



The State of New Hampshire  
**Department of Environmental Services**

Robert R. Scott, Commissioner



**NHDES LAND RESOURCES MANAGEMENT PROGRAM  
MEETING NOTES**

**DATE:** January 15, 2020

**LOCATION:** NHDES, 29 Hazen Dr, Concord.

**RE:** Eversource Vegetation Maintenance

**ATTENDEES:** Amy Lamb, Sabrina Stanwood, Tracy Tarr, Kurt Nelson, Bill Hayes, Jeni Menendez, Michelle Ford, Ian Farlory, Rick Sullivan, Scott Poitras, Jared Meyer, Ryan Duquette, Craig Rennie, Dave Price, Seta Detzel, Melissa Doperalski, Kim Tuttle

**MEETING NOTES:**

- Eversource presented on methods and BMP's they commonly use for conducting routine vegetation maintenance in their ROW's.
- Vegetation maintenance is conducted for the purpose of maintain safety and reliability of facilities and includes:
  - Approximately 6,000 acres of brush maintenance annually.
  - Approximately 300 miles of tree side trimming.
  - As needed hazard tree removals.
  - Right of way reclamation.
  - Emergent work.
- NHB and Fish & Game will meet and coordinate further on addressing concerns pertaining to sensitive species and habitats. A general timeline will be established between all parties to ensure proposed work is reviewed in a timely manner.

**NHDES RECOMMENDATIONS:**

- Avoid wetlands and Priority Resource Areas (PRA) to the greatest extent practicable.
- Utilize appropriate BMP's to minimize wetland impacts.
- The project should meet the applicable requirements of Env-Wt 521.
- Obtain LAC sign off for SPNs where impacts will occur within a designated river corridor.

242



Known for excellence.  
Built on trust.

- GEOTECHNICAL
- ENVIRONMENTAL
- ECOLOGICAL
- WATER
- CONSTRUCTION MANAGEMENT

5 Commerce Park North  
Suite 201  
Bedford, NH 03110  
T: 603.623.3600  
F: 603.624.9463  
www.gza.com

March 11, 2020  
File No. 04.0190999.12

NHDES Wetlands Bureau  
29 Hazen Drive, P.O. Box 95  
Concord, New Hampshire 03302



Re: Statutory Permit-by-Notification (SPN)  
M127 Transmission Line Right-of-Way (ROW)  
New London, New Hampshire

Dear Wetlands Inspector:

This letter transmits a Statutory Permit-by-Notification (SPN) application on behalf of Public Service of New Hampshire doing business as Eversource Energy (Eversource), for proposed vegetation maintenance work and utility inspections located within the existing and maintained M127 Transmission Line ROW. GZA GeoEnvironmental, Inc. (GZA) has been retained by Eversource Energy to pursue state permitting for utility inspections and circuit brush maintenance of non-compliant woody vegetation within the M127 Transmission Line ROW which crosses through portions of Sunapee, Springfield, New London, Wilmot, Andover, and Franklin, New Hampshire.

Pursuant to RSA 482-A:3; XV(d), Eversource has submitted a one-time annual fee of \$400 per town, in order to cover Notifications during 2020.

Thank you for your review and meeting with the project team for a pre-notification meeting on January 15, 2020. Please feel free to contact Tracy Tarr at (603) 232-8739 if you have any questions or comments.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Tracy Tarr, CWS, CWB, CESSWI  
Associate Principal

TLT

Attachments: Wetlands Statutory Permit-by-Notification (SPN)  
Site Locus  
Annotated Aerial Plan

cc: Jared Meyer, Eversource  
Kurt Nelson, Eversource  
Town of New London, Town Clerk



UTILITY MAINTENANCE ACTIVITY  
 STATUTORY PERMIT-BY-NOTIFICATION (SPN)  
 Water Division/Land Resources Management  
 Wetlands Bureau



Check the Status of your Notification

RSA/Rule: RSA 482-A / Env-Wt 308.04(d); Env-Wt 521

NAME OF UTILITY PROVIDER: Eversource Energy

		<input checked="" type="checkbox"/> SPN complete and project as described conforms with all applicable requirements.
		<input type="checkbox"/> SPN incomplete and/or project as described does not conform with all applicable requirements.
File No.: <u>2020-00242</u>		Reviewer's Initials: <u>MAD</u>
Check No.: <u>274779</u>		Amount: <u>400.00</u>

Terms in **bold font** are defined in the attached "Definition of Terms" page.

