IWWH.

D. Equipment Use

(1) Initial clearing, slash removal, and non-emergency infrastructure maintenance within an IWWH must be undertaken during frozen ground conditions whenever practicable. In the event that it is not practicable, vegetation within the IWWH must be removed using hand cutting or appropriate techniques that minimize disturbance to the maximum extent practicable.

(2) Timber mats shall be used to prevent excessive rutting and designated travel lanes shall be used to minimize unnecessary vegetation disturbance.

(3) Matting used for any construction or maintenance purposes:

(a) shall not be made from wood from ash trees (*Fraxinus spp*);

(b) shall be free of bark;

(c) shall be cleaned of soil and vegetative material by pressure washing if imported from out of State;

(d) shall not have been used in, or made from lumber from, Federally Quarantined areas as setout in 7 CFR 301 unless accompanied by the appropriate USDA certificate of treatment required for interstate transport. Said certificates will be maintained in a central filing location available for review by appropriate personnel for a period of three years after project completion, as determined by permittee;

(e) must have shipping information sufficient to identify the shipper, shipping origin, and number of mats;

(f) shall be subject to potential inspection for compliance with these standards by the Maine Forest Service and U. S. Department of Agriculture.

E. Bird Diverters

Where transmission lines cross the non-forested wetland components of an IWWH, the permittee must install bird diverters or aviation marker balls according to manufacturer's guidelines and applicable transmission line codes unless otherwise determined to be impracticable in consultation with MDIFW. If aviation markers are used, colors must alternate between yellow/white (for overcast conditions) and red (for clear conditions). Alternative measures may be considered only in consultation with MDIFW.

F. Slash Management

No accumulation of slash shall be left within fifty (50) feet, horizontal distance, of the edge of the wetland habitat. In all other areas slash shall either be removed or disposed of in such a manner that it lies on the ground and no part thereof extends more than four (4) feet above the ground. Any debris that falls into the habitat shall be removed.

G. Invasive Species

In order to prevent the introduction and spread of invasive plant species within and between IWWH as a result of construction, the following must occur:

- a) Locations within the electric utility transmission line corridor that contain invasive plant species must be identified.
- b) The application must include an invasive species vegetation monitoring plan in its integrated vegetation management plan (IVMP). The vegetation monitoring plan must have a stated objective of preventing the introduction and spread of invasive species as a result of construction.
- c) Hand removal or other non-chemical methods for controlling invasive plant growth are preferred; however if determined to be ineffective, herbicide application may be an acceptable alternative method.

H. Inspector Oversight

The permittee must have a third-party inspector provide oversight to the clearing of IWWH habitats during construction.



Recommended Performance Standards for Maine's Significant Vernal Pools in Overhead Utility ROW Projects

March 26, 2012

Applicability: This document applies to linear right-of-way projects that host Significant Vernal Pools (SVPs) as defined in Chapter 335 of Maine's Natural Resources Protection Act. The definition of SVP habitat for the purposes of the standards below includes the pool depression and the 250 ft radius around the high water boundary of the pool that lies within the ownership or control of the ROW developer.

Data Submission: *All vernal pool data assessments (significant and non-significant) by the permittee must be provided to MDIFW before or during the permit application process. Delays in submission of vernal pool data may affect the speed and efficiency of project review and permitting.*

General Project Alignment: Where practicable, right-of-way alignment should be designed to avoid impacts to SVP habitat. Where full avoidance is not an option, alignments should minimize impacts to SVP habitat by siting development as close as practicable to the outside edge of the SVP habitat, and by designing alignments that do not require vegetation management within the pool and depression components of a SVP habitat. Where avoidance is not practicable, and project impacts to SVPs are realized, close adherence to the minimization standards outlined in this document should be considered a mitigating factor by MDEP when calculating partial habitat compensation requirements.

SVP Habitat Performance Standards:

A. Defining Management Boundaries:

The SVP habitat boundaries and all setbacks defined in subsections of this document must be clearly marked in the field prior to the start of construction or subsequent maintenance work.

B. Arboricultural Management Practices:

(1) Capable vegetation may be removed and controlled within the transmission line corridor portions of the development. Capable vegetation is defined as species that are capable of growing to a height that would reach the conductor safety zone. Most tree species in Maine are defined as capable vegetation.

(2) When terrain conditions permit (e.g., ravines and narrow valleys) capable vegetation must be permitted to grow within SVP habitats where maximum growing height can be expected to remain below the conductor safety zone. Narrow valleys are those that are spanned by a single section of transmission line, pole-to-pole.

(3) If a powerline right-of-way crosses a SVP depression, utility poles should be spaced to minimize line sagging and maximize potential growing height of otherwise capable vegetation in the SVP depression and habitat zone.

(4) When capable vegetation within SVP habitat must be removed for the purpose of construction, natural re-generation of non-capable woody vegetation must be allowed within the SVP habitat. To facilitate the regeneration of natural vegetation, the contractor must separate the topsoil from the mineral soil when excavating during project construction. The excavated topsoil should be returned to its original place and position in the landscape and appropriate erosion control methods utilized.

(5) Within a SVP habitat impacts to scrub-shrub and herbaceous vegetation, and other non-capable species must be minimized to the maximum extent practicable.

C. Herbicide Application:

(1) Herbicide usage must comply with all label requirements and standards established by the Maine Board of Pesticides Control (MBPC), as periodically amended. Herbicide restrictions and approvals are governed by MBPC. Some key standards include the following:

- (a) Use of only trained applicators working under licensed supervisors.
- (b) Awareness of the impacts of climatic conditions prior to application.
- (c) Application prohibited when wind speed exceeds 15 MPH as measured on-site at the time of application and administered in such a manner that drift is minimized.

(2) Products with low potential for mobility and low persistence in the environment must be selected for use in SVP habitats. When operating within SVP habitats the following is required:

(a) Only the following herbicides may be used unless otherwise approved in consultation with MDIFW prior to application:

- (i) 2,4-D salt formulation, NOT the ester formulation,
- (ii) Glyphosate,
- (iii) Imazapyr,
- (iv) Fosamine Ammonium,
- (v) Aminopyralid Triisopropanolammonium, and
- (vi) Metsulfuron methyl

(b) Only the following surfactants may be used unless otherwise approved in consultation with MDIFW prior to application:

- (i) Agri-Dex,
- (ii) Competitor,

- (iii) Dyne-Amic,
- (iv) Clean Cut,
- (v) Cide-Kick,
- (vi) Nu-Film IR,
- (vii) Induce,
- (viii) Chemsurf90, and
- (viii) 41-A

- (3) Herbicides must be applied in accordance with USEPA label requirements to minimize washoff.
- (4) There may be no aerial or motorized application of herbicides.
- (5) Pre-application planning meetings between the ROW owner or agent and pesticide applicator must be conducted.
- (6) The ROW owner or agent must closely supervise and inspect all SVP habitats during application.
- (7) Low-pressure, manual backpack sprayers, with appropriate nozzles to minimize drift, must be used.
- (8) Herbicide application must be specific to individual targeted species.
- (9) No herbicide may be stored, mixed or loaded within any SVP habitat.
- (10) Herbicides should not be applied within 100 feet of SVP depressions whether there is standing water present or not during time of application.

D. Spill Management:

- (1) Any spill or release of petroleum products or other hazardous material within a utility transmission line corridor must be managed in accordance with the Spill Contingency Plan as approved by the Maine Department of Environmental Protection.
- (2) No fuel storage, vehicle/equipment parking and maintenance, and refueling activity may occur within a SVP habitat.

E. Equipment Use & Vegetation Clearing:

- (1) Heavy machinery should be avoided within the SVP depression; removal of capable species must be accomplished using hand cutting or "reach-in" techniques to cut and remove trees.

(2) The use of heavy machinery for clearing and maintenance of vegetation within the SVP habitat should be avoided between March 15 and June 15. Maintenance clearing during this period within the SVP habitat should utilize hand tools (e.g. brush hooks, chainsaws and selective herbicide applications), unless otherwise approved in consultation with MDIFW. No vegetation maintenance operations may occur within 25 feet of a vernal pool depression during this time period.

(3) To minimize rutting and ground disturbance, vegetation clearing, construction and non-emergency infrastructure maintenance within a SVP habitat by heavy machinery should be undertaken during frozen or dry ground conditions. Where possible, machinery should be deployed only on pre-existing or pre-designated trails within the SVP habitat.

(4) Matting used for any construction or maintenance purposes:

(a) shall not be made from wood from ash trees (*Fraxinus spp*);

(b) shall be free of bark;

(c) shall be cleaned of soil and vegetative material by pressure washing if imported from out of State;

(d) shall not have been used in, or made from lumber from, Federally Quarantined areas as set out in 7 CFR 301 unless accompanied by the appropriate USDA certificate of treatment required for interstate transport. Said certificates will be maintained in a central filing location available for review by appropriate Agency personnel for a period of three years after project completion, as determined by utility owner; and,

(e) must have shipping information sufficient to identify the shipper and number and shipping origin of the mats.

(f) shall be subject to potential inspection for compliance with these standards by the Maine Forest Service and U. S. Department of Agriculture.

F. *Slash Management:*

(1) No accumulation of slash shall be left within 25 feet of the edge of a SVP depression. In all other areas slash must either be distributed in such a manner that it lies on the ground and no part thereof extends more than 18 inches above the ground.

(2) Large volumes of debris (more than 5 limbs or branches) that fall into the SVP depression must be removed; such removal must occur outside of the primary egg hatching period from March 15-July 15th.

G. *Inspector Oversight:*

The permittee must have a third-party inspector provide oversight to the clearing of SVP habitats during construction.



STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
177 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

July 8, 2024

Sean Murphy
Flycatcher
Lower Falls Landing, 106 Lafayette Street, Suite 1C
Yarmouth, ME 04096

Via email: sean@flycatcherllc.com

Re: Rare and exemplary botanical features in proximity to: #21V-016, Central Maine Power, Bolt Hill Substation, Eliot, Maine

Dear Sean Murphy:

I have searched the Maine Natural Areas Program's Biological and Conservation Data System files in response to your request received June 27, 2024 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Eliot, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there is a population of Awned Sedge (*Carex atherodes*) along the right-of-way associated with the Bolt Hill Substation. Awned Sedge is a species of wet, open areas. MNAP recommends that there is no disturbance beyond the normal right-of-way maintenance in the area where it occurs. Additionally, MNAP recommends that you survey wet, wooded portions project area for Spicebush (*Lindera benzoin*) as this species occurs nearby and it appears that appropriate habitat may be present in the wet, wooded, southern portions of the project area. MNAP requests that you provide a follow-up report with the results of that survey. If Spicebush is found, MNAP requests additional project information so we can provide appropriate recommendations.

Feature	State Status	State Rank	Global Rank	Occurrence Rank	Notes
Awned Sedge <i>Carex atherodes</i>	Threatened	S1	G5	B Good	Great Creek Wetlands
Spicebush <i>Lindera benzoin</i>	Special Concern	S3	G5	A Excellent	Bolt Hill Wetlands

MOLLY DOCHERTY, DIRECTOR
MAINE NATURAL AREAS PROGRAM
90 BLOSSOM LANE, DEERING BUILDING



PHONE: (207) 287-8044
WWW.MAINE.GOV/DACF/MNAP

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

The Maine Natural Areas Program (MNAP) is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. MNAP welcomes coordination with individuals or organizations proposing environmental alteration or conducting environmental assessments. If, however, data provided by MNAP are to be published in any form, the Program should be informed at the outset and credited as the source.

The Maine Natural Areas Program has instituted a fee structure of \$75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for \$150.00 for two hours of our services.

Thank you for using MNAP in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,

Lisa St. Hilaire

Lisa St. Hilaire | Information Manager | Maine Natural Areas Program
207-287-8044 | lisa.st.hilaire@maine.gov

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Maine Natural Areas Program

Carex atherodes Spreng.

Awned Sedge

- [State Rank](#): S1
- [Global Rank](#): G5
- [State Status](#): Endangered

Habitat: Calcareous meadows, swales, and shores [Coastal non-tidal wetland (non-forested, wetland)]



Range: Circumboreal, south to Maine, West Virginia, Colorado, and Utah.

Aids to Identification: Members of this genus can be difficult to identify without careful examination of microscopic features and knowledge of general groups of species. *Carex*

atherodes is characterized by stout, solitary stems, or a few growing together, to a height of 0.3-1.5 meters. The stems grow from long rhizomes, and the leaf blades closest to the base are reduced to scales. The other blades are 4-10 mm wide, with coarse hairs beneath toward the base of the blade. The perigynia have 12-20 ribs, lack hairs, and are flattened toward the beak. The beak is well-developed with 2 prominent teeth. The hairy leaves plus hairless perigynia distinguish this species from other Maine *Carex*.

Ecological characteristics: Unknown

Phenology: Perennial; fruits June - August.

Family: Cyperaceae

Synonyms: None noted.

Known Distribution in Maine: This rare plant has been documented from a total of 1 town(s) in the following

county(ies): Knox.

Dates of documented observations are: 1920, 1998, 2000

Reason(s) for rarity: At southern limit of range.



Conservation considerations: The known population is in a wet meadow bisected by a road. Maintenance of the hydrology is presumably important in this plant's persistence.

For more information, see the [Native Plant Trust's Conservation Plan](#) for *Carex atherodes*.

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18 Elkins Lane
Augusta, ME 04333
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Maine Natural Areas Program

Lindera benzoin (L.) Blume

Spicebush

- [State Rank](#): S3
- [Global Rank](#): G5
- [State Status](#): Special Concern

Habitat: Damp woods and brooksides. [Forested wetland]

Range: Florida to Texas, north to southern Maine and west to southern Michigan. Fairly widely distributed in York County but virtually absent elsewhere in the state. Not listed as rare in other New England states.



Aids to Identification: This southern shrub is best distinguished by the spicy scent of the leaves and twigs. No other Maine shrub has the combination of spicy scent and leaves that are entire (not toothed or lobed), egg-shaped, and deciduous. Sassafras (*Sassafras albidum*), which is also rare in Maine and which is also strong-scented, can have entire leaves but usually has at least some leaves that are lobed. The flowers are followed by bright red drupes.

Ecological characteristics: Found along brooks, in basin swamps, and in floodplains in southern Maine as a forest understory shrub. Common associates include red maple, white pine,

hemlock, highbush blueberry, sensitive fern, and horsetails.

Phenology: Flowers from late April to May.

Family: Lauraceae

Synonyms: *Benzoin aestivale* (L.) Nees; *Lindera benzoin* (L.) Blume var. *pubescens* (Palmer &

Steyermark) Rehd.

Known Distribution in Maine: This rare plant has been documented from a total of 12 town(s) in the following county(ies): Cumberland, York.

Reason(s) for rarity: At northern limit of range; sometimes winter killed. Some habitats in southern Maine have been converted to other



uses.

Conservation considerations: This plant is restricted statewide to extreme southern Maine. Populations are vulnerable (and some have apparently succumbed) to conversion of their habitat to residential or commercial use.

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CMP Bolt Hill Substation, Eliot

-  Approximate Project Area
-  Rare Plants
-  Town



0 0.13 0.25 0.5 Miles

Maine Natural Areas Program, July 2024
NAIP 2021 Imagery

**Rare and Exemplary Botanical Features within 4 miles of
Project: #21V-016, Central Maine Power Bolt Hill Substation, Eliot, ME**

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Allegheny Vine						
	E	S1	G4	2013-10-08	15	Rocky summits and outcrops (non-forested, upland),Dry
Atlantic White Cedar						
	SC	S2	G4	1996-06-10	13	Forested wetland
Awned Sedge						
	T	S1	G5	2017-07-30	3	Coastal non-tidal wetland (non-forested, wetland)
Beach Plum						
	E	S1	G4	1941-09-05	16	Rocky coastal (non-forested, upland)
Bitternut Hickory						
	E	S1	G5	1995-02-02	1	Hardwood to mixed forest (forest, upland)
Central Hardwoods Oak Forest						
		S3	GNR	2021-06-07	1	
Columbian Watermeal						
	SC	S2	G5	2016-07-20	12	Open water (non-forested, wetland)
Estuary Bur-marigold						
	SC	S3	G4	1936-07	10	Tidal wetland (non-forested, wetland)
Muhlenberg Sedge						
	E	S1	G5	2008-06	4	Dry barrens (partly forested, upland)
Northern Blazing Star						
	T	S1	G5?T3	1922	7	Dry barrens (partly forested, upland)
Oak - Hickory Forest						
		S1	G4G5	2013-06-25	1	
Pale Green Orchis						

Pale Green Orchis						
	SC	S2	G4?T4Q	1916-08-19	25	Non-tidal rivershore (non-forested, seasonally wet),Open
Pendulous Bulrush						
	SC	S2	G5	2015-07-15	7	Open wetland, not coastal nor rivershore (non-forested,
Pointed Watermeal						
	SC	SU	G5	2016-07-20	2	
Salt-hay Saltmarsh						
		S3	G5	2022-10-12	19	
Saltmarsh False-foxglove						
	SC	S3	G5	1960	4	Tidal wetland (non-forested, wetland)
	SC	S3	G5	1982	11	Tidal wetland (non-forested, wetland)
	SC	S3	G5	2011-10-21	37	Tidal wetland (non-forested, wetland)
	SC	S3	G5	2011-10-21	38	Tidal wetland (non-forested, wetland)
Sassafras						
	SC	S2	G5	1905-08-18	11	Hardwood to mixed forest (forest, upland),Old field/
	SC	S2	G5	1990-04	15	Hardwood to mixed forest (forest, upland),Old field/
Scarlet Oak						
	E	S1	G5	2001-07-19	12	Hardwood to mixed forest (forest, upland)
Sharp-lobed Hepatica						
	PE	SX	G5T5	1896-08-18	2	Hardwood to mixed forest (forest, upland)
Slender Knotweed						
	PE	SH	G5	1896-08-26	2	Dry barrens (partly forested, upland)
Small Reed Grass						
	SC	S3	G5	1999-06-04	10	Old field/roadside (non-forested, wetland or upland)
Small Salt-marsh Aster						
	E	S1	G5T5	1992-08-31	3	Tidal wetland (non-forested, wetland)
	E	S1	G5T5	1992-08-31	4	Tidal wetland (non-forested, wetland)
	E	S1	G5T5	1998-06-10	5	Tidal wetland (non-forested, wetland)
Smooth Winterberry Holly						

Smooth Winterberry Holly						
	SC	S3	G5	1998-06-10	23	Forested wetland
	SC	S3	G5	1980	25	Forested wetland
Spicebush						
	SC	S3	G5	2006-08-03	2	Forested wetland
	SC	S3	G5	2009-07-10	12	Forested wetland
	SC	S3	G5	2001-07-20	19	Forested wetland
	SC	S3	G5	1996-06-10	22	Forested wetland
	SC	S3	G5	2020-10-08	38	Forested wetland
Spongy-leaved Arrowhead						
	SC	S3	G5T4	2006-09-20	9	Tidal wetland (non-forested, wetland)
Spotted Wintergreen						
	T	S2	G5	1997	20	Conifer forest (forest, upland),Hardwood to mixed forest
	T	S2	G5	2000	21	Conifer forest (forest, upland),Hardwood to mixed forest
	T	S2	G5	2022-10-12	43	Conifer forest (forest, upland),Hardwood to mixed forest
Spreading Sedge						
	E	S2	G5	1996-06-10	4	Hardwood to mixed forest (forest, upland)
Stout Smartweed						
	PE	SH	G4G5	1978-08-29	1	
Swamp White Oak						
	T	S1	G5	2015-07-15	1	Forested wetland
	T	S1	G5	1989-04	7	Forested wetland
Tall Beak-rush						
	E	S1	G4	1938-09-08	1	Open wetland, not coastal nor rivershore (non-forested,
Tidal Marsh Estuary Ecosystem						
		S3	GNR	2009	5	
Water Pimpernel						
	SC	S3	G5	2006-09-20	30	Tidal wetland (non-forested, wetland)
Water-plantain Spearwort						

Water-plantain Spearwort						
	PE	SH	G4	1907-07-08	4	Open water (non-forested, wetland)
White Vervain						
	SC	S1?	G5	1905-08	1	Hardwood to mixed forest (forest, upland),Open wetland,
	SC	S1?	G5	1887-08-25	4	Hardwood to mixed forest (forest, upland),Open wetland,
White-topped Aster						
	E	S1	G5	1891	3	Dry barrens (partly forested, upland)
Wild Coffee						
	E	S1	G5	1961-07-25	6	Non-tidal rivershore (non-forested, seasonally
Wild Garlic						
	SC	S2	G5	1983	9	Forested wetland,Hardwood to mixed forest (forest,

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Conservation Status Ranks

State and Global Ranks: This ranking system facilitates a quick assessment of a species' or habitat type's rarity and is the primary tool used to develop conservation, protection, and restoration priorities for individual species and natural habitat types. Each species or habitat is assigned both a state (S) and global (G) rank on a scale of critically imperiled (1) to secure (5). Factors such as range extent, the number of occurrences, intensity of threats, etc., contribute to the assignment of state and global ranks. The definitions for state and global ranks are comparable but applied at different geographic scales; something that is state imperiled may be globally secure.

The information supporting these ranks is developed and maintained by the Maine Natural Areas Program (state ranks) and NatureServe (global ranks).

Rank	Definition
S1 G1	Critically Imperiled – At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
S2 G2	Imperiled – At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
S3 G3	Vulnerable – At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
S4 G4	Apparently Secure – At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
S5 G5	Secure – At very low risk of extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
SX GX	Presumed Extinct – Not located despite intensive searches and virtually no likelihood of rediscovery.
SH GH	Possibly Extinct – Known from only historical occurrences but still some hope of rediscovery.
S#S# G#G#	Range Rank – A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem.
SU GU	Unrankable – Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
GNR SNR	Unranked – Global or subnational conservation status not yet assessed.
SNA GNA	Not Applicable – A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities (e.g., non-native species or ecosystems).
Qualifier	Definition
S#? G#?	Inexact Numeric Rank – Denotes inexact numeric rank.
Q	Questionable taxonomy that may reduce conservation priority – Distinctiveness of this entity as a taxon or ecosystem type at the current level is questionable. The “Q” modifier is only used at a global level.
T#	Intraspecific Taxon (trinomial) – The status of intraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank.

State Status: Endangered and Threatened are legal status designations authorized by statute. Please refer to MRSA Title 12, §544 and §544-B.

Status	Definition
E	Endangered – Any native plant species in danger of extinction throughout all or a significant portion of its range within the State or Federally listed as Endangered.
T	Threatened – Any native plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range in the State or Federally listed as Threatened.
SC	Special Concern – A native plant species that is rare in the State, but not rare enough to be considered Threatened or Endangered.
PE	Potentially Extirpated – A native plant species that has not been documented in the State in over 20 years, or loss of the last known occurrence.

Element Occurrence (EO) Ranks: Quality assessments that designate viability of a population or integrity of habitat. These ranks are based on size, condition, and landscape context. Range ranks (e.g., AB, BC) and uncertainty ranks (e.g., B?) are allowed. The Maine Natural Areas Program tracks all occurrences of rare plants and natural communities/ecosystems (S1-S3) as well as exemplary common natural community types (S4-S5 with EO ranks A/B).

Rank	Definition
A	Excellent – Excellent estimated viability/ecological integrity.
B	Good – Good estimated viability/ecological integrity.
C	Fair – Fair estimated viability/ecological integrity.
D	Poor – Poor estimated viability/ecological integrity.
E	Extant – Verified extant, but viability/ecological integrity not assessed.
H	Historical – Lack of field information within past 20 years verifying continued existence of the occurrence, but not enough to document extirpation.
X	Extirpated – Documented loss of population/destruction of habitat.
U	Unrankable – Occurrence unable to be ranked due to lack of sufficient information (e.g., possible mistaken identification).
NR	Not Ranked – An occurrence rank has not been assigned.

Visit the Maine Natural Areas Program website for more information
<http://www.maine.gov/dacf/mnap>





United States Department of the Interior

FISH AND WILDLIFE SERVICE

Maine Ecological Services Field Office

P. O. Box A

East Orland, ME 04431

Phone: (207) 469-7300 Fax: (207) 902-1588



In Reply Refer To:

08/26/2024 20:58:43 UTC

Project Code: 2024-0135455

Project Name: CMP Bolt Hill Substation

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

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The 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 IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC 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/or 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 and/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: <https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see [Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service \(fws.gov\)](#).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

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 Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Maine Ecological Services Field Office

P. O. Box A

East Orland, ME 04431

(207) 469-7300

PROJECT SUMMARY

Project Code: 2024-0135455

Project Name: CMP Bolt Hill Substation

Project Type: Transmission Line - New Constr - Above Ground

Project Description: Build a new substation and associated transmission upgrades

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.119849900000006,-70.76847816159321,14z>



Counties: York County, Maine

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this 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.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Flycatcher, LLC
Name: katelin nickerson
Address: 106 Lafayette Street
City: Yarmouth
State: ME
Zip: 04096
Email: katelin@flycatcherllc.com
Phone: 2072336175



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Maine Ecological Services Field Office
P. O. Box A
East Orland, ME 04431
Phone: (207) 469-7300 Fax: (207) 902-1588



In Reply Refer To:
Project code: 2024-0135455
Project Name: CMP Bolt Hill Substation

08/26/2024 21:03:47 UTC

Federal Action Agency (if applicable): Army Corps of Engineers

Subject: Record of project representative's no effect determination for 'CMP Bolt Hill Substation'

Dear katelin nickerson:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on August 26, 2024, for 'CMP Bolt Hill Substation' (here forward, Project). This project has been assigned Project Code 2024-0135455 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

Determination for the Northern Long-Eared Bat

Based upon your IPaC submission and a standing analysis, your project has reached the determination of "No Effect" on the northern long-eared bat. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed

action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Candidate
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

Based upon your IPaC submission, your project has reached the determination of “No Effect” on the northern long-eared bat. If there are no updates on listed species, no further consultation/coordination for this project is required with respect to the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the Maine Ecological Services Field Office and reference Project Code 2024-0135455 associated with this Project.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

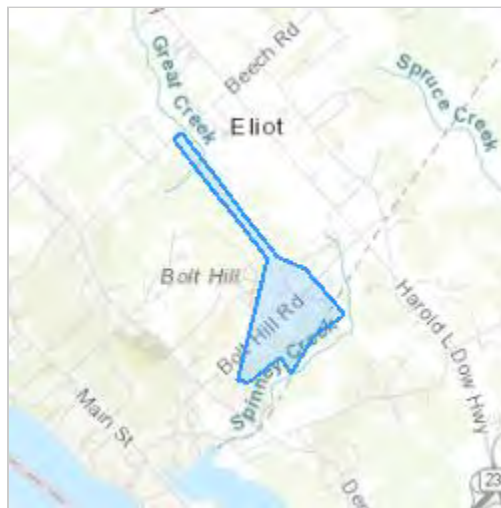
CMP Bolt Hill Substation

2. Description

The following description was provided for the project 'CMP Bolt Hill Substation':

Build a new substation and associated transmission upgrades

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.119849900000006,-70.76847816159321,14z>



DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the Endangered northern long-eared bat (*Myotis septentrionalis*). Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. The proposed action does not intersect an area where the northern long-eared bat is likely to occur, based on the information available to U.S. Fish and Wildlife Service as of the most recent update of this key. If you have data that indicates that northern long-eared bats are likely to be present in the action area, answer "NO" and continue through the key.

Do you want to make a no effect determination?

Yes

PROJECT QUESTIONNAIRE

IPAC USER CONTACT INFORMATION

Agency: Flycatcher, LLC

Name: katelin nickerson

Address: 106 Lafayette Street

City: Yarmouth

State: ME

Zip: 04096

Email: katelin@flycatcherllc.com

Phone: 2072336175

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers



JANET T. MILLS
GOVERNOR

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

KIRK F. MOHNEY
DIRECTOR

June 10, 2024

Ms. Katelin Nickerson
Flycatcher LLC
Lower Falls Landing
106 Lafayette St
Suite 002A
Yarmouth, ME 04096

Project: MHPC #0961-24 Bolt Hill Substation; Bolt Hill Road
Development of a Substation

Town: Eliot, ME

Dear Ms. Nickerson:

In response to your recent request, I have reviewed the information received May 20, 2024 to initiate consultation on the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended.

Please note that the information provided in CARMA is not complete and an architectural survey should be conducted for the array site or sites, as well as the proposed transmission line. The Area of Potential Effect (APE) for above ground resources should be based on potential visual impacts for the area.

An architectural survey is recommended to identify and record information on all resources within the area of potential effect (APE) that are at least 50 years old. Survey must be completed according to our "Revised Above Ground Cultural Resource Survey Manual Project Review Specific." All surveys must be submitted electronically via our on-line CARMA database. See our website for more information:
<https://www.maine.gov/mhpc/quick-links/forms-instructions>

A list of historic preservation consultants who are qualified to conduct architectural survey and have been trained in the use of the CARMA database may be found at the following page of our website:
<https://www.maine.gov/mhpc/programs/survey/approved-consultants/carma-trained-consultants>

In addition, a historic archaeological survey is recommended due to the potential of two historic properties in the project area, but it is very difficult to tell based on the mapped project location. Survey is recommended to determine if one or both properties are present. They are labeled as William Spinney 1856 and G. Hanscom 1856 and 1872. Please see enclosed map.