**SECTION 1 - PROJECT CRITERIA**

- a. Does the project meet all applicable Best Management Practices for Utility Maintenance (Utility BMPs) and have temporary impacts associated with inspection, maintenance, repair, replacement, or removal of existing utility facilities only within existing rights-of-way (Env-Wt 521.06(a)(1))?  Yes  No
- b. If there will be impacts to any **Priority Resource Area (PRA)**, other than **designated prime wetlands** and their **duly-established 100-foot buffers**, will the project follow recommendations provided by Natural Heritage Bureau (NHB), New Hampshire Fish and Game (NHF&G), and the Department in a pre-notification review meeting (Env-Wt 521.06(a)(4))?  Yes  No  N/A

If you answered "No" or "N/A" to question 1a and/or 1b, you cannot use this form and must file a Standard Permit Application (RSA 482-A:3, XV). If you answered "Yes" to question 1a, proceed to question 1b.

- c. Will the project include establishing new access roads, installing permanent stream or **wetland** crossings, constructing new utility corridors or rights of way (ROW), or establishing new utility assets within existing corridors or rights of way (Env-Wt 521.06(a)(2))?  Yes  No
- d. Will the project include any permanent fill in navigable waters (Env-Wt 521.06(a)(3))?  Yes  No
- e. Will timber mats be:
1. Used in a tidal **marsh**; or
  2. Used in an area other than a tidal marsh if they are:
    - Not necessary to conduct activities;
    - Not removed as soon as work is completed; or
    - In place longer than one growing season (Env-Wt 521.06(a)(5))?
- f. Will the project cause permanent conversion of more than 3,000 SF of forested **wetlands** to emergent or **scrub-shrub wetlands** with or without temporary fill (Env-Wt 521.06(a)(6))?  Yes  No

If you answered "Yes" to questions 1c, d, e, and/or f, you cannot use this form and must file a Standard Permit Application (RSA 482-A:3, XV). If you answered "No" to all of the questions 1b-1f, continue to Section 3.

**SECTION 2 - PROPOSED PROJECT DESCRIPTION (RSA 482-A:3, XV(b)(2))**

Please provide a brief written description of the nature of the work to be conducted.

In order to maintain the safety and reliability of Eversource's electric transmission and distribution system, work includes cyclical brush maintenance of non-compliant woody vegetation with track-mounted mowing equipment. Maintenance tree trimming along the utility right-of-way corridor include using a rubber tired skidder-mounted bucket vehicle and/or manual tree trimming without wheeled equipment. In addition, Eversource will be completing visual inspections of infrastructure within the ROWs.

As discussed at the pre-notification meeting on January 15, 2020, this work does not include construction of infrastructure ( e.g. utility poles) or roads. As a result access roads are not depicted. Access will typically occur along existing off-road vehicle trails in uplands to the greatest extent practicable. Work will be conducted according to the Best Management Practices Manual for Utility Management in and Adjacent to Wetlands and Waterbodies of New Hampshire (2019). Work is monitored by Eversource arborists and will be conducted to avoid/limit machine access in PRAs where feasible.

**SECTION 3 - LOCATION OF PROPOSED ACTIVITY (RSA 482-A:3, XV(b)(3))**

Town/City: New London

**SECTION 4 - PROJECT TYPE (RSA 482-A:3, XV(b)(2))**

Check all that apply:

- |  |   |
|--|---|
| <input type="checkbox"/> Equipment repair and maintenance in ROW   | <input type="checkbox"/> Natural Gas Lines                |
| <input type="checkbox"/> Overhead Electric Lines   | <input type="checkbox"/> Water Supply Lines               |
| <input type="checkbox"/> Overhead Telephone or Cable Lines   | <input type="checkbox"/> Sewer Lines                      |
| <input checked="" type="checkbox"/> Vegetative maintenance within ROW<br>(If access through private property is needed to reach the ROW, permission from the landowner(s) is required prior to conducting work.) | <input checked="" type="checkbox"/> Other: ROW Inspection |

**SECTION 5 - UTILITY PROVIDER (RSA 482-A:3, XV(b)(1))**

UTILITY PROVIDER/COMPANY NAME: Eversource Energy

AUTHORIZED REPRESENTATIVE LAST NAME, FIRST NAME, M.I.: Meyer, Jared

MAILING ADDRESS: 13 Legends Drive

TOWN/CITY: Hooksett

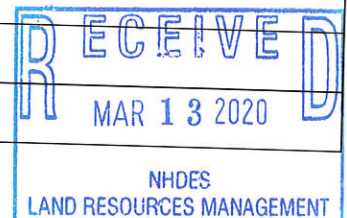
STATE: NH

ZIP CODE: 03106

**SECTION 6 - IMPACTED RESOURCES (RSA 482-A:3, XV(b)(2))**

Check all that apply.

- Temporary Non-Tidal Wetland
- Temporary Intermittent Stream Crossing
- Temporary (2-years maximum) Perennial Stream or River Crossing



**SECTION 7 - ATTACHMENTS (RSA 482-A:3, XV)**

Verify the following attachments are submitted with this form by checking each box below.

- United States Geological Survey (USGS) Topographic Map** (at its original scale 1:24,000 or 1:25,000) with the project location(s) or utility corridor clearly identified (RSA 482-A:3, XV(b)(3)).
- The most recent National Wetland Inventory (NWI) map, **USGS topographic map**, or annotated aerial photograph showing wetland types crossed (optional, but verified for eligibility for an SPN by NHDES). See NHDES Wetland Permit Planning Tool (Env-Wt 406.03(b)(2)c.(5)).
- \$400 non-refundable filing fee per town, per year. Please make check or money order payable to: Treasurer - State of NH (RSA 482-A:3, XV(d)).
- The **DataCheck** identification number and an affirmation that recommendations have been received (Env-Wt 308.05(a)(2)).  
 Natural Heritage Bureau Identification ID: NHB 20 - 186  
*Questions related to completing this process should be directed to the Natural Heritage Bureau.*

**SECTION 8 - REQUIRED CERTIFICATIONS FROM AUTHORIZED UTILITY PROVIDER REPRESENTATIVE**

By initialing each item and signing this application, the authorized representative affirms that (Env-Wt 308.05(b)(2)):

- Initials: JM The project is not located in a PRA, except as provided in Env-Wt 407 and Env-Wt 521 where the applicant has met with the resource agencies (NHB, NHF&G, and NHDES) in a pre-notice meeting.
- Initials: JM All recommendations of NHB and NHF&G have been received. And
- Initials: JM The person responsible for the activity is aware of the limits of the SPN and applicable BMPs for the project, and will adhere to both.

By initialing each item and signing this application, the authorized representative certifies that (Env-Wt 311.11(e)):

- Initials: JM The information submitted on or within this notification is true, complete, and not misleading to the best of the signer's knowledge and belief. And
- Initials: JM The signer understands that:
  - The submission of false, incomplete, or misleading information constitutes grounds for NHDES to:
    1. Deny the application.
    2. Revoke any approval that is granted based on the information. And
    3. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1.
  - The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641. The signature shall constitute authorization for the municipal conservation commission and the Department to inspect the site of the proposed project.

**SECTION 9 - REQUIRED SIGNATURE FROM AUTHORIZED UTILITY PROVIDER REPRESENTATIVE**

AUTHORIZED REPRESENTATIVE SIGNATURE:  
*Jared M. Meyer*

PRINT NAME LEGIBLY:  
Jared Meyer

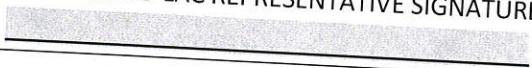




**SECTION 10 - LOCAL RIVER MANAGEMENT ADVISORY COMMITTEE (LAC) SIGNATURE (Env-Wt 308.05)**

If a Utility Maintenance Notification is sought for a project that is within LAC jurisdiction and the Notification has not been signed by a legal representative of the LAC to indicate the right to intervene has been waived by the applicable LAC, NHDES will issue an incomplete letter to the applicant.