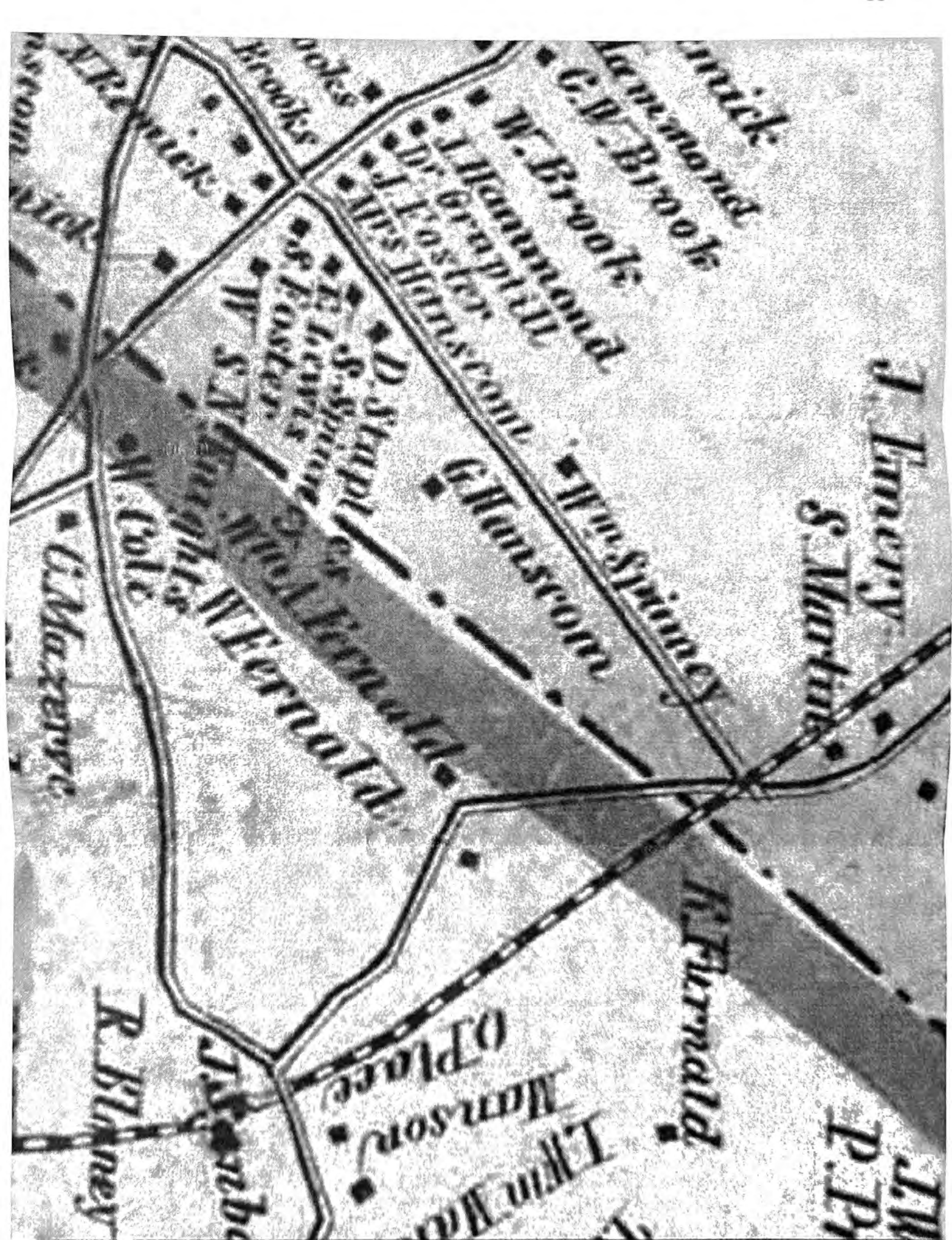
A list of qualified historic archaeologists can be found on our website:
<https://www.maine.gov/mhpc/programs/survey/approved-consultants/historic>

If you have any questions regarding archaeology, please contact Dr. Leith Smith of this office at Leith.Smith@maine.gov.

Please contact Megan M. Rideout of our staff at 287-2992 or megan.m.rideout@maine.gov if you have any questions regarding above ground resources.

Sincerely,

Kirk F. Mohney
State Historic Preservation Officer





JANET T. MILLS
GOVERNOR

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

KIRK F. MOHNEY
DIRECTOR

August 14, 2024

Ms. Katelin Nickerson
Flycatcher LLC
Lower Falls Landing
106 Lafayette St
Suite 1C
Yarmouth, ME 04096

Project: MHPC #0961-24 Bolt Hill Substation; Bolt Hill Road
Development of a Substation
Town: Eliot, ME

Dear Ms. Nickerson:

In response to your recent request, I have reviewed the information received July 23, 2024 to continue consultation on the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended.

Please note that the information provided in CARMA is not complete and an architectural survey should be conducted for the array site or sites, as well as the proposed transmission line. The Area of Potential Effect (APE) for above ground resources should be based on potential visual impacts for the area.

An architectural survey is recommended to identify and record information on all resources within the area of potential effect (APE) that are at least 50 years old. Survey must be completed according to our "Revised Above Ground Cultural Resource Survey Manual Project Review Specific." All surveys must be submitted electronically via our on-line CARMA database. See our website for more information:
<https://www.maine.gov/mhpc/quick-links/forms-instructions>

A list of historic preservation consultants who are qualified to conduct architectural survey and have been trained in the use of the CARMA database may be found at the following page of our website:
<https://www.maine.gov/mhpc/programs/survey/approved-consultants/carma-trained-consultants>

With regard to historic archaeological resources, The Phase 0 report acceptable as written and we concur with the recommendation for a Phase 1 survey to identify the two potential historic properties.

If you have any questions regarding archaeology, please contact Dr. Leith Smith of this office at Leith.Smith@maine.gov.

Please contact Megan M. Rideout of our staff at 287-2992 or megan.m.rideout@maine.gov if you have any questions regarding above ground resources.

Sincerely,

Kirk F. Mohney
State Historic Preservation Officer



JANET T. MILLS
GOVERNOR

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

KIRK F. MOHNEY
DIRECTOR

December 18, 2024

Ms. Katelin Nickerson
Flycatcher LLC
Lower Falls Landing
106 Lafayette St
Suite 1C
Yarmouth, ME 04096

Project: MHPC #0961-24 Bolt Hill Substation; Bolt Hill Road
Development of a Substation
Town: Eliot, ME

Dear Ms. Nickerson:

In response to your recent request, I have reviewed the information received December 2, 2024 to continue consultation on the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended.

Please note that the information provided in CARMA is not complete and an architectural survey should be conducted for the array site or sites, as well as the proposed transmission line. The Area of Potential Effect (APE) for above ground resources should be based on potential visual impacts for the project area associated with the new substation and ½ mile to either side of the centerline of the existing transmission line.

An architectural survey is recommended to identify and record information on all resources within the area of potential effect (APE) that are at least 50 years old. Survey must be completed according to our "Revised Above Ground Cultural Resource Survey Manual Project Review Specific." All surveys must be submitted electronically via our on-line CARMA database. See our website for more information: <https://www.maine.gov/mhpc/quick-links/forms-instructions>

A list of historic preservation consultants who are qualified to conduct architectural survey and have been trained in the use of the CARMA database may be found at the following page of our website: <https://www.maine.gov/mhpc/programs/survey/approved-consultants/carma-trained-consultants>

With regard to historic archaeological resources, we concur with findings in the Addendum dated October 2024 that there are no historic archaeological sites within the project area.

Please contact Megan M. Rideout of our staff at 287-2992 or megan.m.rideout@maine.gov if you have any questions regarding above ground resources.

Sincerely,

Kirk F. Mohney
State Historic Preservation Officer

Attachment B
Representative Photographs



Photo 1: Wetland W-KMN-1



Photo 2: Stream S-KMN-1 and Wetland W-KMN-1



Photo 3: Wetland W-KMN-2



Photo 4: Stream S-KMN-2 and Wetland W-KMN-2



Photo 5: Stream S-KMN-3



Photo 6: Wetland W-KMN-3



Photo 7: Wetland W-EEG-1



Photo 8: Wetland W-EEG-1 and stream S-EEG-1/S-KMN-1



Photo 9: Wetland W-KMN-4



Photo 10: Wetland W-KMN-5



Photo 11: Wetland W-EEG-2

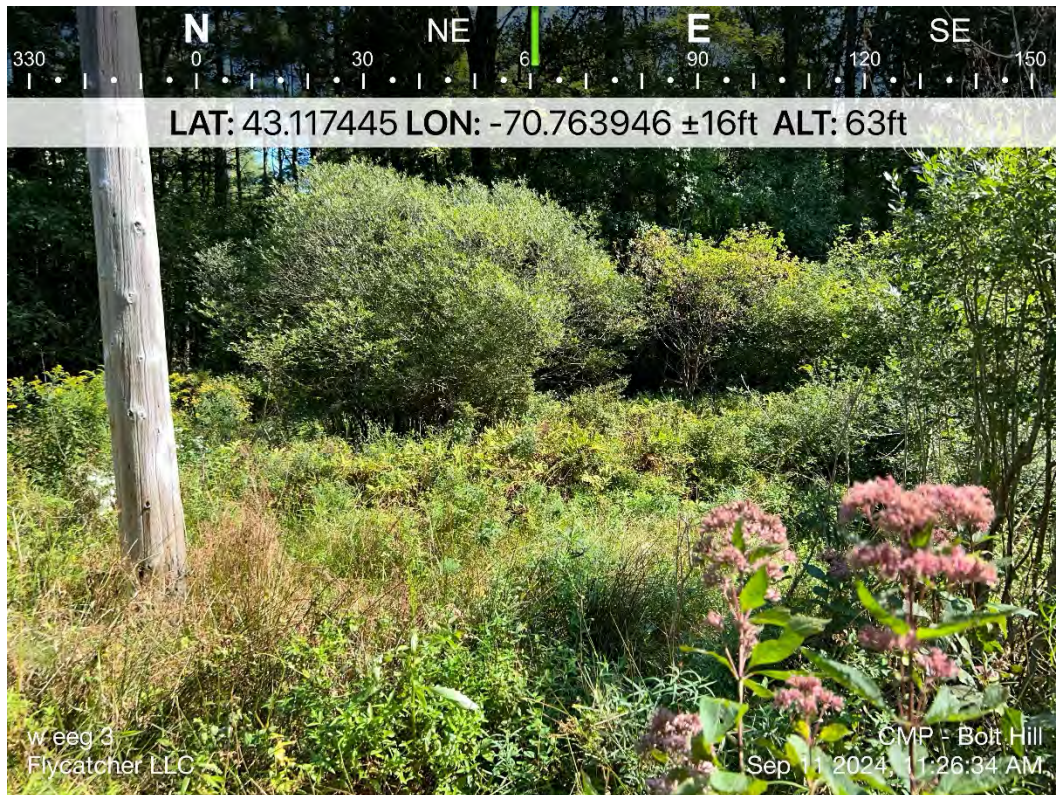


Photo 12: Wetland W-EEG-3



Photo 13: Wetland W-EEG-4

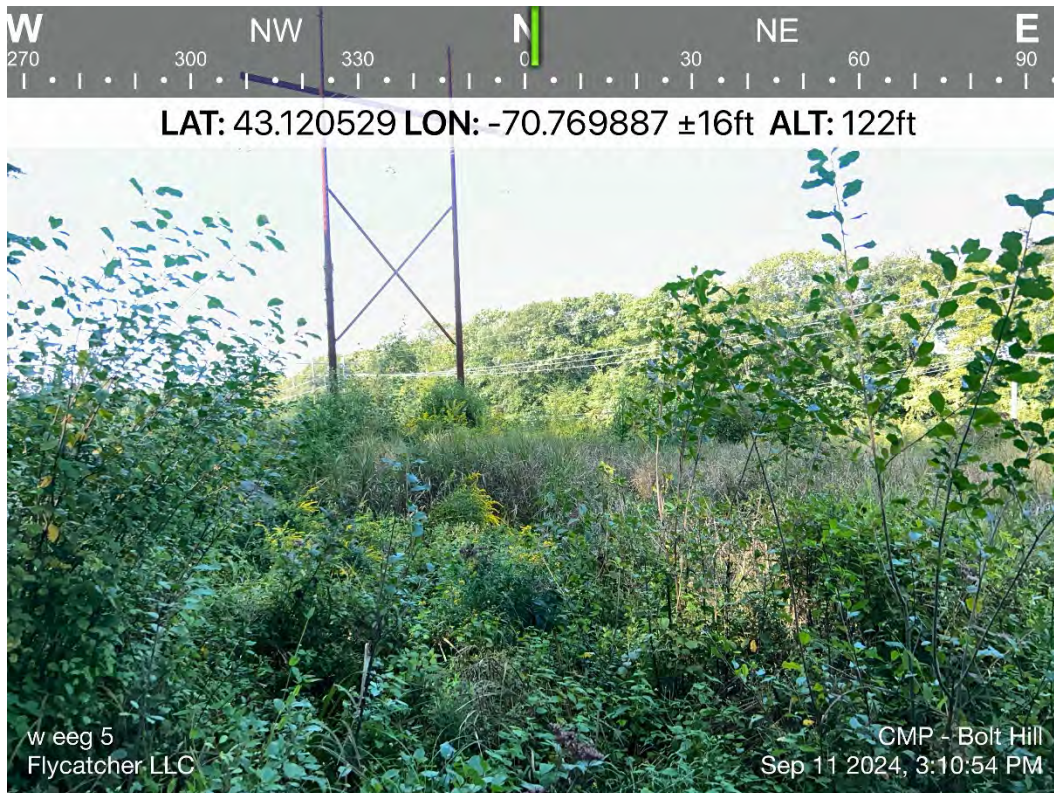


Photo 14: Wetland W-EEG-5

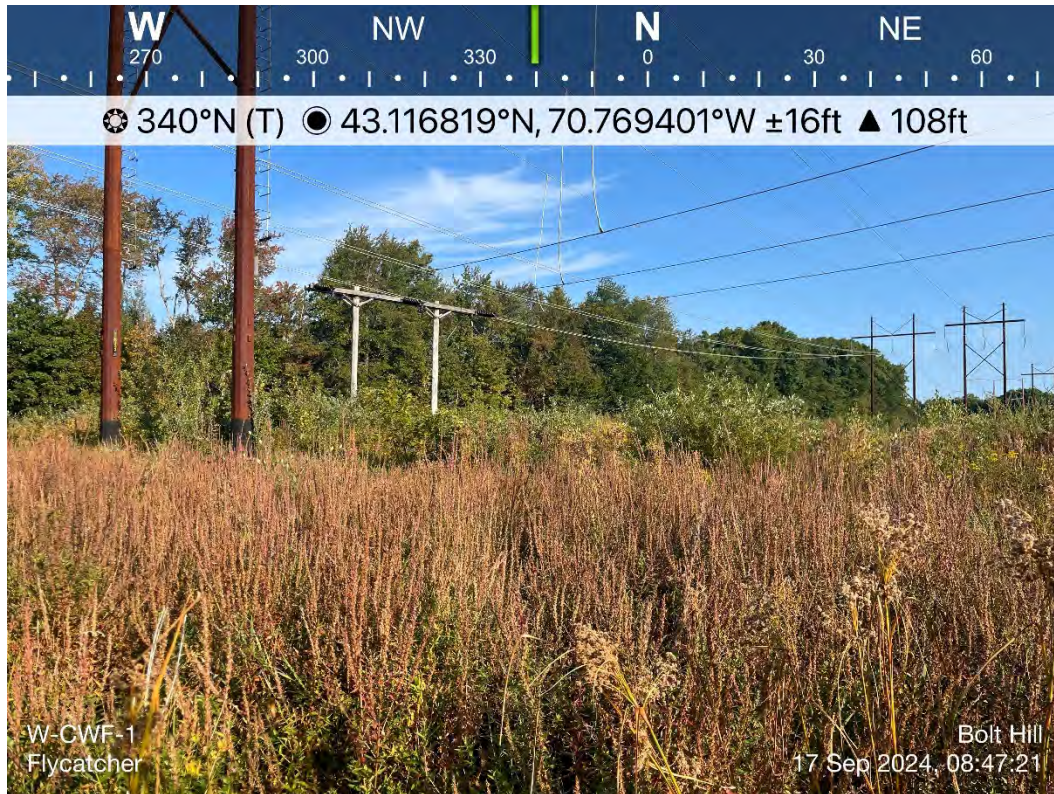


Photo 15: Wetland W-CWF-1

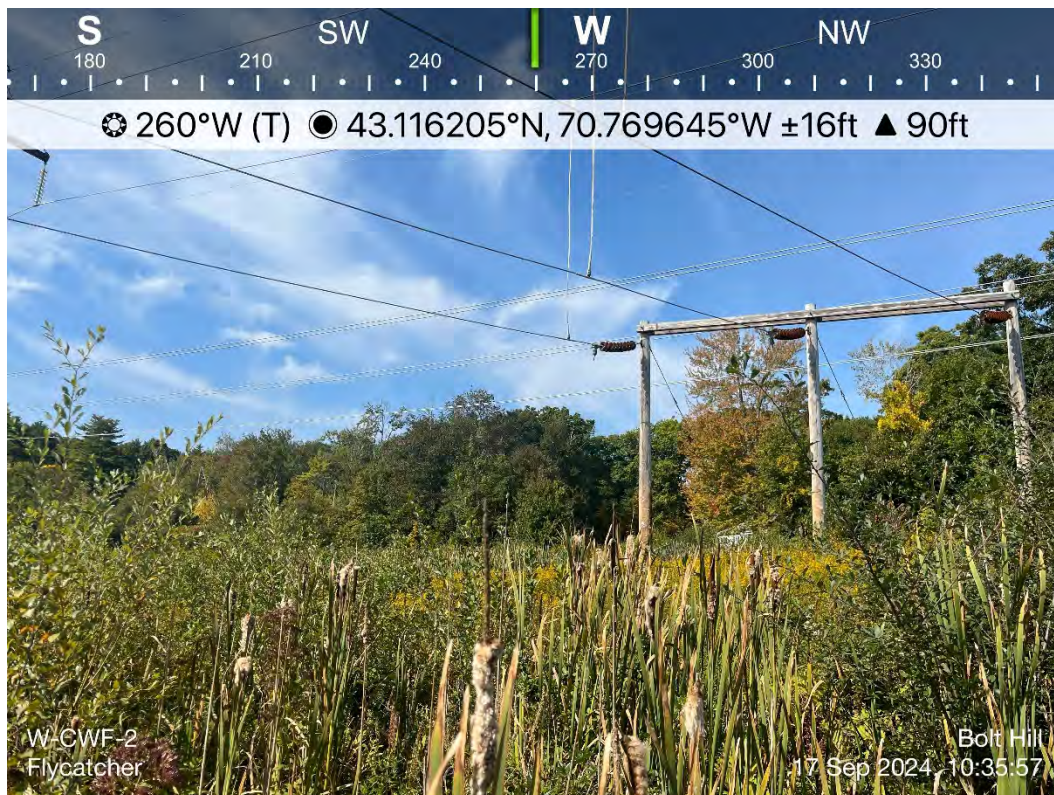


Photo 16: Wetland W-CWF-2



Photo 17: Wetland W-CWF-3



Photo 18: Wetland W-CWF-4



Photo 19: Wetland W-CWF-5



Photo 20: Wetland W-CWF-6



Photo 21: Wetland W-CWF-7



Photo 22: Wetland W-MFT-1



Photo 23: Wetland W-MFT-2



Photo 24: Wetland W-MFT-3



Photo 25: Wetland W-MFT-4



Photo 26: Wetland W-MFT-5



Photo 27: Wetland W-MFT-3 and Stream S-MFT-1

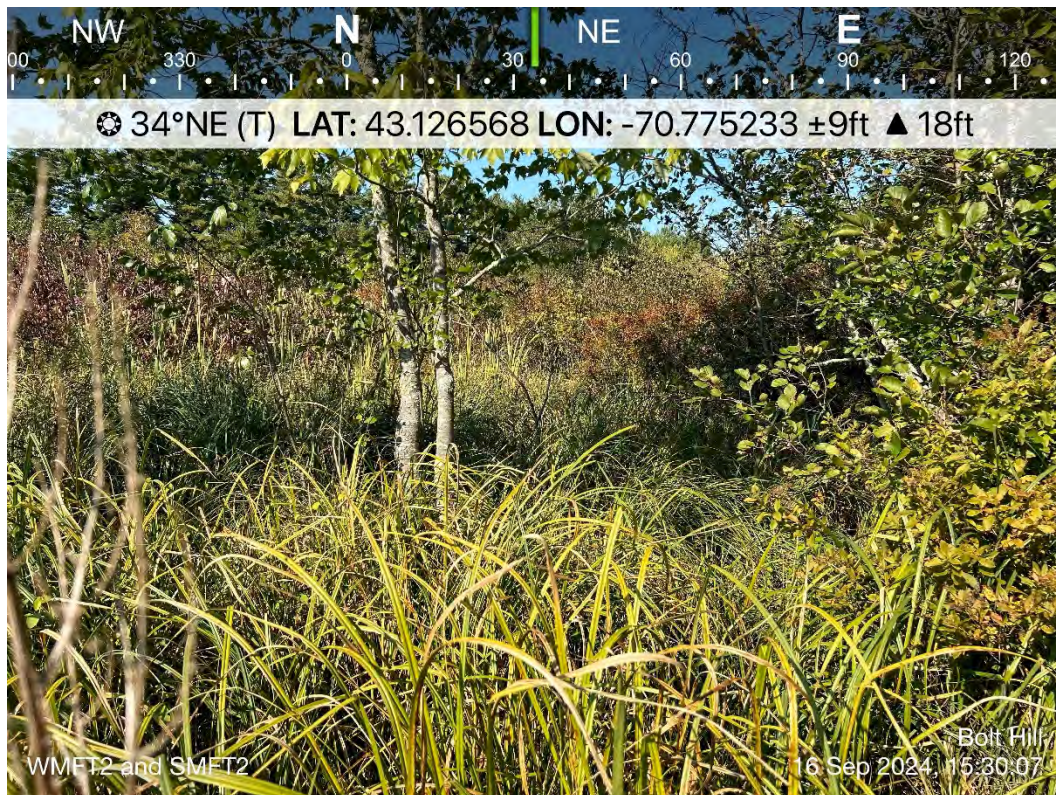


Photo 28: Wetland W-MFT-2 and Stream S-MFT-2

Attachment C
USACE Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Bolt Hill PSNY City/County: Eliot Sampling Date: 4/25/25
 Applicant/Owner: Central Maine Power State: ME Sampling Point: Upl
 Investigator(s): Katelin Nickerson, Jessie Hutchinson Section, Township, Range: Eliot, ME
 Landform (hillside, terrace, etc.): Sideslope Local relief (concave, convex, none): convex Slope %: 2-5
 Subregion (LRR or MLRA): LRR R Lat: 43.114492 Long: -70.768372 Datum: NAD83
 Soil Map Unit Name: Marlow fine sandy loam NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> If yes, optional Wetland Site ID: <u> </u>
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☐ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living Roots (C3) ☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4) ☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Iron Deposits (B5) ☐ Thin Muck Surface (C7) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks) ☐ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ Microtopographic Relief (D4) ☐ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	

VEGETATION – Use scientific names of plants.

 Sampling Point: Upl

Tree Stratum (Plot size: <u>30 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Quercus rubra</u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>9</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>44.4%</u> (A/B)																
2. <u>Fagus grandifolia</u>	<u>15</u>	<u>No</u>	<u>FACU</u>																	
3. <u>Pinus strobus</u>	<u>15</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Acer rubrum</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>																	
5. <u>Betula alleghaniensis</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>95</u> =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)																				
1. <u>Fagus grandifolia</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>95</u></td> <td>x 4 = <u>380</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>140</u> (A)</td> <td><u>510</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.64</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>95</u>	x 4 = <u>380</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>140</u> (A)	<u>510</u> (B)	Prevalence Index = B/A = <u>3.64</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>5</u>	x 2 = <u>10</u>																			
FAC species <u>40</u>	x 3 = <u>120</u>																			
FACU species <u>95</u>	x 4 = <u>380</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>140</u> (A)	<u>510</u> (B)																			
Prevalence Index = B/A = <u>3.64</u>																				
2. <u>Pinus strobus</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Betula alleghaniensis</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
4. <u>Vaccinium corymbosum</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>20</u> =Total Cover																				
Herb Stratum (Plot size: <u>5 feet</u>)																				
1. <u>Maianthemum canadense</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Trientalis borealis</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Pinus strobus</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>25</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>15 feet</u>)																				
1. _____	_____	_____	_____	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				
Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>																				

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point	Upl
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[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Bolt Hill PSNY City/County: Eliot Sampling Date: 4/25/25
 Applicant/Owner: Central Maine Power State: ME Sampling Point: Wet
 Investigator(s): Katelin Nickerson, Jessie Hutchinson Section, Township, Range: Eliot, ME
 Landform (hillside, terrace, etc.): Toe of slope Local relief (concave, convex, none): Concave Slope %: 0
 Subregion (LRR or MLRA): LRR R Lat: 43.114582 Long: -70.768203 Datum: NAD83
 Soil Map Unit Name: Scantic silt loam NWI classification: PFO1B

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u>W-KMN-1</u>
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <u> </u> Surface Water (A1) <u>X</u> Water-Stained Leaves (B9) <u>X</u> High Water Table (A2) <u> </u> Aquatic Fauna (B13) <u>X</u> Saturation (A3) <u> </u> Marl Deposits (B15) <u> </u> Water Marks (B1) <u> </u> Hydrogen Sulfide Odor (C1) <u> </u> Sediment Deposits (B2) <u> </u> Oxidized Rhizospheres on Living Roots (C3) <u> </u> Drift Deposits (B3) <u> </u> Presence of Reduced Iron (C4) <u> </u> Algal Mat or Crust (B4) <u> </u> Recent Iron Reduction in Tilled Soils (C6) <u> </u> Iron Deposits (B5) <u> </u> Thin Muck Surface (C7) <u> </u> Inundation Visible on Aerial Imagery (B7) <u> </u> Other (Explain in Remarks) <u> </u> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <u> </u> Surface Soil Cracks (B6) <u> </u> Drainage Patterns (B10) <u> </u> Moss Trim Lines (B16) <u> </u> Dry-Season Water Table (C2) <u> </u> Crayfish Burrows (C8) <u> </u> Saturation Visible on Aerial Imagery (C9) <u> </u> Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) <u> </u> Shallow Aquitard (D3) <u>X</u> Microtopographic Relief (D4) <u> </u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	

VEGETATION – Use scientific names of plants.

 Sampling Point: Wet

Tree Stratum (Plot size: <u>30 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Acer rubrum</u>	60	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>125</u></td> <td>x 2 = <u>250</u></td> </tr> <tr> <td>FAC species <u>105</u></td> <td>x 3 = <u>315</u></td> </tr> <tr> <td>FACU species <u>25</u></td> <td>x 4 = <u>100</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>255</u> (A)</td> <td><u>665</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.61</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>125</u>	x 2 = <u>250</u>	FAC species <u>105</u>	x 3 = <u>315</u>	FACU species <u>25</u>	x 4 = <u>100</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>255</u> (A)	<u>665</u> (B)	Prevalence Index = B/A = <u>2.61</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>125</u>	x 2 = <u>250</u>																			
FAC species <u>105</u>	x 3 = <u>315</u>																			
FACU species <u>25</u>	x 4 = <u>100</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>255</u> (A)	<u>665</u> (B)																			
Prevalence Index = B/A = <u>2.61</u>																				
2. <u>Pinus strobus</u>	10	No	FACU																	
3. <u>Quercus rubra</u>	5	No	FACU																	
4. <u>Betula alleghaniensis</u>	5	No	FAC																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
80 =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)																				
1. <u>Frangula alnus</u>	35	Yes	FAC	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> X </u> 2 - Dominance Test is >50% <u> X </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Ilex verticillata</u>	20	Yes	FACW																	
3. <u>Cornus alba</u>	5	No	FACW																	
4. <u>Vaccinium corymbosum</u>	5	No	FACW																	
5. <u>Fagus grandifolia</u>	5	No	FACU																	
6. <u>Spiraea alba</u>	5	No	FACW																	
7. _____	_____	_____	_____																	
75 =Total Cover																				
Herb Stratum (Plot size: <u>5 feet</u>)																				
1. <u>Onoclea sensibilis</u>	80	Yes	FACW	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u> X </u> No <u> </u>																
2. <u>Maianthemum canadense</u>	5	No	FACU																	
3. <u>Trientalis borealis</u>	5	No	FAC																	
4. <u>Ribes americanum</u>	10	No	FACW																	
5. <u>Imp cap?</u>	25	No	_____																	
6. <u>Glyceria sp.</u>	5	No	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
130 =Total Cover																				
Woody Vine Stratum (Plot size: <u>15 feet</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Wet**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3							Mucky Sand	Dark muck
3-5	2.5Y 5/2	100					Sandy	
5-15	2.5Y 5/2	90	10YR 4/6	10			Sandy	Loamy sand
15-25	2.5Y 5/2	98	10YR 4/6	2			Sandy	Loamy sand
25-28	10Y 5/	90	10YR 4/6	10			Loamy/Clayey	Silty clay

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

☐ Histosol (A1)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
☐ Black Histic (A3)	☐ High Chroma Sands (S11) (LRR K, L)
☐ Hydrogen Sulfide (A4)	☐ Loamy Mucky Mineral (F1) (LRR K, L)
☐ Stratified Layers (A5)	☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11)	☒ Depleted Matrix (F3)
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)
☒ Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4)	☐ Redox Depressions (F8)
☐ Sandy Redox (S5)	☐ Marl (F10) (LRR K, L)
☐ Stripped Matrix (S6)	
☐ Dark Surface (S7)	

Indicators for Problematic Hydric Soils³:

☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Thin Dark Surface (S9) (LRR K, L)
☐ Iron-Manganese Masses (F12) (LRR K, L, R)
☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____

Depth (inches): 28Hydric Soil Present? Yes X No _____**Remarks:**

Checked off S1 above thinking it may apply, remove if needed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Bolt Hill PSNY City/County: Eliot Sampling Date: 4/25/25
 Applicant/Owner: Central Maine Power State: ME Sampling Point: Upl
 Investigator(s): Katelin Nickerson, Jessie Hutchinson Section, Township, Range: Eliot, ME
 Landform (hillside, terrace, etc.): Side slope Local relief (concave, convex, none): Convex Slope %: 0-2
 Subregion (LRR or MLRA): LRR R Lat: 43.113645 Long: -70.769316 Datum: NAD83
 Soil Map Unit Name: Marlow fine sandy loam NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> If yes, optional Wetland Site ID: <u> </u>
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <u> </u> Surface Water (A1) <u> </u> High Water Table (A2) <u> </u> Saturation (A3) <u> </u> Water Marks (B1) <u> </u> Sediment Deposits (B2) <u> </u> Drift Deposits (B3) <u> </u> Algal Mat or Crust (B4) <u> </u> Iron Deposits (B5) <u> </u> Inundation Visible on Aerial Imagery (B7) <u> </u> Sparsely Vegetated Concave Surface (B8) <u> </u> Water-Stained Leaves (B9) <u> </u> Aquatic Fauna (B13) <u> </u> Marl Deposits (B15) <u> </u> Hydrogen Sulfide Odor (C1) <u> </u> Oxidized Rhizospheres on Living Roots (C3) <u> </u> Presence of Reduced Iron (C4) <u> </u> Recent Iron Reduction in Tilled Soils (C6) <u> </u> Thin Muck Surface (C7) <u> </u> Other (Explain in Remarks)	<u>Secondary Indicators (minimum of two required)</u> <u> </u> Surface Soil Cracks (B6) <u> </u> Drainage Patterns (B10) <u> </u> Moss Trim Lines (B16) <u> </u> Dry-Season Water Table (C2) <u> </u> Crayfish Burrows (C8) <u> </u> Saturation Visible on Aerial Imagery (C9) <u> </u> Stunted or Stressed Plants (D1) <u> </u> Geomorphic Position (D2) <u> </u> Shallow Aquitard (D3) <u> </u> Microtopographic Relief (D4) <u> </u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION – Use scientific names of plants.