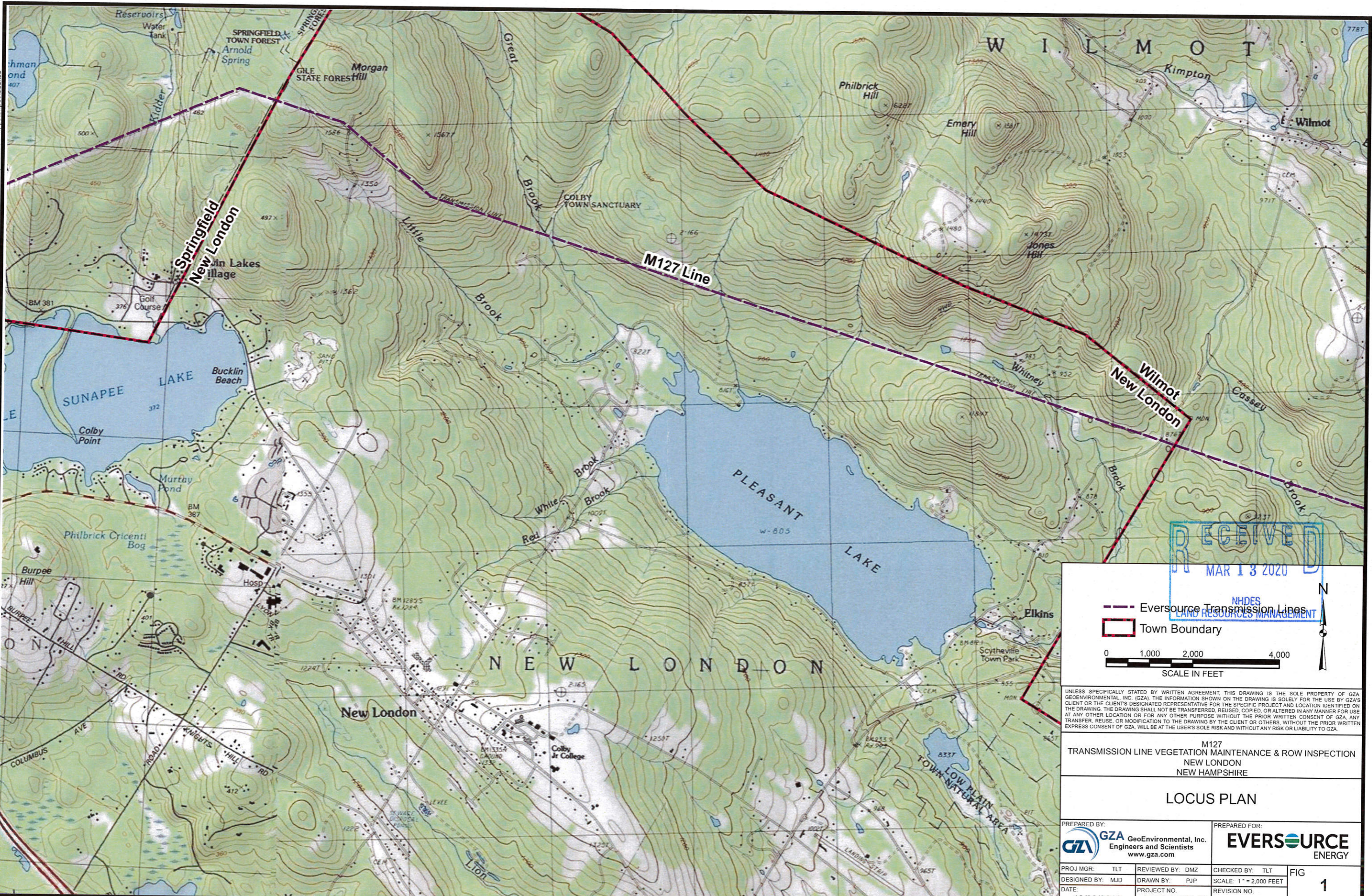
The signature below certifies that the Local River Management Advisory Committee waives its right to intervene per RSA 482-A:11.