 Sampling Point: Upl

Tree Stratum (Plot size: <u>30 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Quercus rubra</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>42.9%</u> (A/B)																
2. <u>Betula papyrifera</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Fagus grandifolia</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Acer rubrum</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Pinus strobus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>80</u>		<u>=Total Cover</u>		Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>24</u></td> <td>x 3 = <u>72</u></td> </tr> <tr> <td>FACU species <u>105</u></td> <td>x 4 = <u>420</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>144</u> (A)</td> <td><u>522</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.63</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>24</u>	x 3 = <u>72</u>	FACU species <u>105</u>	x 4 = <u>420</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>144</u> (A)	<u>522</u> (B)	Prevalence Index = B/A = <u>3.63</u>	
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Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)																				
1. <u>Vaccinium angustifolium</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
2. <u>Vaccinium corymbosum</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Pinus strobus</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Frangula alnus</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Fagus grandifolia</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>55</u>		<u>=Total Cover</u>																		
Herb Stratum (Plot size: <u>5 feet</u>)																				
1. <u>Maianthemum canadense</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Trientalis borealis</u>	<u>2</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Kalmia angustifolia</u>	<u>2</u>	<u>Yes</u>	<u>FAC</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>9</u>		<u>=Total Cover</u>																		
Woody Vine Stratum (Plot size: <u>15 feet</u>)																				
1. _____	_____	_____	_____	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
<u> </u>		<u>=Total Cover</u>																		
Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																				

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point	Upl
----------------	-----

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Bolt Hill PSNY City/County: Eliot Sampling Date: 4/25/25
Applicant/Owner: Central Maine Power State: ME Sampling Point: _____
Investigator(s): Katelin Nickerson, Jessie Hutchinson Section, Township, Range: _____
Landform (hillside, terrace, etc.): Toe of slope Local relief (concave, convex, none): Concave Slope %: 8-15
Subregion (LRR or MLRA): LRR R Lat: 43.113489 Long: -70.769501 Datum: NAD83
Soil Map Unit Name: Elmwood fine sandy loam NWI classification: PSS1C
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

<table style="width: 100%;"><tr><td style="width: 30%;">Hydrophytic Vegetation Present?</td><td style="width: 30%;">Yes <u>X</u></td><td style="width: 30%;">No _____</td></tr><tr><td>Hydric Soil Present?</td><td>Yes <u>X</u></td><td>No _____</td></tr><tr><td>Wetland Hydrology Present?</td><td>Yes <u>X</u></td><td>No _____</td></tr></table>	Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Hydric Soil Present?	Yes <u>X</u>	No _____	Wetland Hydrology Present?	Yes <u>X</u>	No _____	<table style="width: 100%;"><tr><td colspan="2">Is the Sampled Area</td></tr><tr><td colspan="2">within a Wetland? Yes <u>X</u> No _____</td></tr><tr><td colspan="2">If yes, optional Wetland Site ID: <u>W-KMN-2</u></td></tr></table>	Is the Sampled Area		within a Wetland? Yes <u>X</u> No _____		If yes, optional Wetland Site ID: <u>W-KMN-2</u>	
Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____														
Hydric Soil Present?	Yes <u>X</u>	No _____														
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Remarks: (Explain alternative procedures here or in a separate report.)																

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <table style="width: 100%;"><tr><td><u>_____</u> Surface Water (A1)</td><td><u>X</u> Water-Stained Leaves (B9)</td></tr><tr><td><u>X</u> High Water Table (A2)</td><td><u>_____</u> Aquatic Fauna (B13)</td></tr><tr><td><u>X</u> Saturation (A3)</td><td><u>_____</u> Marl Deposits (B15)</td></tr><tr><td><u>_____</u> Water Marks (B1)</td><td><u>_____</u> Hydrogen Sulfide Odor (C1)</td></tr><tr><td><u>_____</u> Sediment Deposits (B2)</td><td><u>_____</u> Oxidized Rhizospheres on Living Roots (C3)</td></tr><tr><td><u>_____</u> Drift Deposits (B3)</td><td><u>_____</u> Presence of Reduced Iron (C4)</td></tr><tr><td><u>_____</u> Algal Mat or Crust (B4)</td><td><u>_____</u> Recent Iron Reduction in Tilled Soils (C6)</td></tr><tr><td><u>_____</u> Iron Deposits (B5)</td><td><u>_____</u> Thin Muck Surface (C7)</td></tr><tr><td><u>_____</u> Inundation Visible on Aerial Imagery (B7)</td><td><u>_____</u> Other (Explain in Remarks)</td></tr><tr><td><u>_____</u> Sparsely Vegetated Concave Surface (B8)</td><td></td></tr></table>		<u>_____</u> Surface Water (A1)	<u>X</u> Water-Stained Leaves (B9)	<u>X</u> High Water Table (A2)	<u>_____</u> Aquatic Fauna (B13)	<u>X</u> Saturation (A3)	<u>_____</u> Marl Deposits (B15)	<u>_____</u> Water Marks (B1)	<u>_____</u> Hydrogen Sulfide Odor (C1)	<u>_____</u> Sediment Deposits (B2)	<u>_____</u> Oxidized Rhizospheres on Living Roots (C3)	<u>_____</u> Drift Deposits (B3)	<u>_____</u> Presence of Reduced Iron (C4)	<u>_____</u> Algal Mat or Crust (B4)	<u>_____</u> Recent Iron Reduction in Tilled Soils (C6)	<u>_____</u> Iron Deposits (B5)	<u>_____</u> Thin Muck Surface (C7)	<u>_____</u> Inundation Visible on Aerial Imagery (B7)	<u>_____</u> Other (Explain in Remarks)	<u>_____</u> Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> <table style="width: 100%;"><tr><td><u>_____</u> Surface Soil Cracks (B6)</td></tr><tr><td><u>_____</u> Drainage Patterns (B10)</td></tr><tr><td><u>_____</u> Moss Trim Lines (B16)</td></tr><tr><td><u>_____</u> Dry-Season Water Table (C2)</td></tr><tr><td><u>_____</u> Crayfish Burrows (C8)</td></tr><tr><td><u>_____</u> Saturation Visible on Aerial Imagery (C9)</td></tr><tr><td><u>_____</u> Stunted or Stressed Plants (D1)</td></tr><tr><td><u>X</u> Geomorphic Position (D2)</td></tr><tr><td><u>_____</u> Shallow Aquitard (D3)</td></tr><tr><td><u>_____</u> Microtopographic Relief (D4)</td></tr><tr><td><u>_____</u> FAC-Neutral Test (D5)</td></tr></table>	<u>_____</u> Surface Soil Cracks (B6)	<u>_____</u> Drainage Patterns (B10)	<u>_____</u> Moss Trim Lines (B16)	<u>_____</u> Dry-Season Water Table (C2)	<u>_____</u> Crayfish Burrows (C8)	<u>_____</u> Saturation Visible on Aerial Imagery (C9)	<u>_____</u> Stunted or Stressed Plants (D1)	<u>X</u> Geomorphic Position (D2)	<u>_____</u> Shallow Aquitard (D3)	<u>_____</u> Microtopographic Relief (D4)	<u>_____</u> FAC-Neutral Test (D5)
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:																																	
Remarks:																																	

VEGETATION – Use scientific names of plants.

Sampling Point: _____

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Quercus rubra</u>	20	Yes	FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A) Total Number of Dominant Species Across All Strata: <u>9</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>77.8%</u> (A/B)																
2. <u>Populus tremuloides</u>	10	Yes	FAC																	
3. <u>Acer rubrum</u>	10	Yes	FAC																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		40	=Total Cover	Prevalence Index worksheet: <table style="width: 100%;"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species <u>50</u></td> <td>x 2 = <u>100</u></td> </tr> <tr> <td>FAC species <u>50</u></td> <td>x 3 = <u>150</u></td> </tr> <tr> <td>FACU species <u>62</u></td> <td>x 4 = <u>248</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>172</u> (A)</td> <td><u>508</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.95</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>10</u>	x 1 = <u>10</u>	FACW species <u>50</u>	x 2 = <u>100</u>	FAC species <u>50</u>	x 3 = <u>150</u>	FACU species <u>62</u>	x 4 = <u>248</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>172</u> (A)	<u>508</u> (B)	Prevalence Index = B/A = <u>2.95</u>	
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Prevalence Index = B/A = <u>2.95</u>																				
Sapling/Shrub Stratum (Plot size: 15 feet)																				
1. <u>Rosa multiflora</u>	20	Yes	FACU																	
2. <u>Vaccinium corymbosum</u>	15	Yes	FACW																	
3. <u>Ilex verticillata</u>	15	Yes	FACW																	
4. <u>Viburnum nudum</u>	5	No	FACW																	
5. <u>Frangula alnus</u>	30	Yes	FAC																	
6. <u>Pinus strobus</u>	10	No	FACU																	
7. <u>Spiraea alba</u>	5	No	FACW																	
		100	=Total Cover																	
Herb Stratum (Plot size: 5 feet)																				
1. <u>Onoclea sensibilis</u>	10	Yes	FACW	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Calamagrostis canadensis</u>	10	Yes	OBL																	
3. <u>Rosa multiflora</u>	5	No	FACU																	
4. <u>Maianthemum canadense</u>	5	No	FACU																	
5. <u>Potentilla simplex</u>	2	No	FACU																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		32	=Total Cover																	
Woody Vine Stratum (Plot size: 15 feet)																				
1. _____	_____	_____	_____	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		_____	=Total Cover	Hydrophytic Vegetation Present? Yes <u>X</u> No _____																

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point

[illegible]



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Maine Ecological Services Field Office

P. O. Box A

East Orland, ME 4431

Phone: (207) 469-7300 Fax: (207) 902-1588



In Reply Refer To:

04/20/2026 19:21:23 UTC

Project Code: 2024-0135455

Project Name: CMP Bolt Hill Substation

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

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The 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 IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the 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/or 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 and/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:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

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 Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Maine Ecological Services Field Office

P. O. Box A

East Orland, ME 4431

(207) 469-7300

PROJECT SUMMARY

Project Code: 2024-0135455

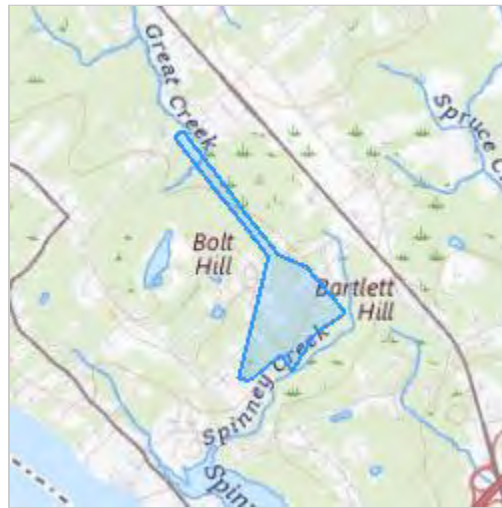
Project Name: CMP Bolt Hill Substation

Project Type: Transmission Line - New Constr - Above Ground

Project Description: Build a new substation and associated transmission upgrades

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.119849900000006,-70.76847816159321,14z>



Counties: York County, Maine

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this 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.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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1. The [Bald and Golden Eagle Protection Act](#) of 1940.
 2. The [Migratory Birds Treaty Act](#) of 1918.

3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper

Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

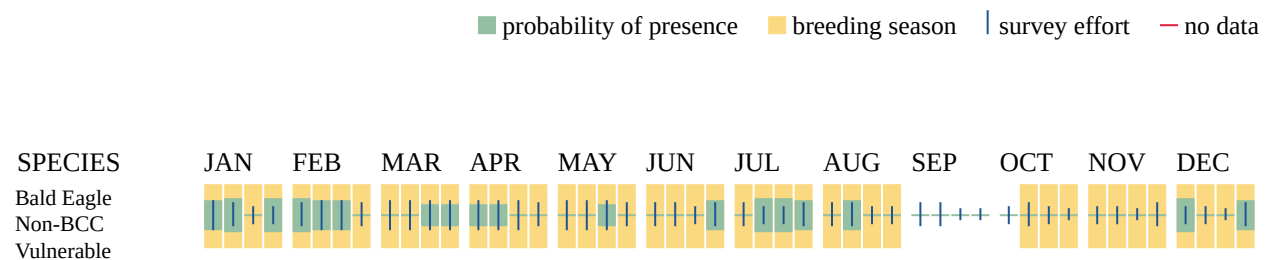
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Blue-winged Warbler <i>Vermivora cyanoptera</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9509	Breeds May 1 to Jun 30
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10678	Breeds May 1 to Aug 20
Grasshopper Sparrow <i>Ammodramus savannarum perpallidus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8329	Breeds Jun 1 to Aug 20
Least Tern <i>Sternula antillarum antillarum</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/11919	Breeds Apr 25 to Sep 5

NAME	BREEDING SEASON
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Prairie Warbler <i>Setophaga discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9513	Breeds May 1 to Jul 31
Purple Sandpiper <i>Calidris maritima</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9574	Breeds elsewhere
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Scarlet Tanager <i>Piranga olivacea</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11967	Breeds May 10 to Aug 10
Semipalmated Sandpiper <i>Calidris pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9603	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Whimbrel <i>Numenius phaeopus hudsonicus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11991	Breeds elsewhere
Willet <i>Tringa semipalmata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10669	Breeds Apr 20 to Aug 5

NAME	BREEDING SEASON
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

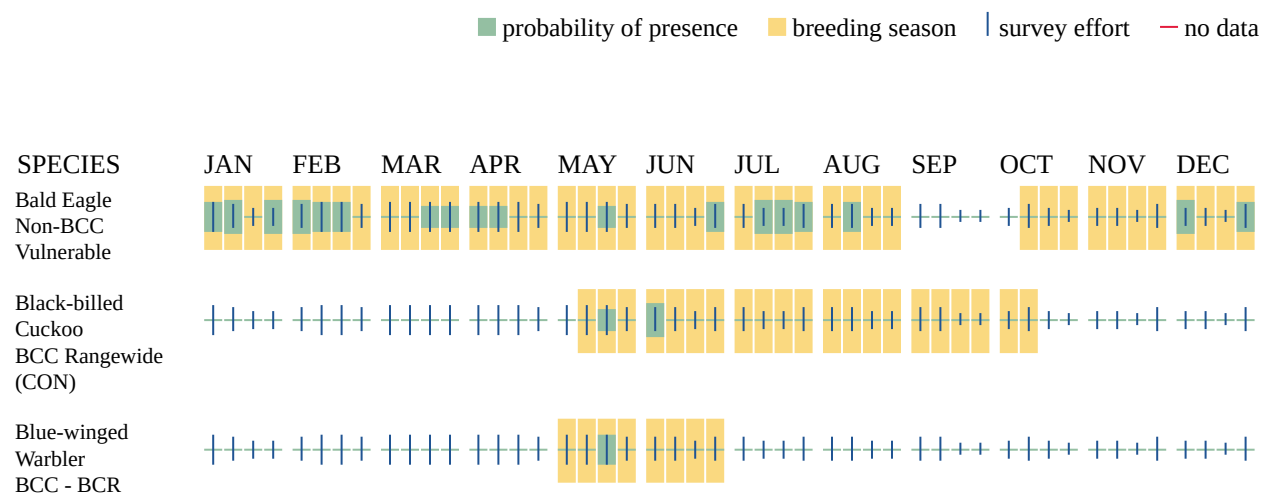
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

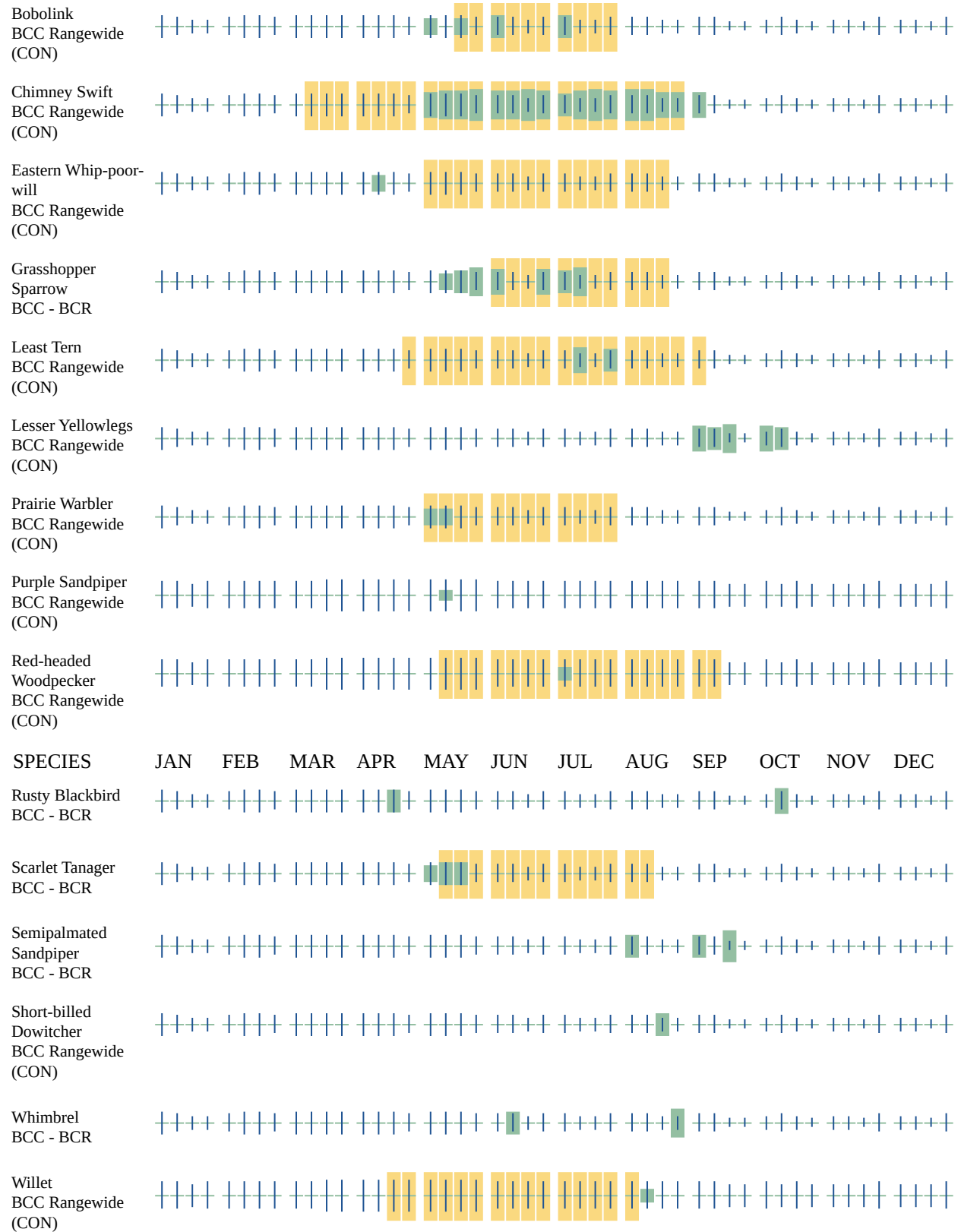
Survey Effort (I)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.





Wood Thrush
BCC Rangewide
(CON)



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER FORESTED/SHRUB WETLAND

- PSS1/EM1B
- PFO1E
- PSS1C
- PFO1/4C
- PFO1/4A
- PFO1B
- PFO1C
- PSS1E
- PSS1/EM1E

FRESHWATER POND

- PUBHx

FRESHWATER EMERGENT WETLAND

- PEM1/SS1E
- PEM1E

RIVERINE

- R2UBH

IPAC USER CONTACT INFORMATION

Agency: Flycatcher, LLC
Name: katelin nickerson
Address: 106 Lafayette Street
City: Yarmouth
State: ME
Zip: 04096
Email: katelin@flycatcherllc.com
Phone: 2072336175

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Maine Ecological Services Field Office

P. O. Box A

East Orland, ME 4431

Phone: (207) 469-7300 Fax: (207) 902-1588



In Reply Refer To:

04/20/2026 19:35:03 UTC

Project code: 2024-0135455

Project Name: CMP Bolt Hill Substation

Federal Nexus: yes

Federal Action Agency (if applicable): Army Corps of Engineers

Subject: Technical assistance for 'CMP Bolt Hill Substation'

Dear katelin nickerson:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on April 20, 2026, for 'CMP Bolt Hill Substation' (here forward, Project). This project has been assigned Project Code 2024-0135455 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements may not be complete.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key (Dkey), invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid. Note that conservation measures for northern long-eared bat and tricolored bat may differ. If both bat species are present in the action area and the key suggests more conservative measures for one of the species for your project, the Project may need to apply the most conservative measures in order to avoid adverse effects. If unsure which conservation measures should be applied, please contact the appropriate Ecological Services Field Office***

Determination for the Northern Long-Eared Bat and Tricolored Bat

Based upon your IPaC submission and a standing analysis completed by the Service, your project has reached the following effect determination(s):

Species	Listing Status	Determination
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Endangered	NLAA
Tricolored Bat (<i>Perimyotis subflavus</i>)	Proposed	No effect
	Endangered	

Federal agencies must consult with U.S. Fish and Wildlife Service under section 7(a)(2) of the Endangered Species Act (ESA) when an action *may affect* a listed species. Tricolored bat is proposed for listing as endangered under the ESA, but not yet listed. For actions that may affect a proposed species, agencies cannot consult, but they can *confer* under the authority of section 7(a)(4) of the ESA. Such conferences can follow the procedures for a consultation and be adopted as such if and when the proposed species is listed. Should the tricolored bat be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the tricolored bat range that previously received a NE or NLAA determination from the key to confirm that the determination is still accurate.

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination key for the northern long-eared bat and tricolored bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Proposed Threatened

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above. Note that if a new species is listed that may be affected by the identified action before it is complete, additional review is recommended to ensure compliance with the Endangered Species Act.

Next Steps

Consultation with the Service is necessary. The project has a federal nexus (e.g., Federal funds, permit, etc.), but you are not the federal action agency or its designated (in writing) non-federal representative. Therefore, the ESA consultation status is incomplete and no project activities should occur until consultation between the Service and the Federal action agency (or designated non-federal representative), is completed.

As the federal agency or designated non-federal representative deems appropriate, they should submit their determination of effects to the Service by doing the following.

1. Log into IPaC using an agency email account and click on My Projects, click "Search by record locator" to find this Project using **365-180031753**. (Alternatively, the originator of the project in IPaC can add the agency representative to the project by using the Add Member button on the project home page.)

2. Review the answers to the Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key to ensure that they are accurate.
3. Click on Review/ Finalize to convert the 'not likely to adversely affect' technical assistance letter to a concurrence letter. Download the concurrence letter for your files if needed.

If no changes occur with the Project or there are no updates on listed species, no further consultation/coordination for this project is required for the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place before project implements any changes which are final or commits additional resources.

If you have any questions regarding this letter or need further assistance, please contact the Maine Ecological Services Field Office and reference Project Code 2024-0135455 associated with this Project.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

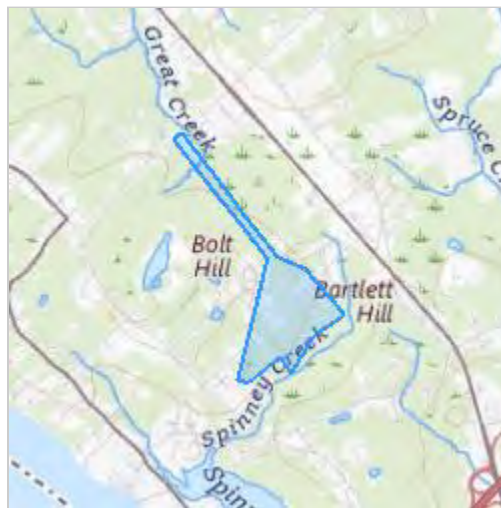
CMP Bolt Hill Substation

2. Description

The following description was provided for the project 'CMP Bolt Hill Substation':

Build a new substation and associated transmission upgrades

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.119849900000006,-70.76847816159321,14z>



DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of “may affect, but not likely to adversely affect” for a least one species covered by this determination key.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed bats or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Is the action area wholly within Zone 2 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered

No

3. Does the action area intersect Zone 1 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered

No

4. Does any component of the action involve leasing, construction or operation of wind turbines? Answer 'yes' if the activities considered are conducted with the intention of gathering survey information to inform the leasing, construction, or operation of wind turbines.

No

5. Does the proposed action involve solar energy facilities?

No

6. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Note for projects in Pennsylvania: Projects requiring authorization under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act would be considered as having a federal nexus. Since the U.S. Army Corps of Engineers (Corps) has issued the Pennsylvania State Programmatic General Permit (PASPGP), which may be verified by the PA Department of Environmental Protection or certain Conservation Districts, the need to receive a Corps authorization to perform the work under the PASPGP serves as a federal nexus. As such, if proposing to use the PASPGP, you would answer ‘yes’ to this question.

Yes

7. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No

8. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

No

9. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

No

10. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

No

11. [Semantic] Is the action area located within 0.5 miles of a known bat hibernaculum or winter roost? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your state wildlife agency.

Automatically answered

No

12. Does the action area contain any winter roosts or caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating bats?

No

13. Does the action area contain (1) talus or (2) anthropogenic or naturally formed rock shelters or crevices in rocky outcrops, rock faces or cliffs?

No

14. Will the action cause effects to a bridge?

Note: Covered bridges should be considered as bridges in this question.

No

15. Will the action result in effects to a culvert or tunnel at any time of year?

No

16. Are trees present within 1000 feet of the action area? **Note:** If there are trees within the action area that are of a sufficient size to be potential roosts for bats answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in the USFWS' [Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines](#).

Yes

17. Does the action include the intentional exclusion of bats from a building or building-like structure? **Note:** Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats or tricolored bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local Ecological Services Field Office to help assess whether northern long-eared bats or tricolored bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures.

No

18. Does the action involve removal, modification, or maintenance of a human-made building-like structure (barn, house, or other building) **known or suspected to contain roosting bats?**

No

19. Will the action cause construction of one or more new roads open to the public?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

20. Will the action include or cause any construction or other activity that is reasonably certain to increase average night-time traffic permanently or temporarily on one or more existing roads? **Note:** For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

21. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

22. Will the proposed Action involve the creation of a new water-borne contaminant source (e.g., leachate pond, pits containing chemicals that are not NSF/ANSI 60 compliant)?

Note: For information regarding NSF/ANSI 60 please visit <https://www.nsf.org/knowledge-library/nsf-ansi-standard-60-drinking-water-treatment-chemicals-health-effects>

No

23. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

No

24. Will the action include drilling or blasting?

No

25. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use at night)?

No

26. Will the proposed action involve the use of herbicides or pesticides (e.g., fungicides, insecticides, or rodenticides)?

No

27. Will the action include or cause activities that are reasonably certain to cause chronic or intense nighttime noise (above current levels of ambient noise in the area) in suitable summer habitat for the northern long-eared bat or tricolored bat during the active season? Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time. Sources of chronic or intense noise that could cause adverse effects to bats may include, but are not limited to: road traffic; trains; aircraft; industrial activities; gas compressor stations; loud music; crowds; oil and gas extraction; construction; and mining.

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in the USFWS' [Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines](#).

No

28. Does the action include, or is it reasonably certain to cause, the use of permanent or temporary artificial lighting within 1000 feet of suitable forested northern long-eared bat or tricolored bat roosting habitat? **Note:** Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in the USFWS' [Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines](#).

Yes

29. Will the action cause an increase in the extent of suitable forested habitat exposed to artificial lighting?

No

30. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

Yes

31. Is the project related to the production of coal, including projects that support the mining of coal, as well as the production and/or distribution of energy produced from coal?

No

32. Will the proposed action occur exclusively in an already established and currently maintained utility right-of-way?

No

33. Does the action include emergency cutting or trimming of hazard trees in order to remove an imminent threat to human safety or property? See hazard tree note at the bottom of the key for text that will be added to response letters

Note: A "hazard tree" is a tree that is an immediate threat to lives, public health and safety, or improved property.

No

34. Does the project intersect with the 0- 9.9% forest density category?

Automatically answered

No

35. Does the project intersect with the 10.0- 19.9% forest density category map?

Automatically answered

No

36. Does the project intersect with the 20.0- 29.9% forest density category map?

Automatically answered

Yes

37. Does the project intersect with the 30.0- 100% forest density category map?

Automatically answered

Yes

38. Will the action cause trees to be cut, knocked down, or otherwise brought down across an area greater than 40 acres in total extent?

No

39. Will the proposed action result in the use of prescribed fire?

Note: If the prescribed fire action includes other activities than application of fire (e.g., tree cutting, fire line preparation) please consider impacts from those activities within the previous representative questions in the key. This set of questions only considers impacts from flame and smoke.

No

40. Does the action area intersect the northern long-eared bat species list area?

Automatically answered

Yes

41. [Semantic] Is the action area located within 0.5 miles of radius of an entrance/opening to any known NLEB hibernacula or winter roost? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

42. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

43. [Semantic] Is the action area located within 150 feet of a documented northern long-eared bat roost site?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency. Have you contacted the appropriate agency to determine if your action is within 150 feet of any documented northern long-eared bat roosts?

Note: A document with links to Natural Heritage Inventory databases and other state-specific sources of information on the locations of northern long-eared bat roosts is available here. Location information for northern long-eared bat roosts is generally kept in state natural heritage inventory databases – the availability of this data varies by state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited.

Automatically answered

No

44. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities? If unsure, answer "Yes." **Note:** Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in the USFWS' [Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines](#)

Yes

45. Has a presence/probable absence summer bat survey targeting the northern long-eared bat following the Service's [Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines](#) been conducted within the project area?

No

46. Are any of the trees proposed for cutting or other means of knocking down, bringing down, topping, or trimming suitable for northern long-eared bat roosting (i.e., live trees and/or snags ≥ 3 inches dbh that have exfoliating bark, cracks, crevices, and/or cavities)?

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in the USFWS' [Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines](#).

Yes

47. Will any tree cutting/trimming or other knocking or bringing down of trees occur during the **Summer Occupancy season** for northern long-eared bats in the action area? **Note:** Bat activity periods for your state can be found in Appendix 2 of the Service's [Northern long-eared Bat and Tricolored Bat Voluntary Environmental Review Process for Development Projects](#).

No

48. Does the action area intersect the tricolored bat species list area?

Automatically answered

Yes

49. Is the action area located within 0.5-mile of radius of an entrance/opening to any known tricolored bat hibernacula or winter roost?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your state wildlife agency.

Automatically answered

No

50. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

51. Has a presence/probable absence bat survey targeting the [tricolored bat and following the Service's Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines](#) been conducted within the project area?

No

52. Is suitable summer habitat for the tricolored bat present within 1000 feet of project activities? (If unsure, answer ""Yes.""") **Note:** If there are trees within the action area that may provide potential roosts for tricolored bats (e.g., clusters of leaves in live and dead deciduous trees, Spanish moss (*Tillandsia usneoides*), clusters of dead pine needles of large live pines) answer ""Yes."" For a complete definition of suitable summer habitat for the tricolored bat, please see the [Service's Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines](#).

No

53. Do you have any documents that you want to include with this submission?

No

PROJECT QUESTIONNAIRE

Enter the extent of the action area (in acres) from which trees will be removed - round up to the nearest tenth of an acre. For this question, include the entire area where tree removal will take place, even if some live or dead trees will be left standing.

9

IPAC USER CONTACT INFORMATION

Agency: Flycatcher, LLC

Name: katelin nickerson

Address: 106 Lafayette Street

City: Yarmouth

State: ME

Zip: 04096

Email: katelin@flycatcherllc.com

Phone: 2072336175

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

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SECTION 8. HISTORIC SITES

8.1 Narrative

An initial request was submitted to the Maine Historic Preservation Commission (MHPC) on May 17, 2024, to determine historic and archeological resources known to exist at the proposed Project site. In response to this initial request, on June 10, 2024, the MHPC recommended that an architectural survey, consistent with their, “Revised Above Ground Cultural Resources Survey Manual Project Review Specific,” should be completed to identify and record information on all resources within the Area of Potential Effect (APE) that are at least 50 years old (Appendix 8-1). In addition, an archaeological history survey was recommended due to the potential of two historic properties within the area (Appendix 8-1).

In June of 2024, SEARCH, Inc. (SEARCH) completed a Phase 0 cultural resources survey of the Project area (Appendix 8-2). This work involved a desktop review of the Project site to identify potential areas of archaeological sensitivity and a pedestrian reconnaissance of the study area. The entire study area was inspected with particular attention paid to four potentially sensitive areas (SAs) identified by the desktop review. During this review, no areas of archaeological sensitivity were identified within the four SAs. Additionally, no areas of archaeological sensitivity were identified elsewhere in the study area. Based upon these results, SEARCH recommended a systematic pedestrian reconnaissance be conducted along transects at both the Wm. Spinney residence and the G. Hanscom residence.

In their response letter, (i.e., dated August 14, 2024), to SEARCH’s Phase 0 report, the MHPC accepted the results and concurred with the recommendation for a subsequent Phase 1 survey to be conducted to identify the two potential historic properties. In addition, the MHPC reiterated the need for an architectural survey to be conducted for the Project (Appendix 8-1).

In October of 2024, SEARCH completed an addendum that specifically addressed MHPC’s request for an additional survey that targeted potential historic house sites. As a result of this subsequent survey, SEARCH identified three areas that satisfied the criteria for historic site sensitivity, (i.e., within 100 m [328 ft] of roads depicted on historical maps and within the vicinity of mapped structures), and conducted pedestrian reconnaissance of the three areas located along 10 m (33 ft) interval transects. As no evidence of historic house sites was encountered in the survey, SEARCH recommended a finding of no effect to significant archaeological resources by the Project (Appendix 8-2).

On December 18, 2024, the MHPC concurred with the findings in the Addendum (i.e., dated October of 2024), that no historic archaeological sites within the project area were identified (Appendix 8-1). SEARCH further conducted an intensive architectural history survey that encompassed a 0.5-mile radius around the periphery of the Project site to identify and provide the National Register of Historic Places (NRHP) recommendations for architectural resources within the Project site and survey area (Appendix 8-2). The architectural history survey resulted in the identification of 16 newly evaluated historic resources (Appendix 8-2).

Based on their evaluation of the survey results, SEARCH recommends that the 16 identified historic resources should not be deemed eligible for NRHP listing (Appendix 8-2). Furthermore, SEARCH recommends that no additional architectural history work, within the Project site or survey area, should be conducted (Appendix 8-2). SEARCH concludes that utilization of the area to support activities related to the Bolt Hill Substation will have no effect on historic resources (Appendix 8-2). The MHPC concurs with results and conclusions articulated in SEARCH's architectural survey and recommendations (Appendix 8-1).

APPENDIX 8-1

AGENCY CORRESPONDENCE



JANET T. MILLS
GOVERNOR

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

KIRK F. MOHNEY
DIRECTOR

June 10, 2024

Ms. Katelin Nickerson
Flycatcher LLC
Lower Falls Landing
106 Lafayette St
Suite 002A
Yarmouth, ME 04096

Project: MHPC #0961-24 Bolt Hill Substation; Bolt Hill Road
Development of a Substation
Town: Eliot, ME

Dear Ms. Nickerson:

In response to your recent request, I have reviewed the information received May 20, 2024 to initiate consultation on the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended.

Please note that the information provided in CARMA is not complete and an architectural survey should be conducted for the array site or sites, as well as the proposed transmission line. The Area of Potential Effect (APE) for above ground resources should be based on potential visual impacts for the area.

An architectural survey is recommended to identify and record information on all resources within the area of potential effect (APE) that are at least 50 years old. Survey must be completed according to our "Revised Above Ground Cultural Resource Survey Manual Project Review Specific." All surveys must be submitted electronically via our on-line CARMA database. See our website for more information:
<https://www.maine.gov/mhpc/quick-links/forms-instructions>

A list of historic preservation consultants who are qualified to conduct architectural survey and have been trained in the use of the CARMA database may be found at the following page of our website:
<https://www.maine.gov/mhpc/programs/survey/approved-consultants/carma-trained-consultants>

In addition, a historic archaeological survey is recommended due to the potential of two historic properties in the project area, but it is very difficult to tell based on the mapped project location. Survey is recommended to determine if one or both properties are present. They are labeled as William Spinney 1856 and G. Hanscom 1856 and 1872. Please see enclosed map.

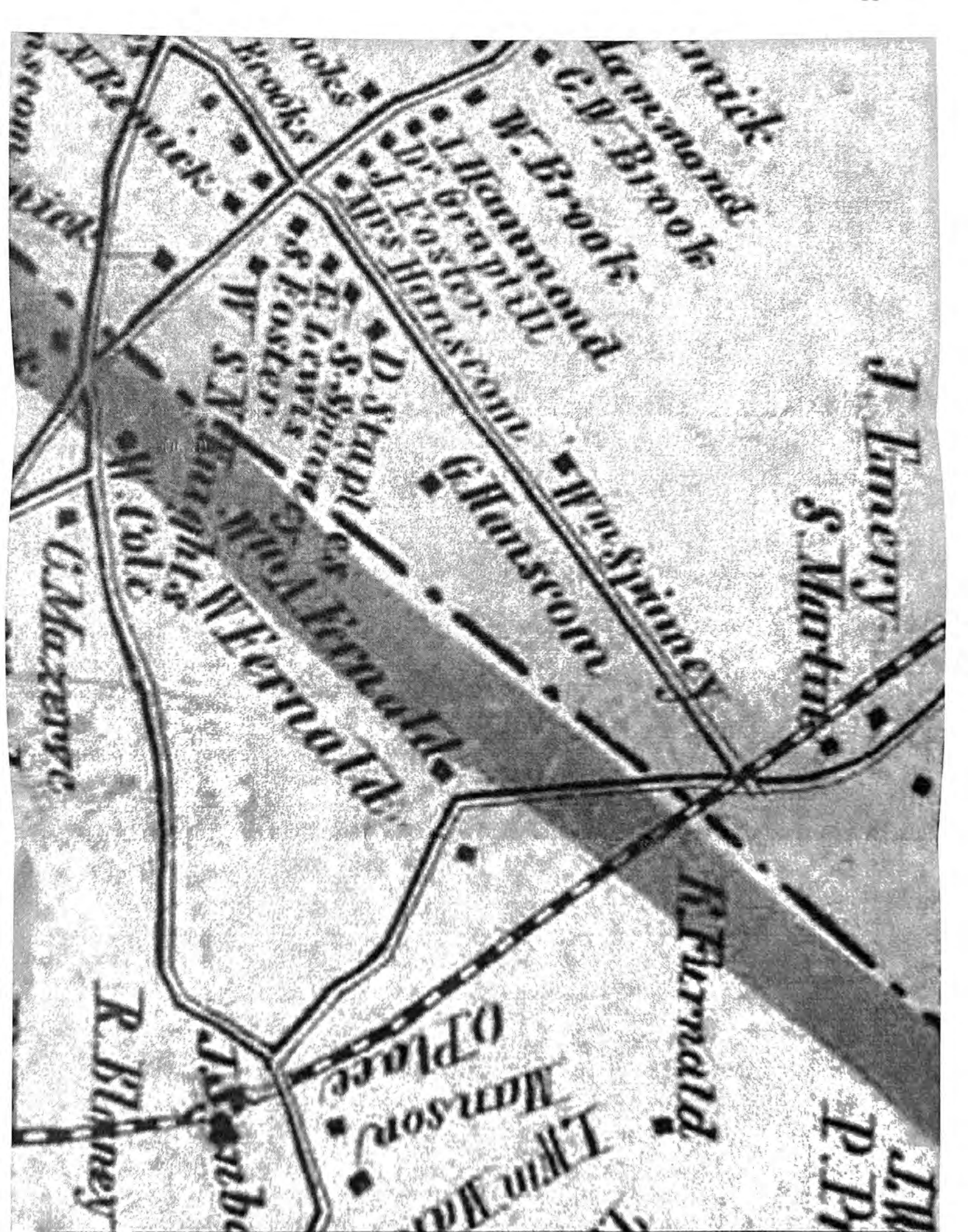
A list of qualified historic archaeologists can be found on our website:
<https://www.maine.gov/mhpc/programs/survey/approved-consultants/historic>

If you have any questions regarding archaeology, please contact Dr. Leith Smith of this office at Leith.Smith@maine.gov.

Please contact Megan M. Rideout of our staff at 287-2992 or megan.m.rideout@maine.gov if you have any questions regarding above ground resources.

Sincerely,

Kirk F. Mohney
State Historic Preservation Officer



J. Emery
S. Martin

H. Furnald

J. W.
P. P.

W. Mason
O. Place

R. Blaney
J. S. Conbe

W. Cole

C. Maxence

G. Manscom

W. Swinney

D. Staph

S. Foster

W. S. Manscom

Hammond
C. W. Brooks

J. Hammond
J. Foster
Mrs. Manscom

Brooks

Hammond
C. W. Brooks

Hammond
C. W. Brooks



JANET T. MILLS
GOVERNOR

MAINE HISTORIC PRESERVATION COMMISSION
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KIRK F. MOHNEY
DIRECTOR

August 14, 2024

Ms. Katelin Nickerson
Flycatcher LLC
Lower Falls Landing
106 Lafayette St
Suite 1C
Yarmouth, ME 04096

Project: MHPC #0961-24 Bolt Hill Substation; Bolt Hill Road
Development of a Substation
Town: Eliot, ME

Dear Ms. Nickerson:

In response to your recent request, I have reviewed the information received July 23, 2024 to continue consultation on the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended.

Please note that the information provided in CARMA is not complete and an architectural survey should be conducted for the array site or sites, as well as the proposed transmission line. The Area of Potential Effect (APE) for above ground resources should be based on potential visual impacts for the area.

An architectural survey is recommended to identify and record information on all resources within the area of potential effect (APE) that are at least 50 years old. Survey must be completed according to our "Revised Above Ground Cultural Resource Survey Manual Project Review Specific." All surveys must be submitted electronically via our on-line CARMA database. See our website for more information:
<https://www.maine.gov/mhpc/quick-links/forms-instructions>

A list of historic preservation consultants who are qualified to conduct architectural survey and have been trained in the use of the CARMA database may be found at the following page of our website:
<https://www.maine.gov/mhpc/programs/survey/approved-consultants/carma-trained-consultants>

With regard to historic archaeological resources, The Phase 0 report acceptable as written and we concur with the recommendation for a Phase 1 survey to identify the two potential historic properties.

If you have any questions regarding archaeology, please contact Dr. Leith Smith of this office at Leith.Smith@maine.gov.

Please contact Megan M. Rideout of our staff at 287-2992 or megan.m.rideout@maine.gov if you have any questions regarding above ground resources.

Sincerely,

Kirk F. Mohney
State Historic Preservation Officer



JANET T. MILLS
GOVERNOR

MAINE HISTORIC PRESERVATION COMMISSION
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KIRK F. MOHNEY
DIRECTOR

December 18, 2024

Ms. Katelin Nickerson
Flycatcher LLC
Lower Falls Landing
106 Lafayette St
Suite 1C
Yarmouth, ME 04096

Project: MHPC #0961-24 Bolt Hill Substation; Bolt Hill Road
Development of a Substation
Town: Eliot, ME

Dear Ms. Nickerson:

In response to your recent request, I have reviewed the information received December 2, 2024 to continue consultation on the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended.

Please note that the information provided in CARMA is not complete and an architectural survey should be conducted for the array site or sites, as well as the proposed transmission line. The Area of Potential Effect (APE) for above ground resources should be based on potential visual impacts for the project area associated with the new substation and ½ mile to either side of the centerline of the existing transmission line.

An architectural survey is recommended to identify and record information on all resources within the area of potential effect (APE) that are at least 50 years old. Survey must be completed according to our "Revised Above Ground Cultural Resource Survey Manual Project Review Specific." All surveys must be submitted electronically via our on-line CARMA database. See our website for more information: <https://www.maine.gov/mhpc/quick-links/forms-instructions>

A list of historic preservation consultants who are qualified to conduct architectural survey and have been trained in the use of the CARMA database may be found at the following page of our website: <https://www.maine.gov/mhpc/programs/survey/approved-consultants/carma-trained-consultants>

With regard to historic archaeological resources, we concur with findings in the Addendum dated October 2024 that there are no historic archaeological sites within the project area.

Please contact Megan M. Rideout of our staff at 287-2992 or megan.m.rideout@maine.gov if you have any questions regarding above ground resources.

Sincerely,

Kirk F. Mohney
State Historic Preservation Officer



JANET T. MILLS
GOVERNOR

MAINE HISTORIC PRESERVATION COMMISSION
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AUGUSTA, MAINE
04333

KIRK F. MOHNEY
DIRECTOR

October 29, 2025

Ms. Katelin Nickerson
Flycatcher LLC
Lower Falls Landing
106 Lafayette St
Suite 1C
Yarmouth, ME 04096

Project: MHPC #0961-24 Bolt Hill Substation; Bolt Hill Road
Development of a Substation
Town: Eliot, ME

Dear Ms. Nickerson:

In response to your recent request, I have reviewed the information received from SEARCH on October 17, 2025 to continue consultation on the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended.

Based on the information submitted, I have concluded that there will be no historic properties (architectural or archaeological) affected by this proposed undertaking, as defined by Section 106.

Please contact Megan M. Rideout of our staff at 287-2992 or megan.m.rideout@maine.gov if you have any questions regarding above ground resources.

Sincerely,

Kirk F. Mohney
State Historic Preservation Officer

APPENDIX 8-2
TECHNICAL REPORTS



TECHNICAL MEMORANDUM

RESULTS OF PHASE 0 SURVEY, BOLT HILL SUBSTATION, ELIOT, MAINE

CONSULTANT:	SEARCH SEARCH Virginia Amelia Courthouse Station
PROJECT MANAGER:	Lillian Azevedo, PhD, RPA
PRINCIPAL INVESTIGATOR:	Chris Clement, PhD, RPA
CLIENT:	Flycatcher, LLC
DATE:	June 2024
SEARCH PROJECT NUMBER:	240117

SEARCH, Inc., (SEARCH) conducted a Phase 0 cultural resources survey under subcontract to Flycatcher, LLC (Flycatcher) on behalf of Central Maine Power (CMP). CMP proposes to remove an existing substation on Bolt Hill Road in Eliot, Maine and, as part of CMP's capital project program, build a new 115/34.5/12kV substation on an nearby parcel along Bolt Hill Road to increase the reliability of the CMP transmission and distribution system (Project; **Figure 1**).

In May 2024, SEARCH conducted a Phase 0 cultural resources survey in support of the Project under subcontract to Flycatcher. That survey, reported in Technical Memorandum: Results of Phase 0 Survey, Bolt Hill Substation, Eliot, Maine (Clement 2024), recommended additional survey targeting potential historic house sites depicted on mid to late nineteenth-century maps. The Maine Historic Preservation Commission (MHPC) concurred with that recommendation on August 14, 2024 (MHPC #0961-24). This technical memorandum presents the results of a survey targeting potential historic house sites that may be impacted by the Project and represents an addendum to that initial report.

A preliminary permitting assessment for the Project indicates that permits will be needed from the US Army Corps of Engineers (USACE), the Maine Department of Environmental Protection (MDEP; Site Law including Stormwater permit), and the Town of Eliot (Site Plan Review, Building permit, and Demolition permit). This addendum is in support of these permitting requirements, specifically the MDEP Site Law and Stormwater permitting. If the USACE finds the Project impacts jurisdictional waters, it will also become subject to issuance of a federal permit under Section 404 of the Clean Water Act, an action that would require Project impacts review under Section 106 of the National Historic Preservation Act.

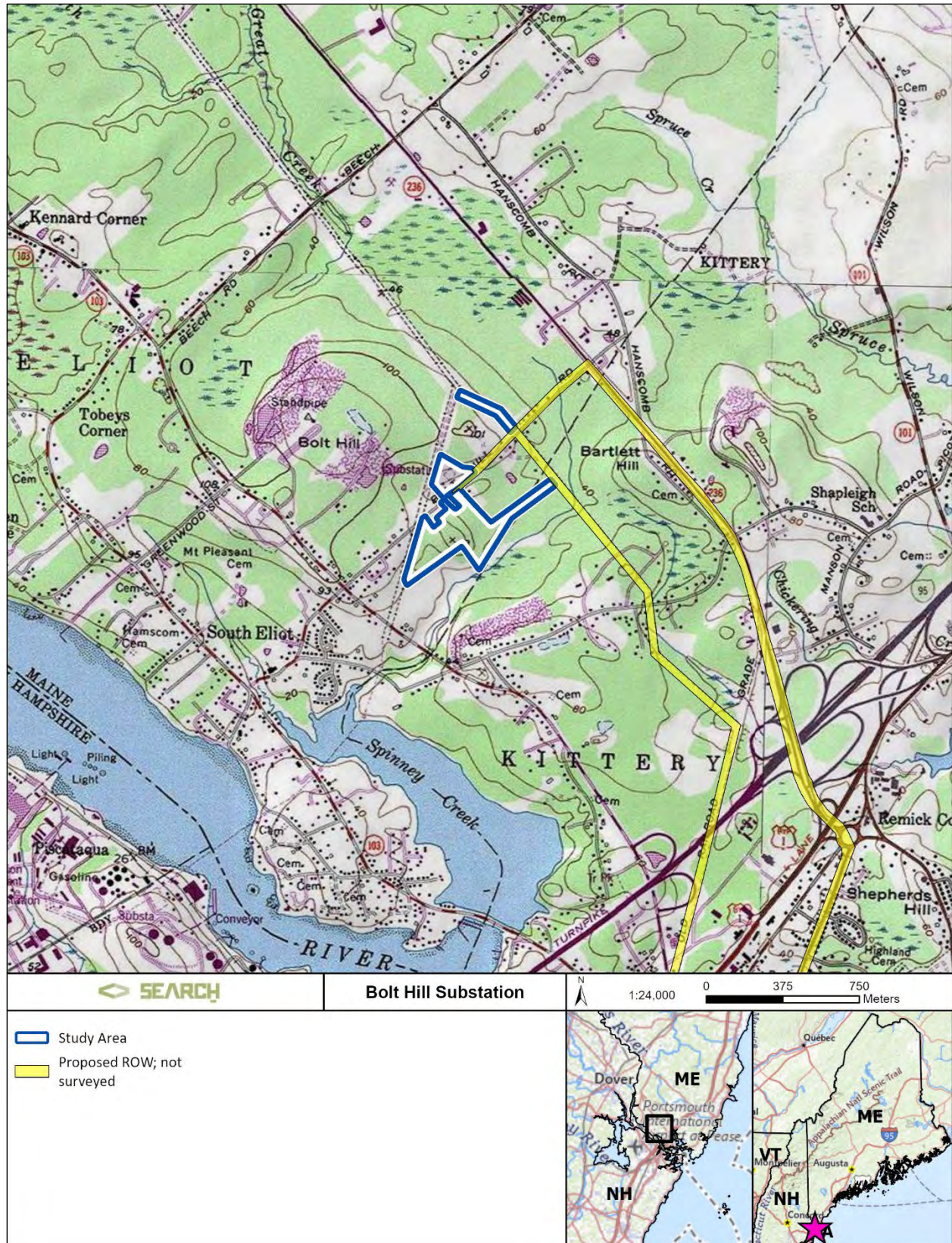


Figure 1. Project location.

PROJECT APE AND STUDY AREA

The area of potential effects (APE) for a Project is determined by the lead federal agency; under Section 106 of the NHPA, also applicable under NEPA, the APE is defined as:

The geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking. (36 CFR § 800.16[d]).

The Project APE has not been determined, but the Project limits of disturbance (LOD) will occur within the study area illustrated in **Figure 2**. The study area consists of three parcels. The main development parcel is between Bolt Hill Road and Spinney Creek, and has a piece of right-of-way (ROW) extending northeast from its eastern limit. The second development parcel is opposite the first, on the other side of Bolt Hill Road. It contains the extant Bolt Hill substation. The third development parcel is a short length of existing ROW to the north.

DESKTOP REVIEW

Prior to pedestrian reconnaissance, SEARCH conducted a desktop review to understand the environment setting of the Project. The desktop review consisted of an environmental context examining physiography and hydrology, mapped soils, and topography. SEARCH also examined historic maps and aerial photographs to identify if historic land use suggests sensitivity for postcontact archaeological resources.

Environmental Context

Physiography and Hydrology

The Bolt Hill study area is in the Gulf of Maine Coastal Lowland Level IV ecoregion (Griffith et al. 2009). The Gulf of Maine Coastal Lowland ecoregion in Maine includes the coastal strip of Maine from Casco Bay to the New Hampshire border. It is an arcuate embayment coastline with plutonic capes and intervening sand beaches often fronting on salt marshes. Glacial sands, silts, and clays blanket the region, which is characterized by low relief, with elevations typically 0–76 m (0–250 ft) amsl. Vegetation includes red oak and white oak forests. Isolated chestnut oak woodlands and extensive white pine forests may also occur. Pitch pine may occur in sandy areas, and pitch pine bogs, Atlantic white cedar swamps, red maple swamps, and *Spartina* saltmarsh are also present.

Abundant wetlands occur within and primarily south of the study area, much of it associated with Spinney Creek, which is southeast of the study area and currently approaches to within 24 m (77 ft). It is the closest perennial water source. The tidal portion of Spinney Creek is some 542 m (1,800 ft) to the south-southwest.

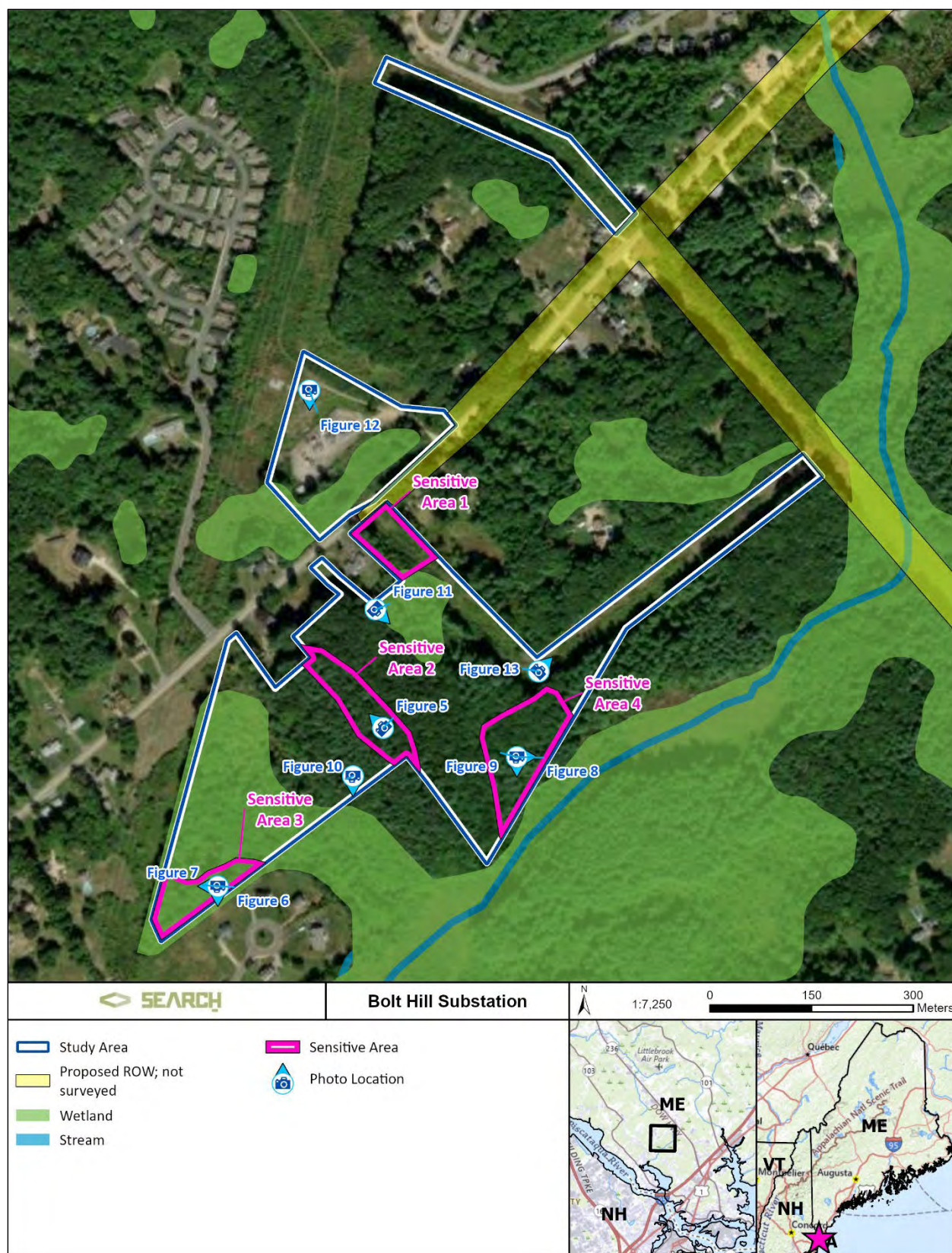


Figure 2. Study area on a modern aerial image, with results.

Soils and Topography

Soils within the study area are mapped on **Figure 3** and summarized in **Table 1** (US Department of Agriculture–Natural Resources Conservation Service 2024). The poorly drained Naumburg sand is the most frequently occurring soil, followed by Scantic silt loam, also poorly drained. Remaining soils each cover less than 10% of the study area. Excessively drained to moderately well-drained soils cover approximately 25.9% of the study area. Three soils are associated with glacial features (outwash plains, etc.), as are areas mapped as gravel pits; combined glacial-associated soils cover 19.6% of the study area.

The study area is dominated topographically by a central ridge running more or less northwest–southeast across the central portion of the main study area parcel (see **Figure 1**). The maximum elevation of this ridge is approximately 26 m (86 ft) amsl, and it is characterized by Marlow fine sandy loam soils. The northeastern flank of the central ridge is marked by Scantic silt loam, Naumburg sand, and Buxton silt loam. The southwestern flank is marked by primarily Naumburg sand, with Elmwood fine sandy loam and Adams loamy sand also prevalent. With the exception of the central ridge and its flanks, the terrain within the study area generally slopes to the southeast towards Spinney Creek.

Historic Map and Aerial Photograph Review

SEARCH reviewed the Chase (1856) map of York County, the 1872 *Atlas of York County, Maine* (Sanford, Everts & Co. 1872), and available historical US Geological Survey (USGS) topographical maps from 1916 to 1994. Bolt Hill Road is depicted on the Chase map, with a residence attributed to G. Hanscom is depicted south of Bolt Hill Road in the northern-most extension of the main development parcel and a residence attributed to Wm. Spinney north of Bolt Hill Road (**Figure 4**). The depicted G. Hanscom location was mapped as wetland away from the road by the Flycatcher environmental team and SEARCH identified non-wetland areas closest to Bolt Hill Road as sensitive for postcontact material. The depicted Wm. Spinney location appears to fall between the current Bolt Hill substation and the short length of existing ROW to the north, but is closer to the former than the latter. Neither name appears on the 1872 *Atlas of York County, Maine*; the G. Hanscom residence appears to be attributed to A. Hanscom but is not in the study area, while structures that may represent the Wm. Spinney location are attributed to A. Newton and T.J. Langley. The A. Newton structure falls within the current Bolt Hill substation parcel while the T.J. Langley structure is to the northeast between the extant Bolt Hill substation and the short length of existing ROW to the north (**Figure 5**).

Bolt Hill Road remains depicted on all USGS topographic maps examined; however, no structures are shown in the study area at any time. Nothing is depicted at the G. Hanscom/A. Hanscom location identified in 1856 and 1872, while beginning with the earliest available USGS topographic map (USGS 1916) the 1856 Wm. Spinney location may be represented by a structure north of Bolt Hill Road between the current Bolt Hill substation and the short length of existing ROW to the north (**Figure 6**). Beginning in 1981 (US Geological Survey [USGS] 1981), one structure

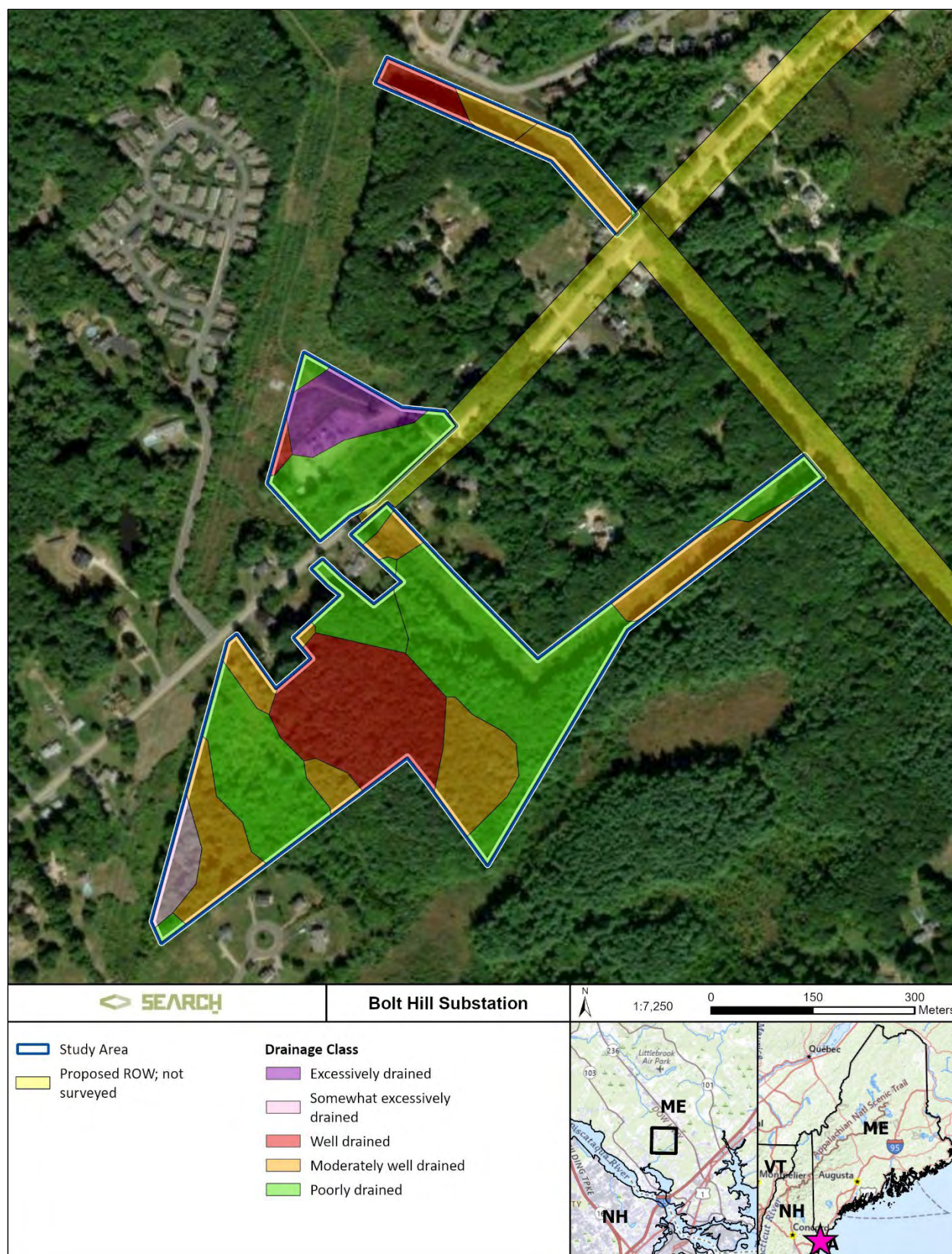


Figure 3. Mapped soils in the study area.

Table 1. Mapped soils in the study area.

Map Unit Symbol	Map Unit Name	Drainage Class	Geomorphic Description	Acres	Percentage
AdC	Adams loamy sand, 8 to 15 percent slopes	Somewhat excessively drained	outwash terraces on outwash plains	0.81	1.20%
BrB	Brayton and Westbury fine sandy loams, 0 to 8 percent slopes	Poorly drained	till plains on uplands	0.17	0.25%
BuC	Buxton silt loam, 8 to 15 percent slopes	Moderately well drained	coastal plains	2.09	3.10%
EmB	Elmwood fine sandy loam, 0 to 8 percent slopes	Moderately well drained	outwash plains	2.33	3.46%
MrB	Marlow fine sandy loam, 3 to 8 percent slopes	Well drained	hills on uplands, mountains on uplands	0.03	0.04%
MrC2	Marlow fine sandy loam, 8 to 15 percent slopes	Well drained	hills on uplands, mountains on uplands	6.20	9.21%
Na	Naumburg sand	Poorly drained	outwash plains	8.18	12.15%
PeB	Peru fine sandy loam, 3 to 8 percent slopes	Moderately well drained	hills on uplands, mountains on uplands	2.17	3.22%
Pg	Pits, gravel	Excessively drained	gravel pits on outwash plains, sand pits on outwash plains	1.90	2.82%
Sc	Scantic silt loam, 0 to 3 percent slopes	Poorly drained	marine terraces on plains, river valleys on plains	7.90	11.74%
SkB	Skerry fine sandy loam, 0 to 8 percent slopes	Moderately well drained	hills on uplands, mountains on uplands	1.35	2.01%
SrB	Skerry fine sandy loam, 0 to 8 percent slopes, very stony	Moderately well drained	hills on uplands, mountains on uplands	0.54	0.80%
Total				33.65	50.00%

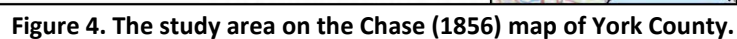




Figure 5. The study area on the Sanford, Everts & Co. (1872) Atlas of York County, Maine.

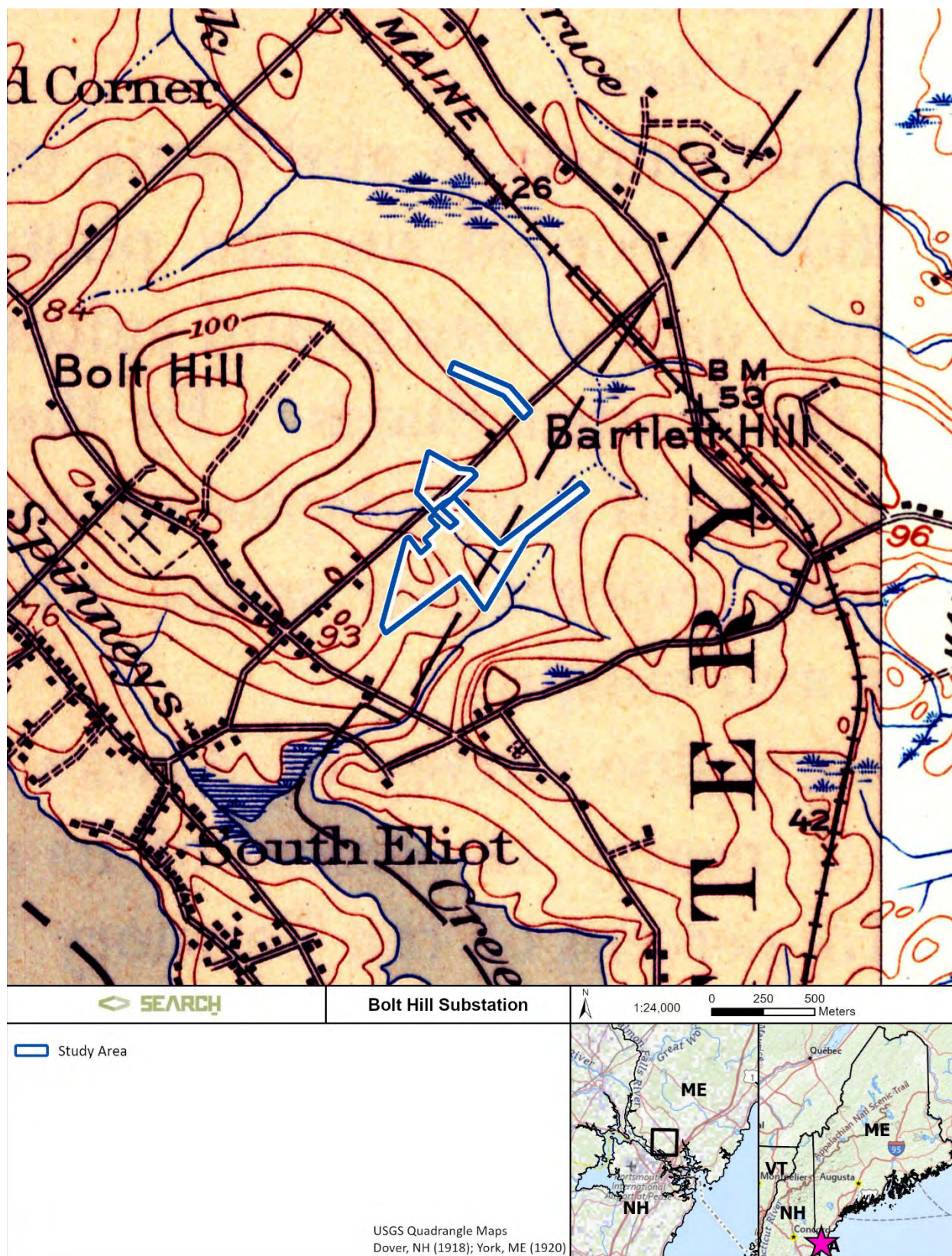


Figure 6. The study area on the 1918 USGS topographic quadrangle.

is shown in a parcel that juts southeastward from Bolt Hill Road into the study area while a second structure is just northeast of the northern-most extension of the main development parcel. By 1994 (USGS 1994) a third structure is shown on a parcel jutting southeastward from Bolt Hill Road into the study area, and between the two previous structures. These structures remain extant today.

A review of aerial imagery flown as early as 1960 shows that the extant Bolt Hill substation had been or was being developed, with attendant ROWs, while a 1962 aerial photograph reveals that the two structures depicted on the 1981 USGS topographic map were extant at the time. No additional information about the study area can be discerned except that the most heavily vegetated portion of the study area was the central ridge and its northeastern flank, and the banks of Spinney Creek, while some likely pastureland characterizes the southwestern flank of the central ridge (NETRONLINE 2024; US Department of Agriculture–Natural Resources Conservation Service 1960).

ARCHAEOLOGICAL SENSITIVITY

Background research combined multiple datasets, including geological, historic, cartographic, and topographic data to identify areas of archaeological sensitivity and to facilitate pedestrian reconnaissance. Archaeological sensitivity for precontact habitation and use were defined using the following criteria, following Pontbriand (2020):

- areas within 50 m (164 ft) of mapped watercourses;
- areas with slopes between 5 and 15 degrees;
- areas with a southerly to southeasterly aspect; and,
- areas characterized by moderately well-drained soils, somewhat excessively drained soils, or water/rock outcrop.

Additionally, elevated, well-drained landforms overlooking or adjacent to navigable (by canoe) waterways are also considered archaeologically sensitive for precontact habitation and use. Meanwhile, sensitivity for Paleoindian sites depends on well-drained sandy soils, often formed from glacial outwash or from glacial outwash that has formed into dunes that are within 100 m (328 ft) of and overlooking small water bodies such as first- and second-order streams, kettlehole ponds, or marshes (Spiess 2020).

Archaeological sensitivity for postcontact resources is based on historic map review, and operationalized as within 100 m (328 ft) of roads depicted on historic maps and in the vicinity of mapped structures.

Based on the above criteria, the desktop review identified four potentially sensitive areas (SAs) within the study area (see **Figure 2**).

- SA-01 consists of a roughly rectangular area in the norther-most portion of the main development parcel. It was identified as sensitive for postcontact archaeological material on the basis of the **Historic Map and Aerial Photograph Review**, above.
- SA-02 is a polygon encompassing the crest of the central main ridge within the main development parcel. It was identified as sensitive for postcontact archaeological material on the basis of the **Historic Map and Aerial Photograph Review**, above, in combination with the knowledge that historic maps often lack spatial accuracy; given the distance from the road the G. Hanscom residence is depicted on the Chase (1856) map of York County, the central ridge was identified as a possible G. Hanscom site location that better matched the terrain.
- SA-03 is a polygon at the southern tip of the main development parcel. It was identified as sensitive for precontact archaeological material on the basis of low mapped slope and mapped soils that include Adams loamy sand (somewhat excessively drained, occurring on outwash terraces on outwash plains) and Elmwood fine sandy loam (moderately well drained, occurring on outwash plains).
- SA-04 is a polygon along the southeastern edge of the main development parcel. It was identified as sensitive for precontact archaeological material on the basis of low mapped slope and distance to Spinney Creek. However, soils at this location are mapped as mostly Scantic silt loam, which is a poorly drained soil occurring on marine terraces and river valleys on plains, and is poorly suited for precontact occupation.

PEDESTRIAN RECONNAISSANCE

SEARCH conducted pedestrian reconnaissance of the Bolt Hill study area on 28 May 2024. The entire survey area was inspected, with particular attention paid to the four SAs described in **Archaeological Sensitivity**, above. No areas of archaeological sensitivity were identified within the four SAs defined on the basis of the desktop review, and no areas of archaeological sensitivity were identified elsewhere in the study area; however, standing water at the surface and dense vegetation limited the effectiveness of pedestrian reconnaissance within SA-01.

SA-01 and SA-02 were identified as potentially sensitive for postcontact archaeological material, mostly on the basis of the historic map and aerial photograph review. Pedestrian inspection did not result in the identification of cellar holes, barn or outbuilding foundations, wells, or other evidence of postcontact occupation. No historic artifacts were identified on the surface, though surface visibility was limited due to vegetation. SA-01 is largely characterized by an existing ROW where disturbance was evident. The southwestern edge of SA-01 is wooded, and standing water was observed at the surface throughout much of the SA. Although postcontact remains were not observed in SA-01, conditions at the time of pedestrian reconnaissance limited its utility and effectiveness.

Figure 7 shows representative conditions in SA-02, which also did not contain postcontact remains. In SA-02, although ground surface visibility was limited, vegetative cover was sufficiently sparse so as to allow identification of architectural remains through pedestrian reconnaissance.



Figure 7. View northwest across SA-02.

SA-03 and SA-04 were both identified as possibly sensitive for precontact archaeological materials, SA-03 on the basis of soils and slope and SA-04 on the basis of the nearby perennial Spinney Creek. No archaeological sensitivity was identified for SA-03. The terrain is generally sloping, with no definable landforms present and a wet, uneven surface, making it unlikely that a precontact site is present. Although a remnant stone wall was observed in the eastern portion of SA-03, no other postcontact remains were present. **Figure 8** shows representative conditions in SA-03, while **Figure 9** shows the remnant stone wall feature.

Pedestrian inspection of SA-04 found it to be a low lying area with a hummocked and spongy ground surface suggesting seasonal wetland conditions, making it unlikely that a precontact site is present. **Figure 10** and **Figure 11** show the conditions encountered in SA-04.

Much of the remainder of the study area is characterized by seasonal wetlands, and pedestrian reconnaissance did not reveal any locations where precontact archaeological materials are likely to be found. Though historic stone walls such as that identified in SA-03 characterize the remainder of the study area, no architectural remains were identified that would betray the presence of postcontact occupation. Additionally, the small parcel containing the existing Bolt Hill substation is heavily disturbed, and the two sections of ROW included in the study area have been developed. They were not identified as archaeologically sensitive for precontact or postcontact archaeological material; however, MHPC identified the Wm. Spinney residence location depicted as potentially within the study area, and desktop review indicates that if it is in the study area, it is in the parcel containing the extant Bolt Hill substation, a parcel that has been completely developed and is unlikely to contain intact archaeological remains, or in the short length of existing ROW to the north. **Figure 10–Figure 15** show representative photos.



Figure 8. View west from eastern portion of SA-03.



Figure 9. View south of remnant stone wall in SA-03.



Figure 10. View east from SA-04 towards Spinney Creek.



Figure 11. View south from within SA-04 showing seasonal wetland conditions.



Figure 12. View south of stone wall south of SA-02.

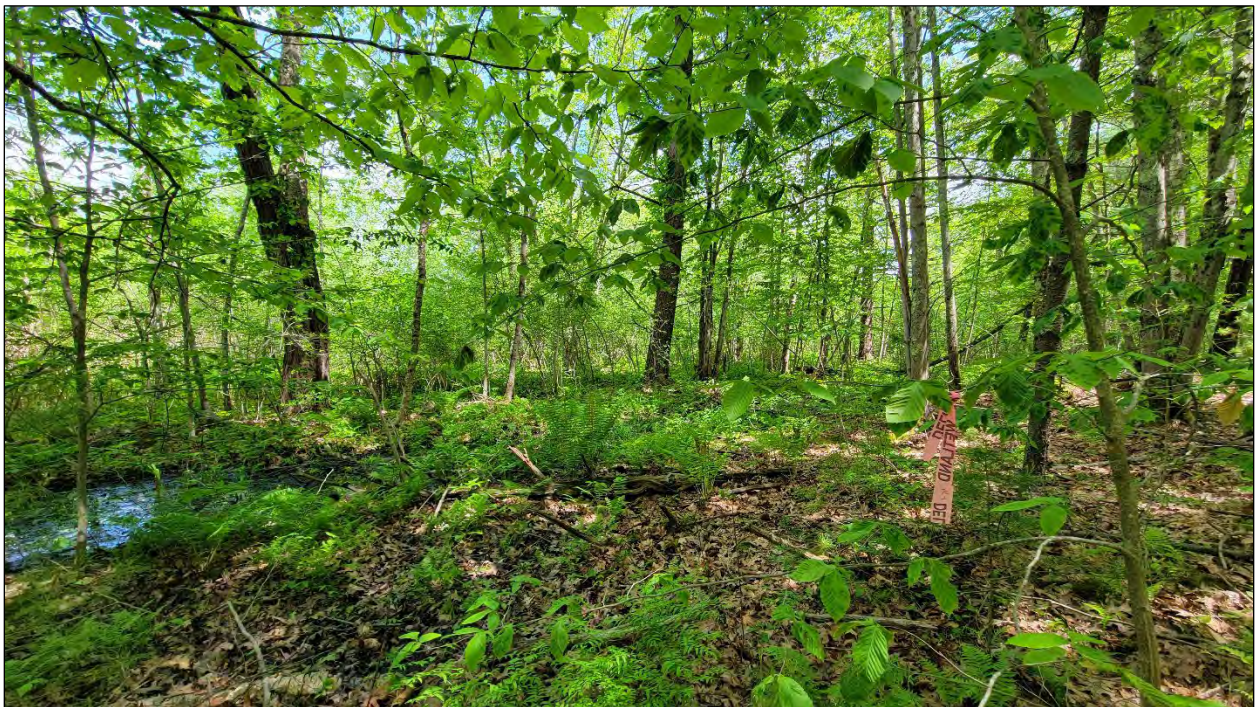


Figure 13. View southeast of seasonal wetland north of SA-02.



Figure 14. View south of existing Bolt Hill substation.



Figure 15. View northeast along ROW extending northeast from main development parcel.

SUMMARY AND RECOMMENDATIONS

SEARCH conducted a Phase 0 cultural resources survey under subcontract to Flycatcher on behalf of CMP. CMP proposes to remove an existing substation on Bolt Hill Road in Eliot, Maine and, as part of CMP's capital project program, build a new 115/34.5/12kV substation on an nearby parcel along Bolt Hill Road to increase the reliability of the CMP transmission and distribution system.

A preliminary permitting assessment for the Project has been completed, and indicates that a NEPA permit will be needed from the USACE, and permitting may also be required from MDEP, the Maine Department of Transportation, and the Town of Eliot. The Phase 0 survey reported here is in support of these permitting requirements, specifically NEPA and the MDEP Site Law and Stormwater permitting. If the USACE finds the Project impacts jurisdictional waters, it will also become subject to issuance of a federal permit under Section 404 of the Clean Water Act, an action that would require Project impacts review under Section 106 of the NHPA.

SEARCH conducted a desktop review of the study area to identify potential areas of archaeological sensitivity and a pedestrian reconnaissance of the study area. The entire study area was inspected, with particular attention paid to four SAs identified by the desktop review. No areas of archaeological sensitivity were identified within the four SAs defined on the basis of the desktop review, and no areas of archaeological sensitivity were identified elsewhere in the study area. However, standing water at the surface and dense vegetation limited the utility of pedestrian reconnaissance within SA-01.

Recommendations

SEARCH recommends systematic pedestrian survey along transects spaced at a 10 m (33 ft) interval within SA-01 to identify if surface indications of the G. Hanscom residence are present, supplemented by up to 10 shovel tests (STs). STs, if indicated by surface finds, will be excavated at 10 m (33 ft) intervals in a cruciform pattern centered on surface remains. SEARCH also recommends systematic pedestrian survey along transects spaced at a 10 m (33 ft) interval within 100 m (328 ft) of Bolt Hill Road in the short length of existing ROW to the north of the extant substation to identify if surface indications of the Wm. Spinney residence are present, supplemented by up to 10 STs. STs, if indicated by surface finds, will be excavated at 10 m (33 ft) intervals in a cruciform pattern centered on surface remains.

No additional archaeological survey is recommended in support of the Project.

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TECHNICAL MEMORANDUM
RESULTS OF PHASE 0 SURVEY, BOLT HILL SUBSTATION, ELIOT, MAINE
ADDENDUM 1: HISTORIC HOUSE SITES SURVEY

CONSULTANT:	SEARCH SEARCH Virginia Amelia Courthouse Station
PROJECT MANAGER:	Lillian Azevedo, PhD, RPA
PRINCIPAL INVESTIGATOR:	Chris Clement, PhD, RPA
CLIENT:	Flycatcher, LLC
DATE:	October 2024
SEARCH PROJECT NUMBER:	240117

Central Maine Power (CMP) proposes to remove an existing substation on Bolt Hill Road in Eliot, Maine and, as part of CMP’s capital project program, build a new 115/34.5/12kV substation on an nearby parcel along Bolt Hill Road to increase the reliability of the CMP transmission and distribution system (Project; **Figure 1**). In May 2024, SEARCH conducted a Phase 0 cultural resources surveys in support of the Project under subcontract to Flycatcher, LLC (Flycatcher). That survey, reported in *Technical Memorandum: Results of Phase 0 Survey, Bolt Hill Substation, Eliot, Maine* (Clement 2024), recommended additional survey targeting potential historic house sites depicted on mid to late nineteenth-century maps. The Maine Historic Preservation Commission (MHPC) concurred with that recommendation on August 14, 2024 (MHPC #0961-24). This technical memorandum presents the results of a survey targeting potential historic house sites that may be impacted by the Project, and represents an addendum to that initial report.

A preliminary permitting assessment for the Project indicates that permits will be needed from the US Army Corps of Engineers (USACE; a National Environmental Policies Act [NEPA] permit and a Category 2 permit for native endangered and threatened species), the Maine Department of Environmental Protection (MDEP; Site Law and Stormwater permit), the Maine Department of Transportation (Utility Location permit), and the Town of Eliot (Site Plan Review, Building permit, and Shoreland Zone/Floodplain permit). This addendum is in support of these permitting requirements, specifically NEPA and MDEP Site Law and Stormwater permitting. If the USACE finds the Project impacts jurisdictional waters, it will also become subject to issuance of a federal permit under Section 404 of the Clean Water Act, an action that would require Project impacts review under Section 106 of the National Historic Preservation Act.



Figure 1. Project location.

Flycatcher initiated consultation coordination with MHPC on behalf of CMP on May 20, 2024 (MHPC #0961-24). MHPC responded on June 10, 2024, after SEARCH's initial survey effort but prior to submission of its results, and requested a historic archaeological survey due to the potential of two historic house sites in the study area: the Wm. Spinney residence and the G. Hanscom residence. MHPC reiterated its request for additional survey targeting potential historic house sites on August 14, 2024. This addendum specifically addresses additional survey for historic house sites conducted by SEARCH in response to the June 10 and August 14, 2024, MHPC letters (**Appendix A**).

An area of potential effects for the Project has not been determined, but the Project limits of disturbance will occur within three parcels (**Figure 2**). The main development parcel is between Bolt Hill Road and Spinney Creek, with a piece of right-of-way (ROW) extending northeast from its eastern limit. The second development parcel is opposite the first development parcel, on the other side of Bolt Hill Road, and contains the extant Bolt Hill substation. It has been expanded moderately from its original extent examined during the initial Phase 0 survey; the new acreage incorporates a section of ROW northeast of the extant Bolt Hill substation. The third development parcel is a short length of existing ROW to the north.

SEARCH conducted a desktop review to understand the environmental setting of the Project as part of the initial Phase 0 survey effort. The environmental setting is not repeated here. SEARCH also examined historic maps and aerial photographs to identify if historic land use suggests sensitivity for postcontact archaeological resources. Because MHPC specifically requested survey in relation to the Wm. Spinney residence and the G. Hanscom residence, SEARCH reexamined the Chase (1856) map of York County and the 1872 *Atlas of York County, Maine* (Sanford, Everts & Co. 1872), confirming that the 1856 map depicts the G. Hanscom residence and the Wm. Spinney residence within the Project parcels (**Figure 3** and **Figure 4**). The depicted G. Hanscom location was mapped as wetland away from the road by the Flycatcher environmental team, while the depicted Wm. Spinney location appears to the north of the current Bolt Hill substation. Neither name appears on the 1872 *Atlas of York County, Maine*; structures that may represent the Wm. Spinney location are attributed to A. Newton and T.J. Langley (see **Figure 4**). The A. Newton structure falls within the current Bolt Hill substation parcel, while the T.J. Langley structure is to the northeast between the extant Bolt Hill substation and the short length of existing ROW to the north. No structure is depicted south of Bolt Hill Road on the 1872 map where the G. Hanscom residence was previously depicted. Beginning with the earliest available US Geological Survey topographic map (US Geological Survey 1916), the 1856 Wm. Spinney location may be represented by a structure north of Bolt Hill Road between the current Bolt Hill substation and the short length of existing ROW to the north (**Figure 5**).

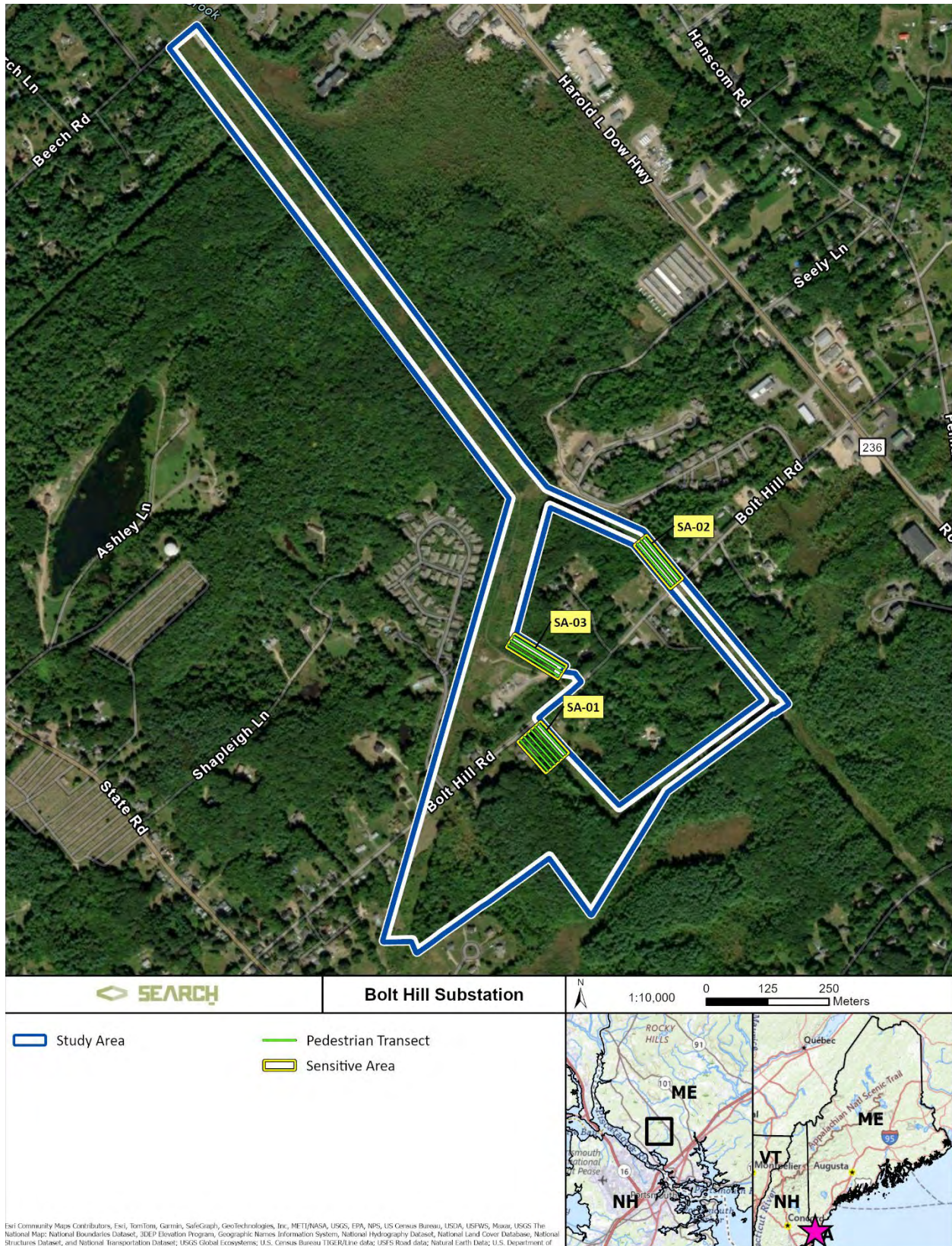
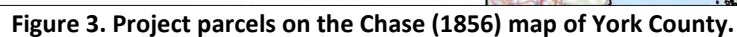


Figure 2. Project parcels, areas sensitive for historic house sites, and pedestrian inspection transects.



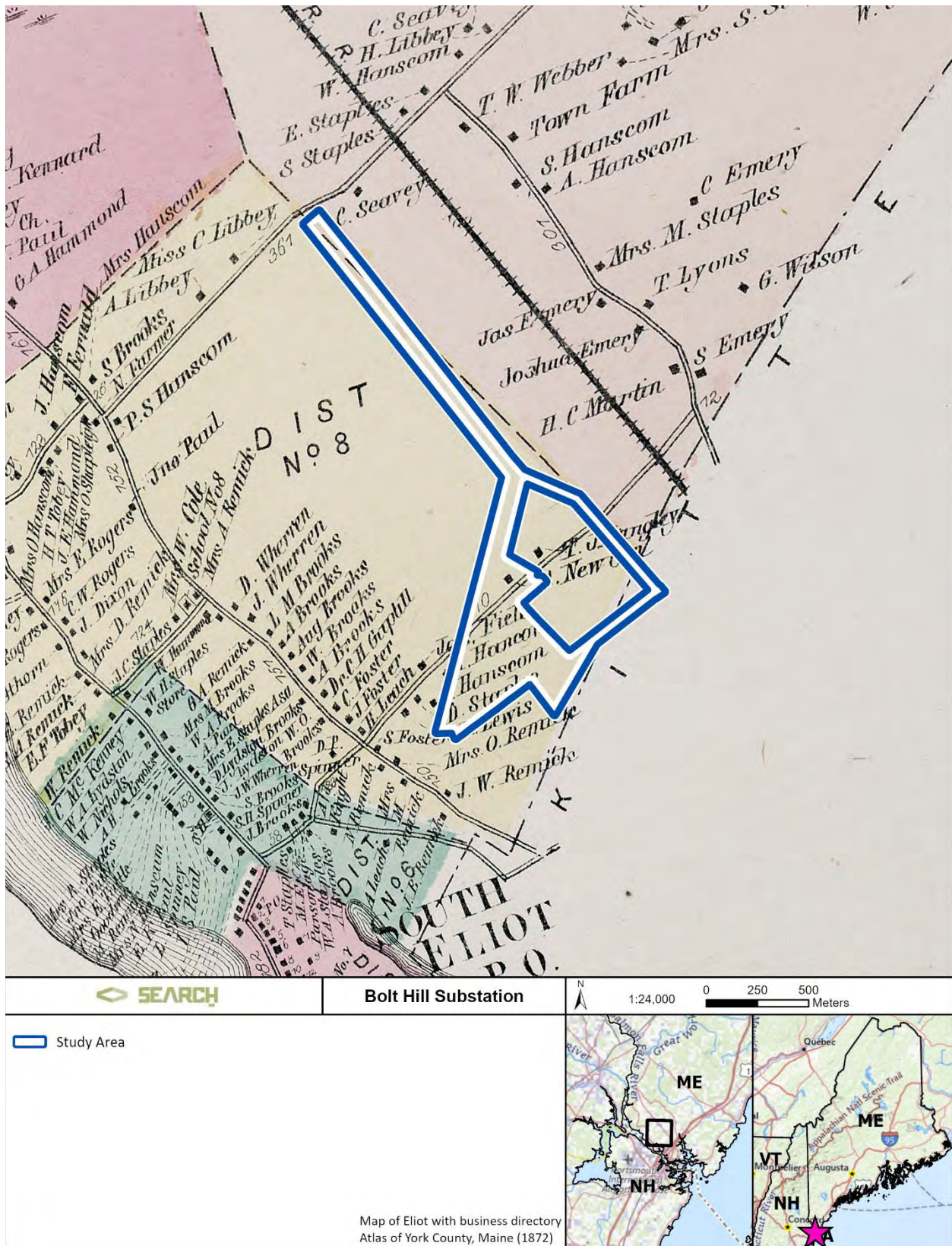


Figure 4. Project parcels on the Sanford, Everts & Co. (1872) Atlas of York County, Maine.

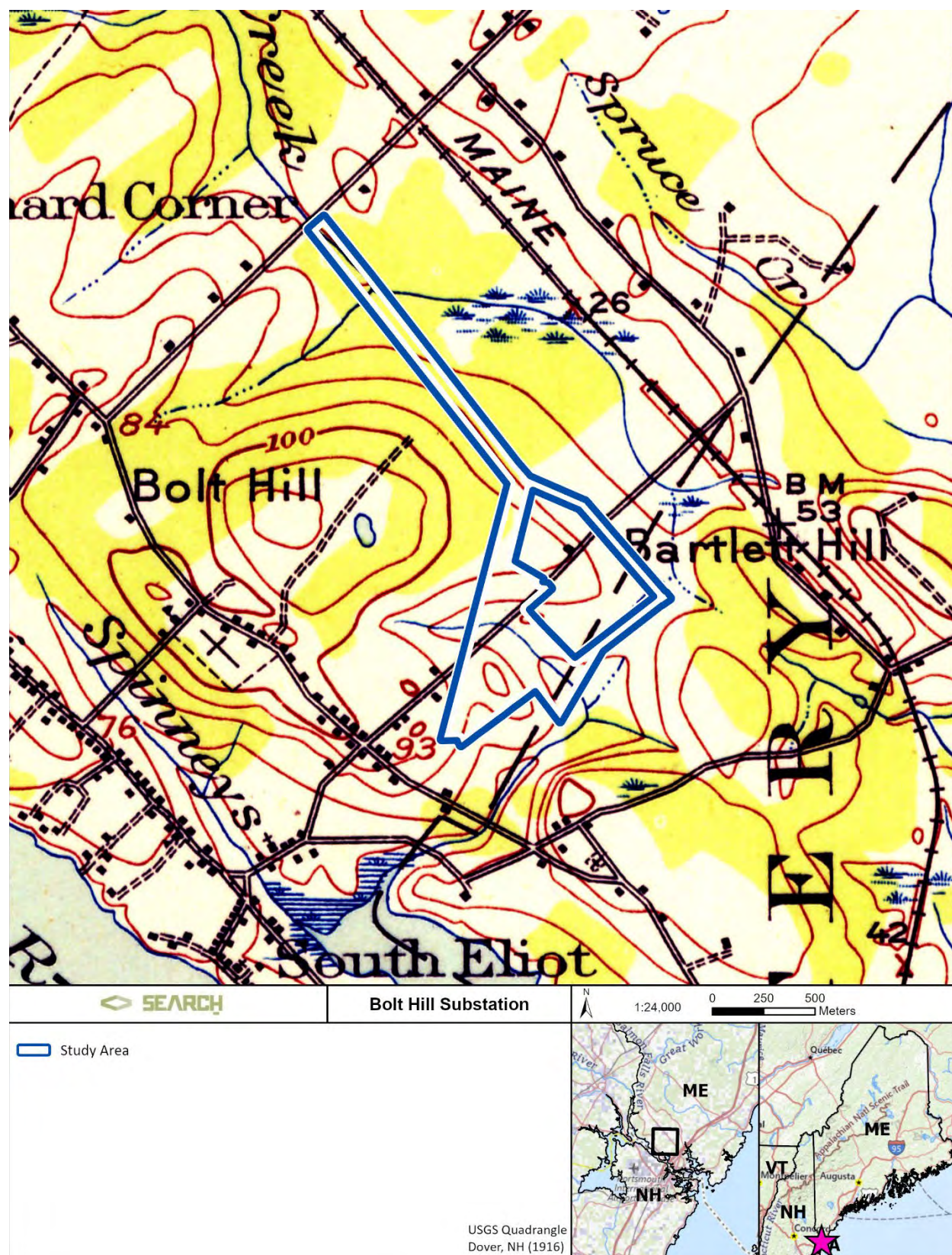


Figure 5. Project parcels on the Dover, NH (1916) 1:62,500 US Geological Survey topographic quadrangle.

ARCHAEOLOGICAL SENSITIVITY

SEARCH bases archaeological sensitivity for postcontact resources on historic map review and operationalizes it within 100 m (328 ft) of roads depicted on historic maps and in the vicinity of mapped structures. Based on these criteria, three sensitive areas (SAs) that were sensitive for postcontact resources were identified prior to the survey (see **Figure 2**):

- SA-01 consists of a roughly rectangular area abutting Bolt Hill Road in the northernmost portion of the main development parcel;
- SA-02 consists of the newly added section of ROW abutting the Bolt Hill substation parcel to the northeast; and
- SA-03 consists of the ROW north of the main development parcel, within 100 m (328 ft) of Bolt Hill Road.

RESULTS

SEARCH conducted pedestrian reconnaissance of the three SAs on September 23 and 24, 2024, with a team of two archaeologists. Each SA was examined along 10 m (33 ft) interval transects, including six transects in SA-01, three transects in SA-02, and three transects in SA-03 (see **Figure 2**).

SA-01 consists of a preexisting CMP ROW and utility line corridor. It is on the south side of Bolt Hill Road, directly across from the existing Bolt Hill substation. It occupies a low-lying landform vegetated with grasses, mosses, and briars, along with thick secondary scrub and tree growth. A wetland is present in the southern, southwestern, and southeastern portions of the SA. The landform is hummocked and has an uneven ground surface. Ground surface disturbance by mechanical means is evidenced by the presence of push piles of timber slash and debris along the margins of the ROW. The pedestrian survey identified no cultural materials. **Figure 6**, **Figure 7**, and **Figure 8** show conditions encountered within SA-01.

SA-02 is a section of CMP ROW on the north side of Bolt Hill Road. The area is low lying, with wetland delineation flags in the northern and northeastern portions of the SA. The ROW is a preexisting utility corridor with signs that utility structures were recently replaced. Ground cover consists of scrub brush and secondary tree growth. The landform is hummocked and uneven with visual signs of mechanical disturbance due to corridor construction and repair, including push piles and timber slash along the western margins of the ROW. A stone wall was noted running along the entirety of the SA from the southeast to the northwest, but no other cultural materials or historic architectural remains were observed. **Figure 9**, **Figure 10**, and **Figure 11** show conditions encountered within SA-02.



Figure 6. View southeast of SA-01 from Bolt Hill Road.



Figure 7. View southeast of SA-01 along southwestern edge of SA.



Figure 8. View west of SA-01 showing wetland vegetation in southern part of SA.



Figure 9. View northwest of SA-02 near Bolt Hill Road.



Figure 10. View southeast in SA-02 showing typical vegetation and ground conditions.



Figure 11. View northwest of stone wall running the length of SA-02.

SA-03 is a small piece of CMP ROW directly northeast and abutting the existing Bolt Hill substation. The landform has been heavily modified due to substation and transmission line construction. The landform has a groundcover of scrub brush and juniper and secondary growth of small trees. There are visual indications that the eastern half of the SA has been disturbed by mechanical borrowing, with the material likely removed during substation construction to build the pad that supports the substation. A small wetland is at the base of the borrow pit. The western portion of the SA also shows evidence of ground surface disturbance due to mechanical activity. The ground surface is hummocked and uneven, and areas around utility structures have been benched. No cultural materials or architectural remains were encountered during the survey of SA-03. **Figure 12**, **Figure 13**, and **Figure 14** show conditions encountered within SA-02



Figure 12. View northwest of SA-03 near Bolt Hill Road.



Figure 13. View southeast from northwestern end of SA-03.



Figure 14. View southeast along southwestern edge of SA-03.

SUMMARY AND RECOMMENDATIONS

CMP proposes to remove an existing substation on Bolt Hill Road in Eliot, Maine, and build a new substation on an adjacent parcel to support the Project. The Project is part of CMP's capital project program. In May 2024 SEARCH conducted a Phase 0 cultural resources survey in support of the Project under subcontract to Flycatcher. That survey, reported in *Technical Memorandum: Results of Phase 0 Survey, Bolt Hill Substation, Eliot, Maine* (Clement 2024), recommended additional survey specifically targeting potential historic house sites depicted in or near the Project parcels on mid to late nineteenth-century maps. This technical memorandum presents an addendum to that initial report.

A preliminary permitting assessment for the Project indicates that permits will be needed from the USACE, MDEP, the Maine Department of Transportation, and the Town of Eliot. This addendum is in support of these permitting requirements, specifically NEPA and MDEP Site Law and Stormwater permitting. If the USACE finds the Project impacts jurisdictional waters, it will also become subject to issuance of a federal permit under Section 404 of the Clean Water Act, an action that would require Project impacts review under Section 106 of the National Historic Preservation Act.

Flycatcher initiated consultation coordination with MHPC on behalf of CMP on May 20, 2024. MHPC requested a historic archaeological survey in response due to two potential historic house sites depicted on mid to late nineteenth-century maps in or near the Project. This addendum has specifically addressed these potential historic house sites.

SEARCH identified three areas that met criteria for historic site sensitivity (within 100 m [328 ft] of roads depicted on historic maps and in the vicinity of mapped structures) and conducted pedestrian reconnaissance of the three areas along 10 m (33 ft) interval transects.

No evidence of historic house sites was encountered.

SEARCH recommends a finding of no effect to significant archaeological resources by the Project. No additional archaeological survey is recommended in support of the Project.

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APPENDIX A

CONSULTATION CORRESPONDENCE



TECHNICAL REPORT

ARCHITECTURAL HISTORY SURVEY FOR THE BOLT HILL SUBSTATION PROJECT, ELIOT, YORK COUNTY, MAINE

PREPARED FOR

**FLYCATCHER LLC
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**SEARCH PROJECT No. 240117
MHPC PROJECT No. 0961-24**

OCTOBER 2025

TECHNICAL REPORT

ARCHITECTURAL HISTORY SURVEY FOR THE BOLT HILL SUBSTATION PROJECT, ELIOT, YORK COUNTY, MAINE

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ABSTRACT

In May 2024, SEARCH was contracted by Flycatcher LLC on behalf of Central Maine Power (CMP) to conduct a Phase I architectural history survey of the project site and a 0.5-mile survey area around the project site. The survey was conducted as due diligence to determine whether the Project Site or the 0.5-mile (230-hectare / 502-acre) survey area contained architectural resources. Background research for the architectural history survey began in February 2025; field work was conducted on April 3 and July 21, 2025; and the architectural history survey report was submitted to the Maine State Historic Preservation Office for review in August 2025.

CMP proposes to remove an existing substation on the north side of Bolt Hill Road in Eliot, Maine and, as part of CMP's capital project program, build a new 115/34.5/12kV substation on a nearby parcel along the south side of Bolt Hill Road to increase the reliability of the CMP transmission and distribution system.

The purpose of this architectural history survey is to identify previously recorded and previously unrecorded historic-age architectural resources 45 years old or older within the survey area; provide NRHP-eligibility recommendations to previously unrecorded historic-age architectural resources; and consider potential effects the proposed Project may have to historic properties. The architectural history survey included pedestrian survey and historic map review that conformed to the Maine State Historic Preservation Office's *Above Ground Cultural Resource Survey Manual*, revised in 2013; Section 106 of the National Historic Preservation Act of 1966, as amended (Public Law 113-287 [Title 54 United States Code]); and implementing regulations of 36 Code of Federal Regulations Part 800 (Protection of Historic Properties). The principal investigator exceeds the Secretary of the Interior's *Standards and Guidelines for Architectural History* (48 Federal Register 44716, September 30, 1983).

In total, SEARCH identified 16 architectural resources within the survey area; the results and recommendations of those resources are presented in this report. The report conforms to Maine State Historic Preservation Office guidelines. SEARCH recommends no further architectural history work within the project site or survey area and that use of the area to support activities related to the Bolt Hill Substation will have no effect on historic resources.

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1 INTRODUCTION

In May 2024, SEARCH was contracted by Flycatcher LLC on behalf of Central Maine Power (CMP) to conduct a Phase I architectural history survey of the project site and a 0.5-mile survey area around the project site (**Figure 1**). The survey area is southeast of the intersection of White Tail Ridge and Bolt Hill Road in Eliot, York County, Maine. The survey area is a 0.5-mile area around the project site. CMP proposes to remove an existing substation on the north side of Bolt Hill Road in Eliot, Maine and, as part of CMP's capital project program, build a new 115/34.5/12kV substation on a nearby parcel along the south side of Bolt Hill Road to increase the reliability of the CMP transmission and distribution system. The survey was conducted as due diligence to determine whether the property or the 0.5-mile (230-hectare / 502-acre) survey area contained architectural resources.

Background research for the architectural history survey began in February 2025; field work was conducted on April 3 and July 21, 2025; and the architectural history survey report was submitted to the Maine State Historic Preservation Office for review in August 2025.

CMP is currently completing an architectural survey in cooperation with this project that is limited to the transmission line modifications that will connect to the proposed substation. This architectural survey, which utilizes National Register of Historic Places (NRHP) determinations that have been shared in cooperation with CMP, has not yet been entered into the Cultural & Architectural Resource Management Archive (CARMA).

1.1 BASIS OF SURVEY

The purpose of this architectural history survey is to identify previously recorded and previously unrecorded historic-age architectural resources 45 years old or older within the survey area; provide NRHP-eligibility recommendations to previously unrecorded historic-age architectural resources; and consider potential effects the proposed Project may have to historic properties. The architectural history survey included pedestrian survey and historic map review that conformed to the Maine State Historic Preservation Office's (SHPO) *Above Ground Cultural Resource Survey Manual*, revised in 2013; Section 106 of the National Historic Preservation Act of 1966, as amended (Public Law 113-287 [Title 54 United States Code]); and implementing regulations of 36 Code of Federal Regulations Part 800 (Protection of Historic Properties). The principal investigator exceeds the professional qualifications of the Secretary of the Interior's *Standards and Guidelines for Architectural History* (48 Federal Register 44716, September 30, 1983).

In total, SEARCH identified 16 architectural resources within the survey area; the results and recommendations of those resources are presented in this report. The report conforms to Maine SHPO guidelines. SEARCH recommends no further architectural history work within the survey area and that use of the area to support activities related to the Bolt Hill Substation will have no effect on historic resources.

1.2 PROJECT SITE AND SURVEY AREA

1.2.1 Project Site

The project site is within an approximately 8-hectare (20-acre) parcel (**Figure 1** and **Figure 2**). The parcel numbers are 011-040-000 and 011-041-000 and are classified as electric right-of-way land (Town of Eliot 2025). The project site is approximately 1.6-kilometers (1.0-mile) inland from the Piscataqua River shoreline in a slightly built-up area of South Eliot bordering Kittery. The surrounding area is predominantly residential. Undeveloped wooded land in the area includes a mix of hardwoods such as oak, pine, and birch. The parcel is bound by Bolt Hill Road to the northwest and private property to the northeast, southeast, and southwest. Spinney Creek and wetlands are located to the south/southeast of the project site.

Within parcel 011-040-000 are stone walls associated with the former residence at 266 Bolt Hill Road. The residential building that was formerly located at 266 Bolt Hill Road was constructed ca. 1964 (demolished ca. 2024) and it is likely that a majority of the stone walls were constructed during or after the building's construction. Per information available at the York County Registry of Deeds, parcel numbers 011-040-000 and 011-041-000 were at one time a singular parcel. This parcel was likely divided into the two separate parcels that exist today in a 1907 property sale (York County Maine Government, 1907). No information was available regarding the construction of stone walls from the 1907 property sale or any subsequent sales that have since occurred. Parcels 011-040-000 and 011-041-000 are currently owned by CMP.

The stone walls consist of cut stones and field stones, and are constructed within the interior of the parcel and along its borders. The stone walls along the northeastern and southwestern boundaries of the parcel were constructed for use as retaining walls (**Figure 3**). The stone wall on the southeastern boundary of the property appears to be constructed as a property boundary marker (**Figure 3**). The stone walls within the interior of the parcel appear to have been constructed for decorative purposes and are associated with a previously existing garden.

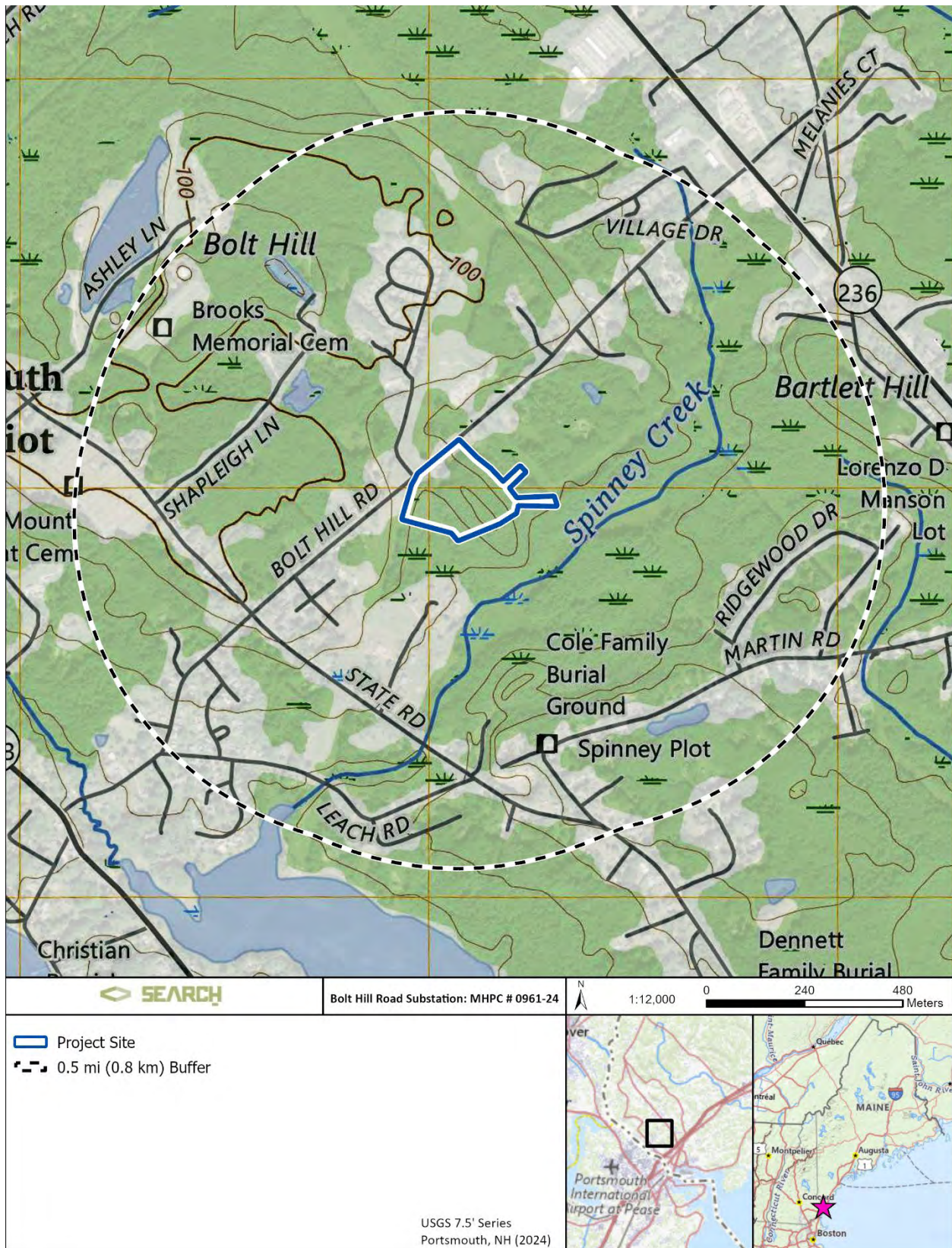


Figure 1. Topographic map of the project site and survey area.

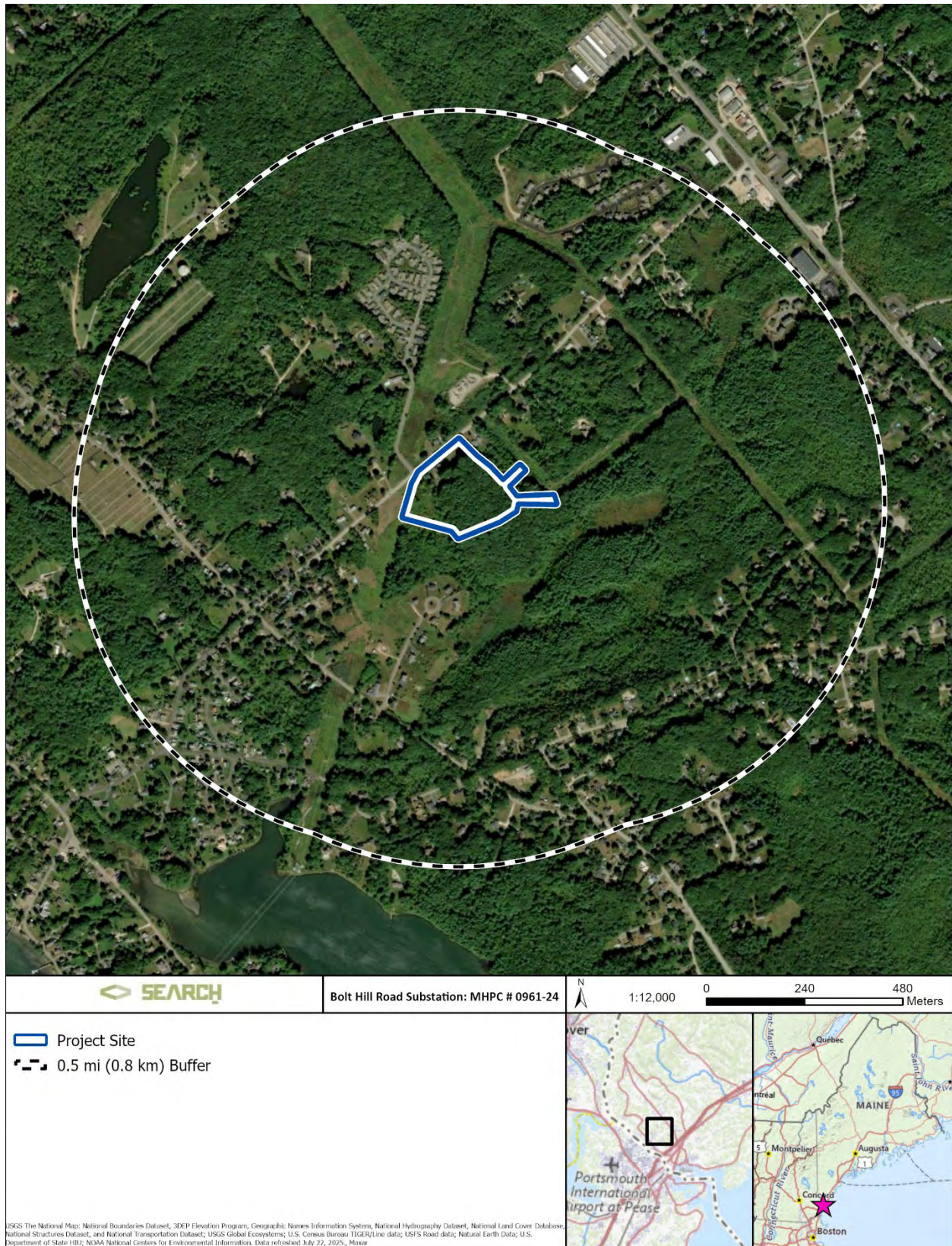


Figure 2. Aerial map of the project site and survey area.



Figure 3. Northeastern retaining wall, facing north (left); southeastern boundary wall, facing northeast (right).

1.2.2 Survey Area

The survey area consists of the project site and a 0.5-mile (230-hectare / 502-acre) viewshed area around the project site (see **Figure 4**). SEARCH completed a viewshed analysis based on the height of the proposed substation, topography, and intervening vegetation and development. SEARCH identified potential historic resources within the viewshed area that may be within view of the proposed substation, which are identified in **Section 4** of this report.

Setting

The Project Site is located in a wooded area on the southern side of Bolt Hill Road. The Project Site is located in the southern portion of Eliot, approximately 1.6-kilometers (1.0-mile) northeast of the Piscataqua River shoreline in a slightly built-up area bordering Kittery. Topography consists of gently undulating hills, wetlands, and Spinney Creek to the southeast.

The area surrounding the Project Site currently consists primarily of post-1940 residential development, wooded land, and electric equipment including a substation and overhead transmission line. A ca. 1850 map of Eliot shows Bolt Hill Road was originally named Knight's Lane. The map shows School District No.8 to the north and a railroad line to the northeast (Eliot Historical Society 1850). The railroad line is no longer extant and was replaced by ME-236 by 1963 (NETR 1963). Historic topographic maps continue to show minimal development along Bolt Hill Road ca. 1893 and deed sales describe an area consisting of cleared fields related agricultural activities which over time were parceled out and sold (NETR 1893; York County Maine Government, 1907). Development in the mid to late 19th and early 20th century appears to be primarily located along State Road to the southwest. By ca. 1952, residential development increased in the area northeast of the intersection of Bolt Hill Road and State Road, with development continuing along Bolt Hill Road to the northeast through ca. 1981 (NETR 1952, 1981, 1994). The overhead high-voltage utility line which crosses Bolt Hill Road running in a general north to south direction first appears on topographic maps in 1952 (NETR 1952). Bolt Hill

Road currently consists of a mix of historic and non-historic age residential development of varying architectural styles.

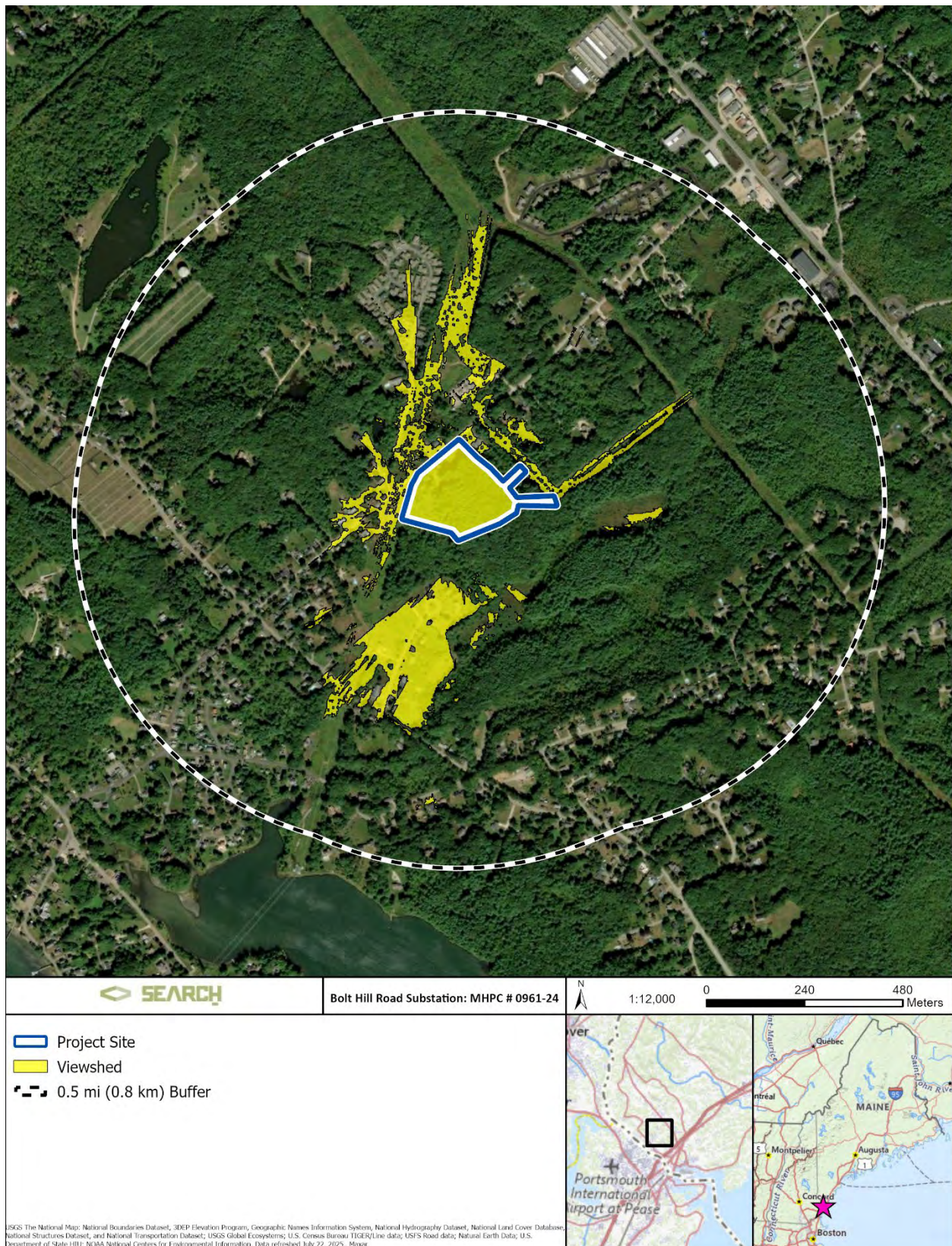


Figure 4. Aerial map of the project site and viewshed.

2 BACKGROUND RESEARCH

2.1 PREVIOUS INVESTIGATIONS AND RECORDED CULTURAL RESOURCES

SEARCH reviewed the Maine Historic Preservation Commission (MHPC) CARMA database and the NRHP database prior to fieldwork to identify previous cultural resource investigations and previously recorded resources within the survey area. No previously recorded NRHP-listed or -eligible resources are within the survey area.

2.1.1 Previous MHPC Survey Results

SEARCH identified one previous architectural survey that included identified architectural resources within the survey area. *Reconnaissance Historic Building Survey* by Historical Preservation Consultants (Federer and Hostutler 1992) was completed for the Eliot Historical Society and the MHPC as a Historic Preservation Fund (Community) survey. The survey is not available on the CARMA database and SEARCH was provided the survey through consultation with the MHPC. The purpose of the reconnaissance survey project was to identify, document, and map buildings that were 50 years old or older (as of 1992) across the southwestern half of Eliot (Federer & Hostutler 1992:2).

The reconnaissance survey did not provide eligibility recommendations for the properties in the survey area. As such, SEARCH has determined that there are no previously NRHP-evaluated resources in the survey area.

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3 RESEARCH DESIGN AND METHODS

3.1 NRHP CRITERIA

Cultural resources identified within the survey area were evaluated according to the NRHP criteria (36 Code of Federal Regulations 60.4). As defined by the National Park Service (NPS; 1997), the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

- A. that are associated with events or activities that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or
- C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded, or may be likely to yield, information important in prehistory or history.

In addition to the four criteria used to evaluate aboveground historic resources, the concept of integrity is also considered. “Integrity” is an important qualification of NRHP eligibility and can be related to the following:

- Location: the place where the historic property (or properties) was/were constructed or where the historic event(s) occurred.
- Design: the combination of elements that create the form, plan, space, structure, and style of a property (or properties).
- Setting: the physical environment of the historic property (or properties).
- Materials: the physical elements combined to create the property (or properties) during the associated period of significance.
- Workmanship: the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- Feeling: the property’s (or properties’) expression of the aesthetic or historic sense of the period of significance.
- Association: the direct link between the important historic event(s) or person(s) and the historic property (or properties) (NPS 1997).

NRHP-eligible districts must possess a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. NRHP-eligible districts and buildings must also possess historic significance, historic integrity, and historical context.

3.2 BACKGROUND RESEARCH

Background research involved a review of available information for the survey area. This included a review of the MHPC CARMA database, the NRHP database, available Eliot and Kittery assessor information, and information from the York County Maine Government Registry of Deeds.

3.3 ARCHITECTURAL HISTORY METHODS

SEARCH conducted the architectural history survey in compliance with SHPO survey guidance, specifically *Above Ground Cultural Resource Survey Manual* (MHPC 2013). The main goals of this survey were to

- identify historic architectural resources within the survey area, and
- evaluate historic architectural resources within survey area for NRHP eligibility.

The architectural history survey followed SHPO survey procedures for locating, investigating, and recording historic resources that are 45 years old or older. SEARCH architectural historians reviewed US Geological Survey (USGS) quadrangle maps and historic aerial photographs to identify resources constructed before 1980. Field survey documented extant historic buildings, structures, and objects within the survey area. SEARCH architectural historians photographed resources with a digital camera and recorded pertinent information regarding architectural style, distinguishing characteristics, and condition. Architectural historians reviewed construction dates available through the Eliot and Kittery assessor database, historic topographic maps, and aerial photographs to determine which resources were surveyed.

Upon completion of fieldwork, dates of construction, design, architectural characteristics, overall condition, and resource location were carefully considered. SEARCH evaluated each resource's significance and eligibility for NRHP listing and recommended each as "eligible" or "not eligible."

4 ARCHITECTURAL HISTORY RESULTS

The architectural history survey resulted in the identification of 16 newly evaluated historic resources within the survey area (**Table 1**). Fieldwork was conducted on April 3 and July 21, 2025. A Survey Map with survey numbers corresponding to the CARMA submission is included in **Figure 5**.

CMP is currently completing an architectural survey in cooperation with this project. This survey, which utilizes NRHP determinations that have been shared in cooperation with CMP, is currently underway and has not yet been entered into CARMA.

SEARCH did not survey buildings, structures, or additions within the survey area that were built after 1980 (i.e., those that are not yet historic). SEARCH completed a Maine SHPO Architectural Property Identification Form for the 16 newly recorded resources. Resource descriptions and NRHP evaluations are included in detail below.

Table 1. Identified Historic Resources.

Survey Map #	MHPC Inventory #	Address	Town	Year Built	NRHP Eligibility Criteria Met	Integrity
1	143-0354	224 Bolt Hill Road	Eliot	ca.1830	None	Retains aspects of location, setting, and feeling. Installation of vinyl siding, asphalt roof shingles, and replacement windows impacts design, workmanship, and materials.
2/3	143-0355	226 Bolt Hill Road	Eliot	ca.1941	None	Retains aspects of location, setting, and feeling. Installation of asphalt roof shingles and replacement windows impacts design, workmanship, and materials.
4	n/a	231 Bolt Hill Road	Eliot	ca.1978	None	Retains aspects of location, setting, materials, and feeling.
5/6	n/a	235 Bolt Hill Road	Eliot	ca.1971	None	Retains aspects of location, setting, materials, and feeling.
7/8	143-0356	243 Bolt Hill Road	Eliot	ca.1905	None	Retains aspects of location, setting, and feeling. Installation of vinyl siding and asphalt roof shingles impacts design, workmanship, and materials.
9	n/a	280 Bolt Hill Road	Eliot	ca.1977	None	Retains aspects of location, setting, materials, and feeling.
10/11	n/a	294 Bolt Hill Road	Eliot	ca.1955	None	Retains aspects of location, setting, materials, and feeling.
12	n/a	322 Bolt Hill Road	Eliot	ca.1963	None	Retains aspects of location, setting, materials, and feeling.
13	143-0357	325 Bolt Hill Road	Eliot	ca.1840	None	Retains aspects of location, setting, and feeling. Installation of vinyl siding and asphalt roof shingles

Table 1. Identified Historic Resources.

Survey Map #	MHPC Inventory #	Address	Town	Year Built	NRHP Eligibility Criteria Met	Integrity
						impacts design, workmanship, and materials.
14	n/a	1 Willow Lane	Eliot	ca.1954	None	Retains aspects of location, setting, materials, and feeling. Installation of addition impacts design and workmanship.
15	n/a	8 Hickory Lane	Eliot	ca.1953	None	Retains aspects of location, setting, materials, and feeling.
16	143-0347	1048 State Road	Eliot	ca.1942	None	Retains aspects of location, setting, feeling, and design. Installation of replacement windows impacts workmanship and materials.
17	n/a	1039 State Road	Eliot	ca.1967	None	Retains aspects of location, setting, materials, and feeling. Exterior renovations impact design and workmanship.
18	143-0349	1019 State Road	Eliot	ca.1858	None	Retains aspects of location, setting, and feeling. Installation of vinyl siding, asphalt roof shingles, and replacement windows impacts design, workmanship, and materials.
19	n/a	13 Leach Road	Kittery	ca.1958	None	Retains aspects of location, setting, materials, and feeling.
20	n/a	17 Leach Road	Kittery	ca.1948	None	Retains aspects of location, setting, materials, and feeling. Exterior renovations and additions impact design and workmanship.



4.1 ARCHITECTURAL STYLES REPRESENTED IN THE SURVEY AREA

The survey area contains six architectural forms and styles that represent the area's development during the nineteenth and twentieth centuries. Additionally, buildings that have no recognizable style or have undergone significant renovations are identified as Vernacular or "no style." Each form and style is summarized below.

4.1.1 Cape Cod

The Cape Cod style first gained widespread popularity in New England in the late eighteenth century. The basic eighteenth-century form remained in consistent use into the mid-nineteenth century. Cape Cod-style homes are typically modestly sized, one-and-a-half stories, and covered by a side-gabled roof with or without dormers (**Figure 6**). A central masonry chimney heats the building's small interior space. The Cape Cod style emphasizes symmetry through rectangular plans, central entrances, and double fenestration. Cape Cod homes can be categorized as half, three-quarter, or full Cape, depending on a floorplan's size. Exterior walls are typically clad with wooden shingles or wooden siding. The Cape Cod style gained renewed popularity in the 1940s. Developers created several small suburban houses meant for post-World War II families. Many variations were inspired by the earlier Cape Cod and Colonial Revival houses (Baker 1994).

Characteristics of the Cape Cod style include the following:

- Symmetry;
- Rectangular plans;
- Central entrances and double fenestration;
- Side-gabled roofs with steep slopes; and
- Minimal exterior ornamentation (McAlester 2013).



Figure 6. View of 325 Bolt Hill Road, an example of the Cape Cod style.

4.1.2 Colonial Revival

The Colonial Revival style was one of the most popular architectural styles in the United States in the late nineteenth to mid-twentieth centuries (**Figure 7**). In the aftermath of the Civil War, the United States sought a unified national identity. The style referenced buildings with patriotic, early American associations, including Independence Hall, Washington's Headquarters at Newburgh, and Mount Vernon (Rhoads 1976). The American Centennial Exposition of 1876 in Philadelphia sparked interest in the nation's colonial heritage. The 1893 World's Columbian Exposition in Chicago further promoted Classical Revival and Colonial Revival styles (Brandt 2009).

Characteristics of the Colonial Revival style include the following:

- Strict symmetry;
- Central entry, sometimes with a pedimented frontispiece supported by pilasters or slim columns;
- Palladian windows or paired double-hung sash windows; and
- Classical details (McAlester 2013).



Figure 7. View of 1019 State Road, an example of the Colonial Revival style.

4.1.3 Minimal Traditional

The Minimal Traditional architectural style is a simple style that originated during the years of the Great Depression and continued into the post-World War II era (McAlester 2013). Minimal Traditional houses are styled with minimal decoration/ornamentation, are small, and have a simple rectilinear footprint (**Figure 8**). Roofs are typically side-gabled with a cross gable at the entryway and have little to no overhang of the gables and eaves.

Characteristics of the Minimal Traditional style include the following:

- Concrete foundations;
- Minimal ornamentation and decoration;
- Side-gable roof with entrances under a cross gable, sometimes with an integrated porch entryway;
- Sash windows with shutters (functional and non-functional);
- Garages are typically free-standing outbuildings (MHPC 2008).



Figure 8. View of 226 Bolt Hill Road, an example of the Minimal Traditional style.

4.1.4 Neo-Colonial

The Neo-Colonial architectural style is inspired by Colonial architecture and informal representations of the Colonial style (**Figure 9**). This style incorporates both older stylistic elements (e.g., small light sash, garrison overhangs, and shutters) and contemporary trends such as contrasting siding materials, bay windows, and garages (MHPC 2008). Neo-Colonial buildings are typically two stories, have side-gabled roofs, and have garrison-type features defined by overhanging second stories with contrasting siding materials. Most are three-bays wide with centrally located entryways.

Characteristics of the Neo-Colonial style include the following:

- Concrete foundations;
- Moderately pitched side-gable roofs with overhanging eaves, closed soffits, and asphalt shingles;
- Clapboard, wooden shingle, or brick veneer siding with changes in cladding materials to articulate stories;
- Small garages made to minimize visual impact (MHPC 2008).



Figure 9. View of 1048 State Road, an example of the Neo-Colonial style.

4.1.5 Ranch

The evolution of the Ranch style had multiple centers: the Chicago area, inspired by the Prairie Houses of Frank Lloyd Wright; the American southwest, inspired by working ranches; and California, where rapid early-twentieth-century growth necessitated Vernacular development (**Figure 10**). In the 1930s, Californian architects Cliff May, H. Roy Kelley, William Wurster, and others adapted traditional southwestern ranches, haciendas, and Spanish Colonial Revival styles into a suburban plan (NPS 2002:66). The initial popularity of the Ranch style can be attributed to its affordability and its references to the culture of the American west (Hubka 1995). Ease of construction furthered the style's popularity after 1945, when families relocated from city centers to new suburban developments (Salant 2006). The Ranch style was most prevalent in the United States between 1940 and 1970 (Salant 2006). Exterior materials of early Ranch homes focused on natural material and often included adobe, stone, wood, and brick (NPS 2002:66). Concrete block, concrete stucco, and other materials were also used later in the twentieth century.

Characteristics of the Ranch style often include the following:

- Single story;
- Emphasis on horizontality;
- Low-pitched roofs with deep set eaves;
- Rectangular, L-shaped, or U-shaped plan;
- Attached garages;
- Modest stylistic details; and
- Picture windows (McAlester 2013).



Figure 10. View of 322 Bolt Hill Road, an example of the Ranch style.

4.1.6 Split Level

The Split Level is an architectural form that was popular from the mid-1930s to the 1970s due to its unique approach to the arrangement of living areas. This style has three or more levels that are separated by partial staircases (**Figure 11**). Typically, the lower level houses the garage and family room, the middle level has a living area, and the upper level contains sleeping rooms (MHPC 2008). The Split Level can be further differentiated by how it achieves this separation. The Tri-Level Split, which has three distinct levels separated by partial staircases, and the Bi-Level Split, which has two distinct levels for living quarters and an entry level staggered in between, became two of the most common types of Split Level homes (McAlester 2013). The staggered arrangement allowed for the maximization of sloped land and was popular in the north for its compact nature. As a form, the Split Level can take on multiple styles. However, Ranch Split Level homes are among the most common (McAlester 2013).

Characteristics of the Split Level style include the following:

- Multilevel, staggered living spaces;
- Low-pitched roof with deep-set eaves;
- Rectangular or L-shaped plan;
- Asymmetry;
- Integrated garage; and
- Minimal decoration.



Figure 11. View of 235 Bolt Hill Road, an example of the Split Level style.

4.1.7 Vernacular or “No Style”

Vernacular houses are either so simple they lack enough detail to fit an architectural style or combine elements from so many styles the resulting house cannot be categorized (MHPC 2008). The exterior ornamentation is typically minimal (**Figure 12**). Vernacular buildings utilize a variety of construction methods, including wooden frame, reinforced concrete, or concrete-block masonry. Buildings typically possess simple rectangular or square plans and are covered by simple gabled roofs. A building’s original, simple geometric plan will commonly expand over time through additions as an occupant’s needs change. Exterior building materials, such as wood lap siding and sash windows, are commonly replaced throughout a building’s history during general maintenance or storm repair. Similarly, structures with no style are often utilitarian, such as culverts and bridges, constructed with available materials and according to local needs.

Characteristics of the Vernacular style or no style often include the following:

- Balloon frame or concrete-block masonry construction;
- Simple geometric plans;
- One to three stories;
- Minimal exterior ornamentation;
- Original siding replaced with vinyl or cement board;
- Designs maximizing use of the environment and site (McAlester 2013).



Figure 12. View of 17 Leach Road, an example of the Vernacular style.

4.2 SURVEY RESULTS AND NRHP EVALUATIONS

4.2.1 224 Bolt Hill Road (MHPC Inventory #143-0354)

224 Bolt Hill Road is southwest of the project site. The building is a one-and-a-half-story Vernacular dwelling built ca. 1830 (**Figure 13** and **Figure 14**). The building is set at-grade on a concrete-block foundation. The main entryway is on the northern facade, and an additional entryway is on the western elevation. The exterior consists of vinyl siding. Fenestration includes double-hung sash windows. The side-gabled roof is covered with asphalt shingles. A deck extends off of the southern elevation. A modern storage shed is adjacent to the building. The building is in good condition.



Figure 13. View of 224 Bolt Hill Road, facing southeast.

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person or people significant in history. The building is an example of a residential building and is not a notable representation of an architectural style. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.



Figure 14. 224 Bolt Hill Road (143-0354) location map.

4.2.2 226 Bolt Hill Road (MHPC Inventory #143-0355)

226 Bolt Hill Road is southwest of the project site. The building is a one-story Minimal Traditional dwelling built ca. 1941 (**Figure 15** and **Figure 16**). The building is set at-grade on a concrete foundation. An enclosed porch entryway (likely a later addition) is on the southeastern facade. The exterior consists of clapboard siding. Fenestration includes double-hung sash windows. The cross-gabled roof is covered with asphalt shingles. A two-bay garage with masonry exterior is northeast of the building. The garage has a single-leaf entry on the northwestern facade, double-hung sash windows, and a side-gabled roof covered with asphalt shingles. The building and garage are in good condition.



Figure 15. View of 226 Bolt Hill Road, facing east (left) and facing south (right).

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person or people significant in history. The building is an example of a residential building and is not a notable representation of the Minimal Traditional style. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.

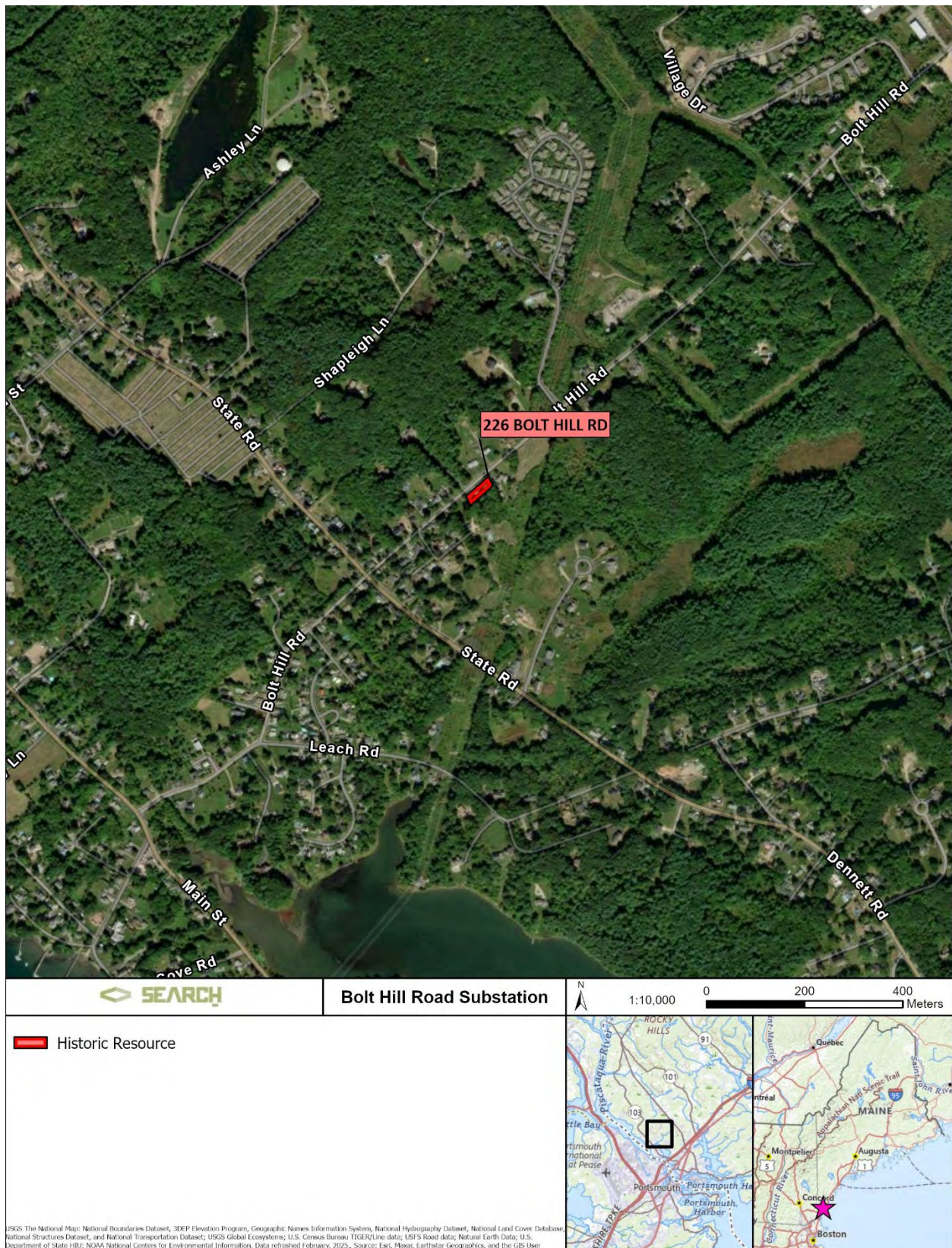


Figure 16. 226 Bolt Hill Road (143-0355) location map.

4.2.3 231 Bolt Hill Road

231 Bolt Hill Road is southwest of the project site. The building is a one-story Split Level dwelling built ca. 1978 (**Figure 17** and **Figure 18**). The building is set on a concrete foundation. The main entryway is on the southeastern facade. The exterior consists of vinyl siding. Fenestration includes double-hung sash windows of varying size. The side-gabled roof is covered with asphalt shingles. A two-bay, under-house garage is on the western portion of the building. A raised deck extends off the northwestern elevation. The building is in excellent condition.



Figure 17. View of 231 Bolt Hill Road, facing northwest (left) and facing north (right).

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person or people significant in history. The building is an example of a residential building and is not a notable representation of the Split Level style. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.

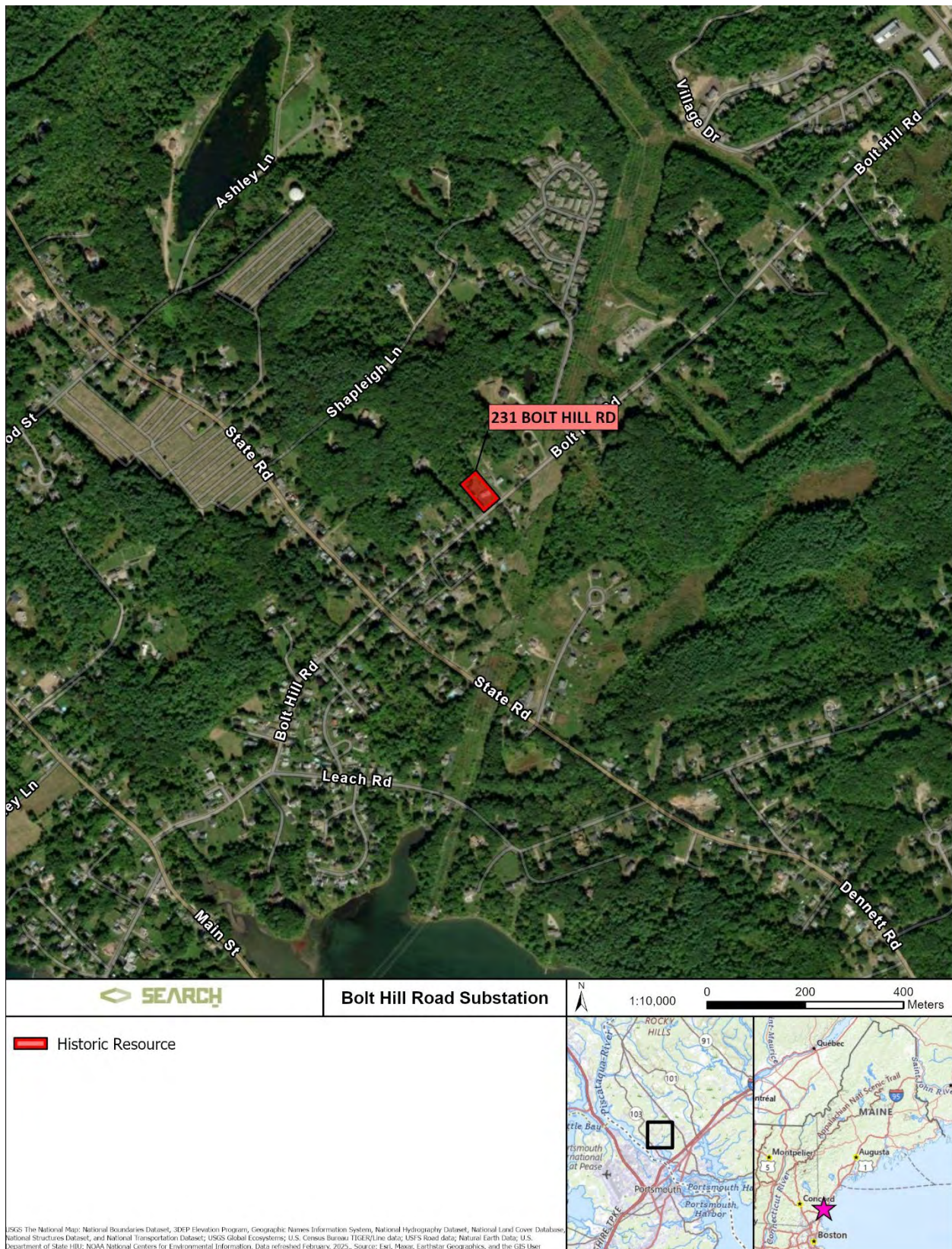


Figure 18. 231 Bolt Hill Road location map.

4.2.4 235 Bolt Hill Road

235 Bolt Hill Road is west of the project site. The building is a one-story Split Level dwelling built ca. 1971 (**Figure 19** and **Figure 20**). The building is set on a concrete foundation. The main entryway is on the southeastern facade. The exterior consists of vinyl siding. Fenestration includes double-hung sash windows and casement windows of varying size. The side-gabled roof is covered with asphalt shingles. A single-bay, under-house garage is on the northwestern elevation of the building. A raised deck extends off the northwestern elevation. A one-story, two-bay detached garage with a gabled roof and vinyl siding is adjacent to the building. The building and detached garage are in good condition.



Figure 19. View of 235 Bolt Hill Road, facing northwest (left) and facing north (right).

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person or people significant in history. The building is an example of a residential building and is not a notable representation of the Split Level style. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.

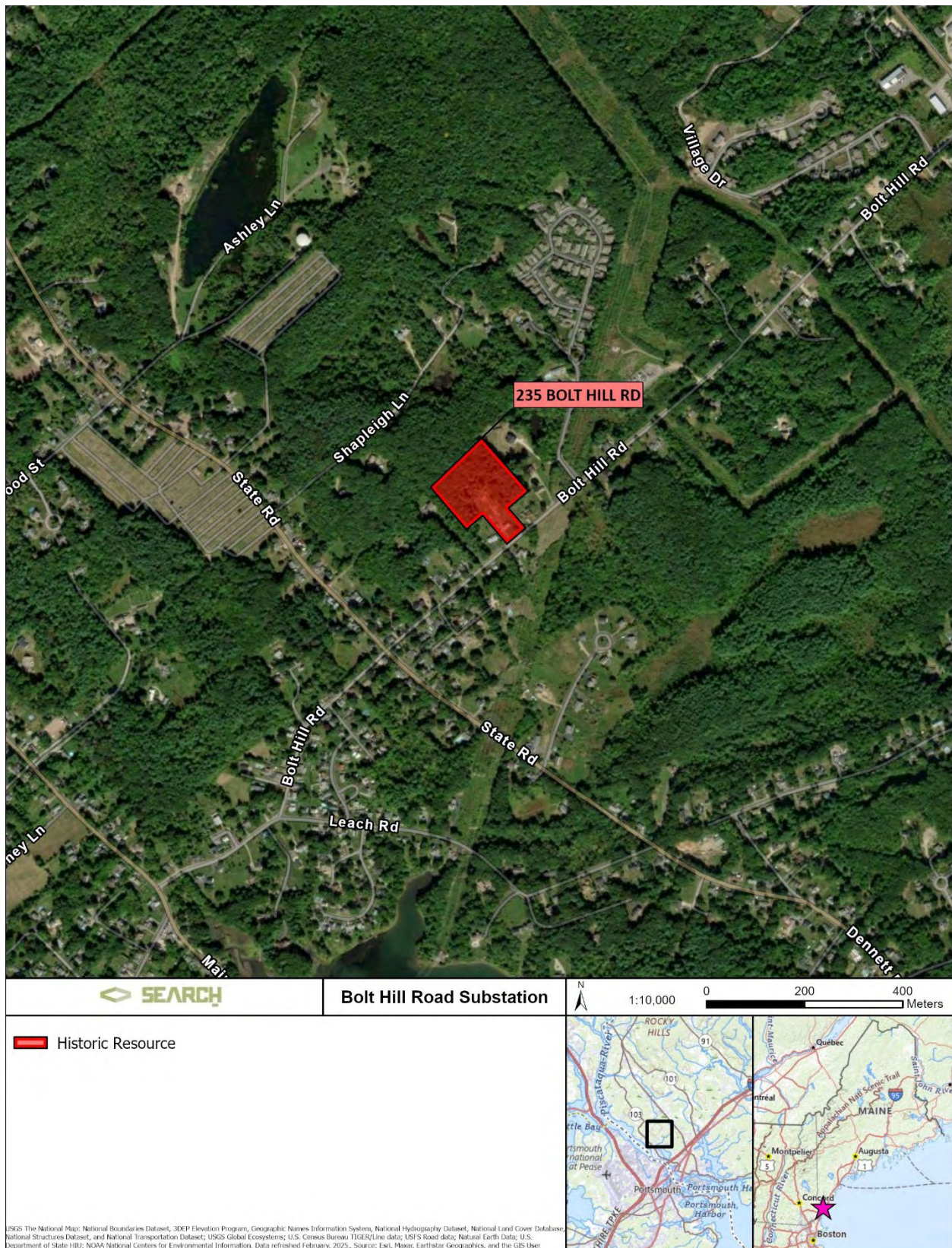


Figure 20. 235 Bolt Hill Road location map.

4.2.5 243 Bolt Hill Road (MHPC Inventory #143-0356)

243 Bolt Hill Road is west of the project site. The building is a one-and-a-half-story Cape Cod dwelling built ca. 1905 (**Figure 21** and **Figure 22**). The building is set at-grade on a concrete-block foundation. The main entryway is on the southeastern facade; an enclosed secondary entryway is at the rear of the southwestern elevation. The exterior consists of vinyl siding. Fenestration includes double-hung sash windows. The side-gabled roof is covered with asphalt shingles. A single-bay garage with wooden paneling is northwest of the building. The garage has a front-gabled roof covered with asphalt shingles. The building and garage are in good condition.



Figure 21. View of 243 Bolt Hill Road, facing northwest (left) and facing north (right).

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person or people significant in history. The building is an example of a residential building and is not a notable representation of the Cape Cod style. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.



Figure 22. 243 Bolt Hill Road (143-0356) location map.

4.2.6 280 Bolt Hill Road

280 Bolt Hill Road is north of the project site. The building is a one-story Vernacular dwelling built ca. 1977 (**Figure 23** and **Figure 24**). The building is set on a concrete foundation. The main entryway is on the northwestern facade beneath a gabled porch with Y-bracketed support columns. The exterior consists of composite siding. Fenestration includes double-hung sash windows with decorative shutters. The cross-gabled roof is covered with asphalt shingles. A raised deck extends off the southeastern elevation. A two-bay attached garage is on the northeastern portion of the building. The building is in good condition.



Figure 23. View of 280 Bolt Hill Road, facing southeast (left) and facing south (right).

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person or people significant in history. The building is an example of a residential building and is not a notable representation of an architectural style. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.



Figure 24. 280 Bolt Hill Road location map.

4.2.7 294 Bolt Hill Road

294 Bolt Hill Road is north of the project site. The building is a one-story Ranch dwelling built ca. 1955 (**Figure 25** and **Figure 26**). The building is set at-grade on a concrete foundation. The main entryway is on the northwestern facade; a secondary entry is on the southwestern elevation, accessed by a wooden deck. The exterior consists of composite siding. Fenestration includes double-hung sash and casement windows. The side-gabled roof is covered with asphalt shingles. A two-bay, one-story detached garage with a loft is adjacent to the building. The building and garage are in good condition.



Figure 25. View of 294 Bolt Hill Road, facing southeast (left) and facing east (right).

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person significant in history. The building is an example of a residential building and is not a notable representation of the Ranch style. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.

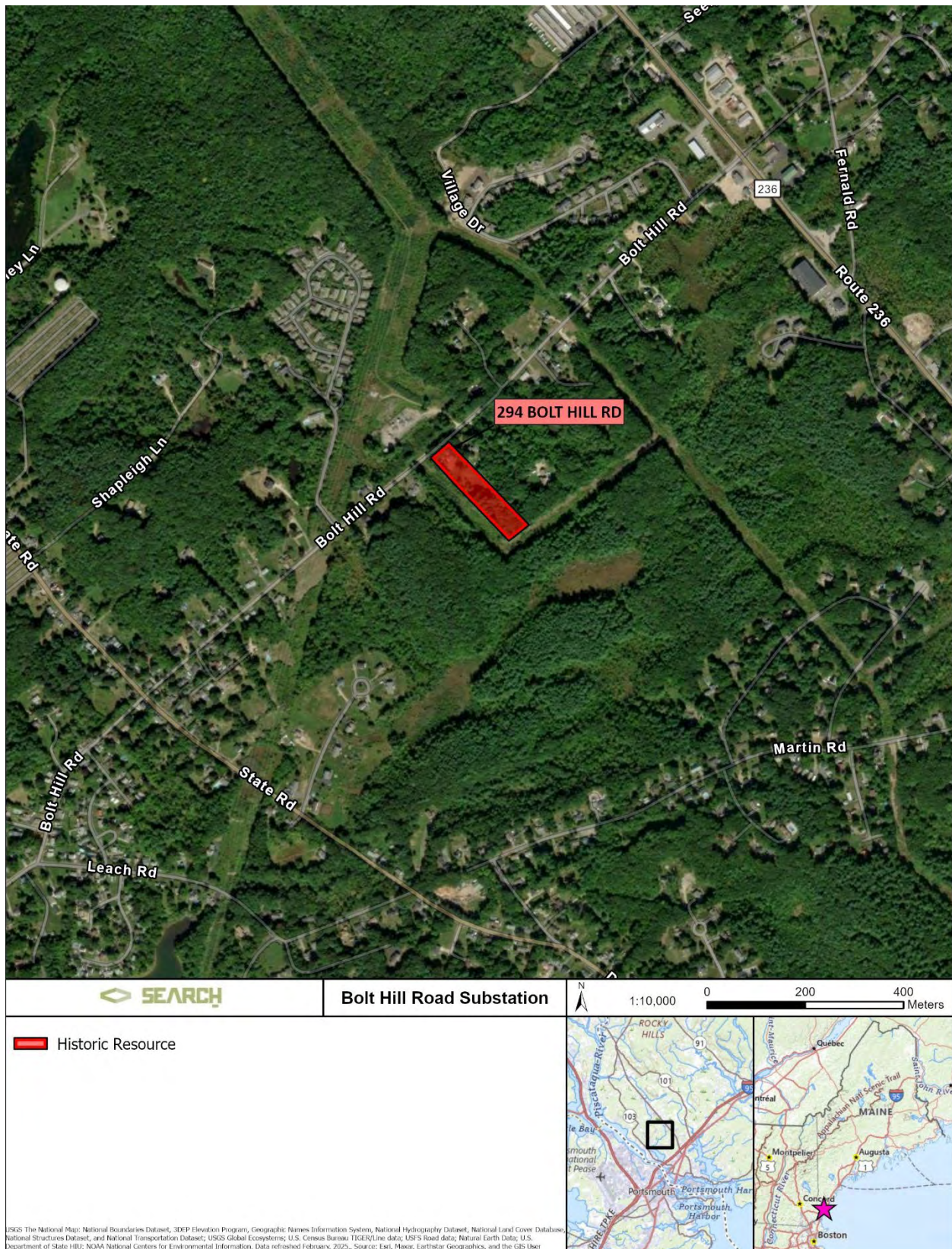


Figure 26. 294 Bolt Hill Road location map.

4.2.8 322 Bolt Hill Road

322 Bolt Hill Road is north of the project site. The building is a one-story Ranch dwelling built ca. 1963 (**Figure 27** and **Figure 28**). The building is set on a concrete foundation. The main entryway is on the northwestern facade; a secondary entry is on the northeastern elevation, accessed by a raised wooden deck. The exterior consists of vinyl siding. Fenestration includes double-hung sash and bay windows. The side-gabled roof is covered with asphalt shingles. A single-bay, under-house garage is on the southeastern elevation beneath an elevated wooden deck. A two-bay, one-story detached garage adjacent to the building was constructed sometime after 1986. The building and garage are in good condition.



Figure 27. View of 322 Bolt Hill Road, facing southeast (left) and facing south (right).

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person or people significant in history. The building is an example of a residential building and is not a notable representation of the Ranch style. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.

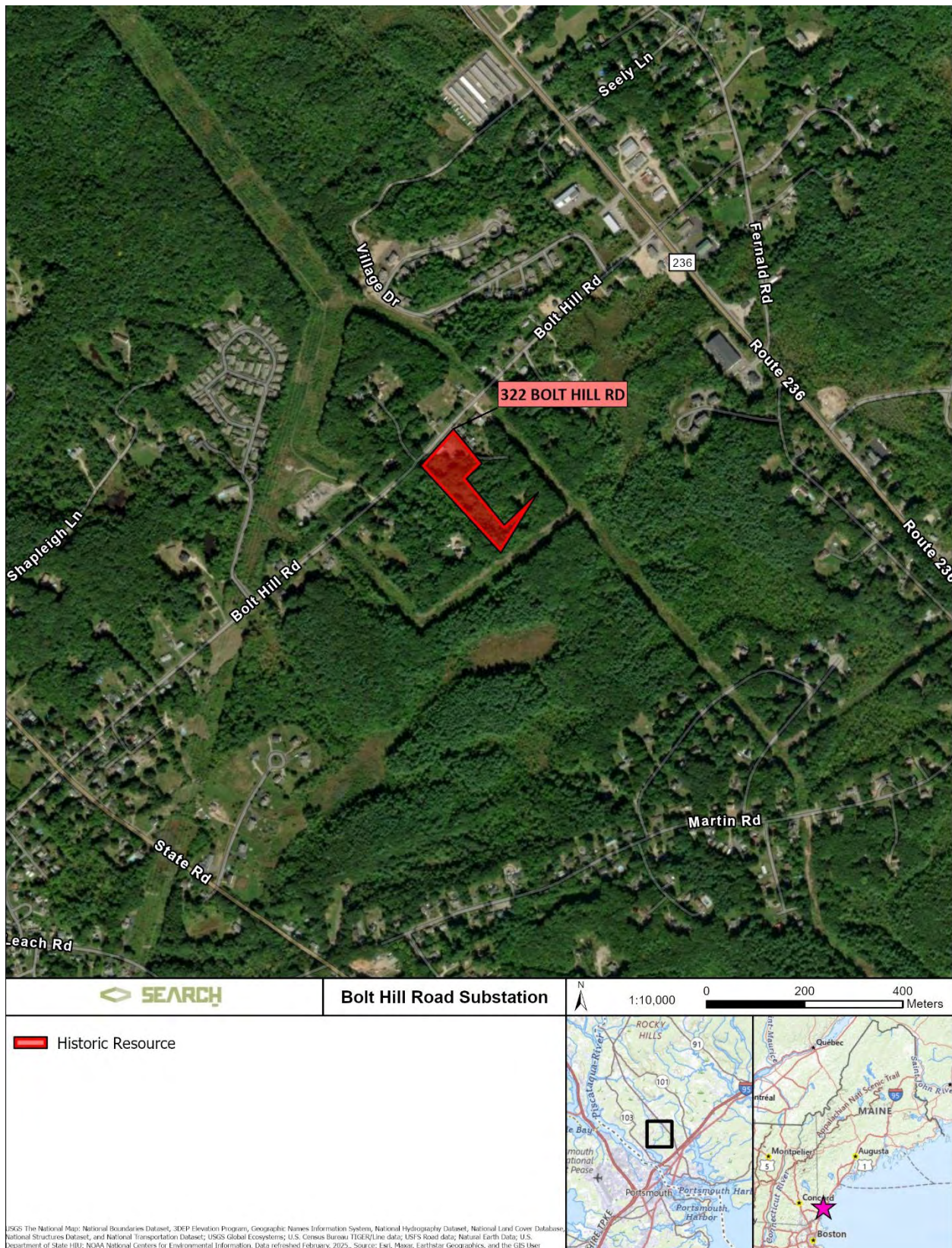


Figure 28. 322 Bolt Hill Road location map.

4.2.9 325 Bolt Hill Road (MHPC Inventory #143-0357)

325 Bolt Hill Road is north of the project site. The building is a one-story Cape Cod dwelling built ca. 1840 (**Figure 29** and **Figure 30**). The building is set at-grade on a stone foundation. The main entryway is located centrally on the southeastern facade and consists of a vertical, wooden-slat door with gate-style hinges. A secondary entryway is on the southwestern elevation. The exterior consists of vinyl siding. Fenestration includes double-hung sash windows. The side-gabled roof is covered with asphalt shingles. The building is in good condition.



Figure 29. View of 325 Bolt Hill Road, facing northwest (left) and facing north (right).

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person or people significant in history. The building is an example of a residential building and is not a notable representation of the Cape Cod style. Modern renovations, such as the installation of vinyl siding, detract from its architectural distinction. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.



Figure 30. 325 Bolt Hill Road (143-0357) location map.

4.2.10 1 Willow Lane

1 Willow Lane is northeast of the project site. The building is a one-story Minimal Traditional dwelling built ca. 1954 (**Figure 31** and **Figure 32**). The building is set on a concrete-block foundation. The main entryway is on the southwestern facade. The exterior consists of wooden shingles. Fenestration includes double-hung sash and set frame windows. The side-gabled roof is covered with asphalt shingles. A one-and-a-half story addition with a vertical, wooden panel exterior and gabled roof was added to the southeastern portion of the building sometime between 2011 and 2017. The building is in good condition.



Figure 31. View of 1 Willow Lane, facing east (left) and facing north (right).

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person or people significant in history. The building is an example of a residential building and is not a notable representation of the Ranch style. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.



Figure 32. 1 Willow Lane location map

4.2.11 8 Hickory Lane

8 Hickory Lane is southwest of the project site. The building is a one-story Vernacular dwelling built ca. 1953 (**Figure 33** and **Figure 34**). The building is set on a concrete-block foundation. The main entryway is on the northeastern facade within an enclosed front porch. A secondary entrance is on the southwestern elevation and accessed by a raised wooden deck. The exterior consists of wooden shingles. Fenestration includes double-hung sash and set frame windows. The cross-gabled roof is covered with asphalt shingles. A one-bay, under-house garage is on the southeastern elevation. The building is in good condition.



Figure 33. View of 8 Hickory Lane, facing southeast (left) and facing south (right).

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person or people significant in history. The building is an example of a Vernacular residential building and is not a notable representation of an architectural style. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.



Figure 34. 8 Hickory Lane location map.

4.2.12 1048 State Road (MHPC Inventory #143-0347)

1048 State Road is southwest of the project site. The building is a two-story Neo-Colonial dwelling built ca. 1942 (**Figure 35** and **Figure 36**). The building is set on a concrete foundation with a single-bay, under-house garage. The main entryway is on the southeastern facade and accentuated with pilasters. A secondary entryway is on the northeastern elevation via an elevated wooden deck. The exterior consists of wooden shingles. Fenestration includes uniformly spaced, double-hung sash windows, and an octagonal vent window centrally located on the second story of the southeastern facade. The side-gabled roof is covered with asphalt shingles. Brick chimneys are on the northeastern and southwestern elevations. The building is in good condition.



Figure 35. View of 1048 State Road, facing northwest.

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person or people significant in history. The building is an example of a residential building and is not a notable representation of the Neo-Colonial style. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.

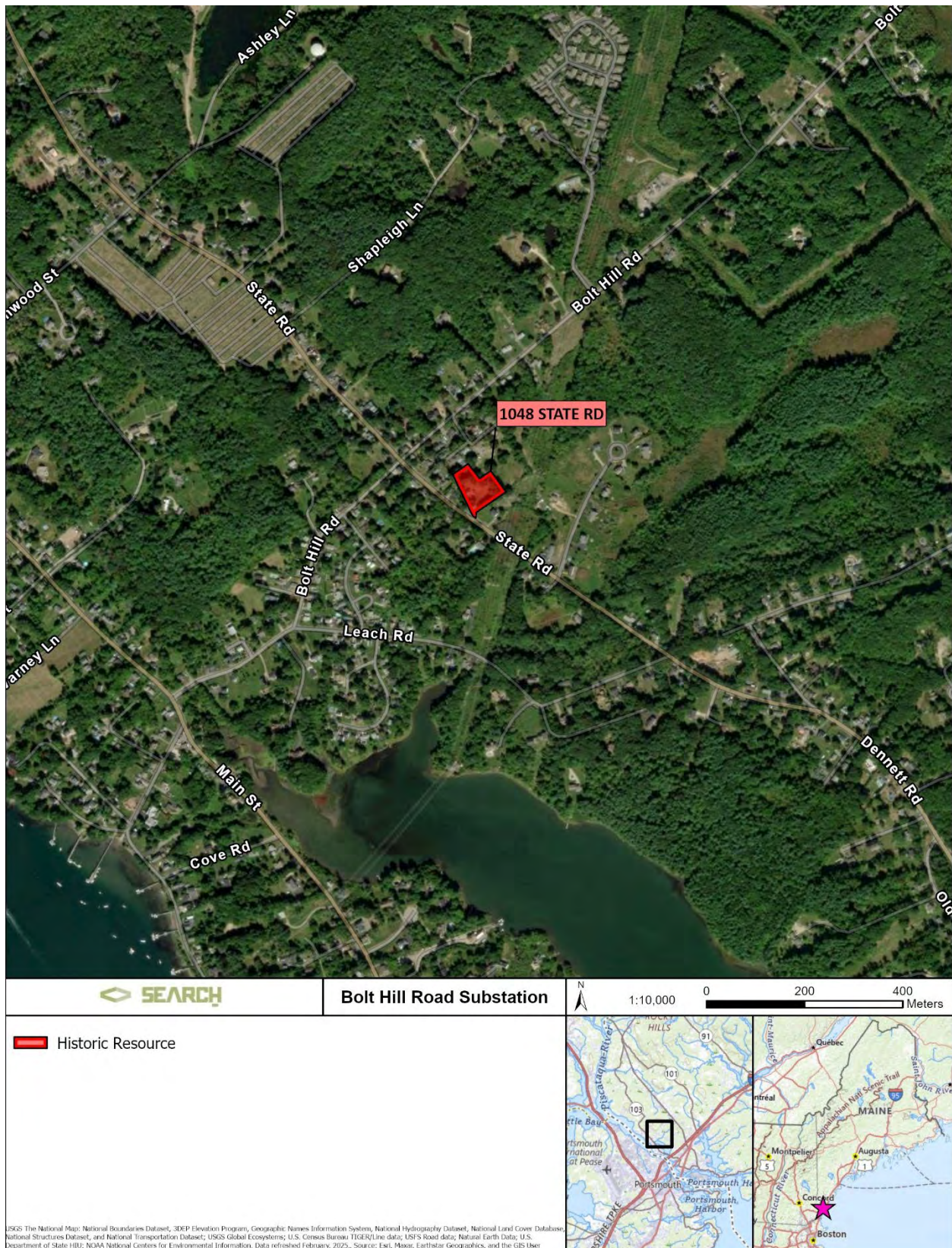


Figure 36. 1048 State Road (143-0347) location map.

4.2.13 1039 State Road

1039 State Road is southwest of the project site. The building is a one-story Vernacular dwelling built ca. 1967 (**Figure 37** and **Figure 38**). The building is set on a concrete foundation. The main entryway is on the northeastern facade within a covered front entryway. The exterior consists of vinyl siding. Fenestration includes double-hung sash windows and a glass-block bay window. The cross-gabled roof is covered with asphalt shingles. A two-bay garage is on the northern portion of the northeastern facade. It was enclosed sometime between 2017 and 2019 and incorporated into the residence. Its former door now consists of an exterior wall with double-hung sash windows. A raised porch is on the southwestern elevation. The building is in good condition.



Figure 37. View of 1039 State Road, facing southwest (left) and facing south (right).

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person or people significant in history. The building is an example of a Vernacular residential building and is not a notable representation of an architectural style. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.



Figure 38. 1039 State Road location map.

4.2.14 1019 State Road (MHPC Inventory #143-0349)

1019 State Road is southwest of the project site. The building is a two-story Colonial Revival dwelling built ca. 1858 (**Figure 39** and **Figure 40**). The building is set at-grade on a granite foundation. The main entryway is on the northeastern facade, accentuated with a decorative straight pediment with inset panel and vertical sidelights, and supported by pilasters. A secondary entryway is on the southeastern elevation with an extended pediment and pilasters. The exterior consists of vinyl siding. Fenestration includes uniformly spaced double-hung sash windows with decorative straight pediments, shutters, and a bay window on southeastern elevation of the first floor. The side-gabled roof is covered with asphalt shingles. Brick chimneys extend through the ridge of the roof; one is on the southeastern portion, and the other is on the northwestern portion. An enclosed porch is on the southwestern elevation. An attached one-story garage with a loft is on the southern corner of the building. The garage has two bays, a single-leaf entryway on the northeastern facade, and a front-gabled roof covered with asphalt shingles. Two double-hung windows are on the upper loft portion of the northeastern facade. The building and garage are in good condition.



Figure 39. View of 1019 State Road, facing southwest (left) and facing west (right).

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person or people significant in history. The building is an example of a residential building and is not a notable representation of the Colonial Revival style. Modern renovations, including the installation of vinyl siding, detract from its architectural distinction. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.



Figure 40. 1019 State Road (143-0349) location map.

4.2.15 13 Leach Road

13 Leach Road is south of the project site. The building is a one-story Ranch Vernacular dwelling built ca. 1958 (**Figure 41** and **Figure 42**). The building is set on a concrete foundation. The main entryway is on the northern facade. The exterior consists of vinyl siding. Fenestration includes double-hung sash and bay windows. The seamed metal roof is cross-gabled. A one-story, two-bay, attached, barn-style garage with loft is on the southern elevation. The attached garage has vinyl siding and a gambrel seam metal roof. The building is in good condition.



Figure 41. View of 13 Leach Road, facing southeast (left) and facing south (right).

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person or people significant in history. The building is an example of a Vernacular Ranch residential building and is not a notable representation of the Ranch style. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.



Figure 42. 13 Leach Road location map.

4.2.16 17 Leach Road

17 Leach Road is south of the project site. The building is a one-story Vernacular dwelling built ca. 1948 (**Figure 43** and **Figure 44**). The building is set on a concrete-block foundation. The main entryway is on the northern facade within a covered, raised, front-porch entryway. The exterior consists of vinyl siding and masonry elements. Fenestration includes double-hung sash windows with decorative shutters and fixed-frame windows. The cross-gabled roof is covered with asphalt shingles. A one-story, two-bay, attached garage is on the northern facade at a lower elevation. The attached garage has a single-leaf door entry between the bays, vinyl siding, and a front-gabled roof. The building appears to have undergone alterations and additions sometime between 1986 and 1992. The building is in good condition.



Figure 43. View of 17 Leach Road, facing southeast (left) and facing south (right).

Background research did not determine whether the building is associated with events that have made a significant contribution to the broad patterns of our history. SEARCH recommends the building is not significant under Criterion A. Background research did not identify the building's architect or builder. SEARCH recommends the building is not significant under Criterion B because it lacks association with a person or people significant in history. The building is an example of a Vernacular residential building and is not a notable representation of an architectural style. SEARCH recommends the building is not significant under Criterion C because it lacks architectural distinction, is not the work of a master, and does not possess high artistic values. SEARCH recommends the building is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, SEARCH recommends the building not eligible for NRHP listing.

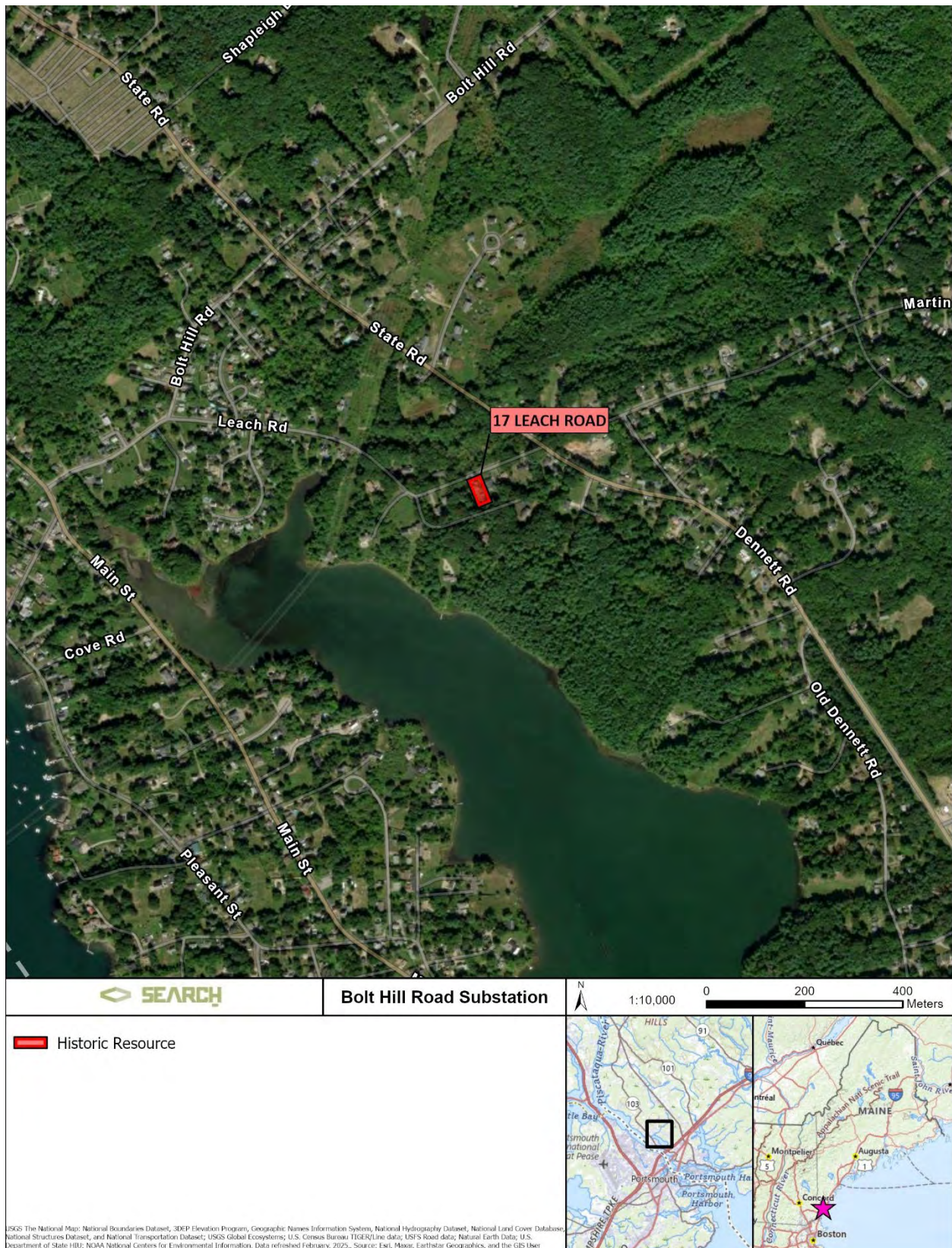


Figure 44. 17 Leach Road location map.

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5 CONCLUSIONS AND RECOMMENDATIONS

SEARCH conducted an intensive architectural history survey for Flycatcher LLC on behalf of CMP for the project site and a 0.5-mile (230-hectare / 502-acre) survey area around the project site in Eliot, York County, Maine. CMP proposes to remove an existing substation on the north side of Bolt Hill Road and, as part of CMP's capital project program, build a new 115/34.5/12kV substation on a nearby parcel along the south side of Bolt Hill Road to increase the reliability of the CMP transmission and distribution system. The purpose of the survey was to identify and provide NRHP recommendations for architectural resources within the project site and survey area.

The architectural history survey resulted in the identification of 16 newly evaluated historic resources. SEARCH recommends the 16 identified historic resources not eligible for NRHP listing. SEARCH entered the 16 identified historic resources into the MHPC CARMA database. Architectural Property Identification Forms are included in **Appendix A**. SEARCH recommends no further architectural history work within the project site or survey area and that use of the area to support activities related to the Bolt Hill Substation will have no effect on historic resources.

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