N/A This project is *not* within a Designated River Corridor)

AUTHORIZED LAC REPRESENTATIVE SIGNATURE: 	PRINT NAME LEGIBLY: 	DATE: 
---	--	--



© 2019 - GZA GeoEnvironmental, Inc. P:\04\Jobs\0190507\00 Eversource MSA\04\_0190507\_59 2018 TRRP Assessment\_Mapping\Figures-CAD\2020 SP\NL176\_1125\MXD\Belmont Locus 1 of 1.mxd 12/30/2019 2:28:23 PM peter.petkauskas



RECEIVED  
MAR 13 2020  
NHDES  
LAND RESOURCES MANAGEMENT

Legend:  
- - - Eversource Transmission Lines  
 Town Boundary

Scale: 0 1,000 2,000 4,000  
SCALE IN FEET

North Arrow

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEON ENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR THE USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

M127  
TRANSMISSION LINE VEGETATION MAINTENANCE & ROW INSPECTION  
NEW LONDON  
NEW HAMPSHIRE

LOCUS PLAN

PREPARED BY: **GZA** GeoEnvironmental, Inc.  
Engineers and Scientists  
www.gza.com

PREPARED FOR: **EVERSOURCE**  
ENERGY

PROJ MGR: TL	REVIEWED BY: DMZ	CHECKED BY: TLT	FIG
DESIGNED BY: MJD	DRAWN BY: PJP	SCALE: 1" = 2,000 FEET	1
DATE: 12/30/2019	PROJECT NO: 04.0190507.59	REVISION NO:	SHEET NO. 1 OF 1



**UTILITY MAINTENANCE ACTIVITY  
STATUTORY PERMIT-BY-NOTIFICATION (SPN)  
Water Division/Land Resources Management  
Wetlands Bureau**



[Check the Status of your Notification](#)

**RSA/Rule:** RSA 482-A / Env-Wt 308.04(d); Env-Wt 521

**NAME OF UTILITY PROVIDER:** Eversource Energy

		<input checked="" type="checkbox"/> SPN complete and project as described conforms with all applicable requirements.	<input type="checkbox"/> SPN incomplete and/or project as described does not conform with all applicable requirements.
		File No.: 2020-00242	Reviewer's Initials: RAD
		Check No.: 274779	Amount: 400.00

Terms in **bold font** are defined in the attached "Definition of Terms" page.

**SECTION 1 - PROJECT CRITERIA**

a. Does the project meet all applicable Best Management Practices for Utility Maintenance (Utility BMPs) and have temporary impacts associated with inspection, maintenance, repair, replacement, or removal of existing utility facilities only within existing rights-of-way (Env-Wt 521.06(a)(1))?  Yes  No

b. If there will be impacts to any **Priority Resource Area (PRA)**, other than **designated prime wetlands** and their **duly-established 100-foot buffers**, will the project follow recommendations provided by Natural Heritage Bureau (NHB), New Hampshire Fish and Game (NHF&G), and the Department in a pre-notification review meeting (Env-Wt 521.06(a)(4))?  Yes  No  
 N/A

If you answered "No" or "N/A" to question 1a and/or 1b, you cannot use this form and must file a Standard Permit Application (RSA 482-A:3, XV). If you answered "Yes" to question 1a, proceed to question 1b.

c. Will the project include establishing new access roads, installing permanent stream or **wetland** crossings, constructing new utility corridors or rights of way (ROW), or establishing new utility assets within existing corridors or rights of way (Env-Wt 521.06(a)(2))?  Yes  No

d. Will the project include any permanent fill in navigable waters (Env-Wt 521.06(a)(3))?  Yes  No

e. Will timber mats be:

1. Used in a tidal **marsh**; or
2. Used in an area other than a tidal marsh if they are:
  - Not necessary to conduct activities;
  - Not removed as soon as work is completed; or
  - In place longer than one growing season (Env-Wt 521.06(a)(5))? Yes  No

f. Will the project cause permanent conversion of more than 3,000 SF of forested **wetlands** to emergent or **scrub-shrub wetlands** with or without temporary fill (Env-Wt 521.06(a)(6))?  Yes  No

If you answered "Yes" to questions 1c, d, e, and/or f, you cannot use this form and must file a Standard Permit Application (RSA 482-A:3, XV). If you answered "No" to all of the questions 1b-1f, continue to Section 3.




<b>SECTION 2 - PROPOSED PROJECT DESCRIPTION (RSA 482-A:3, XV(b)(2))</b>		
Please provide a brief written description of the nature of the work to be conducted.		
Eversource Energy is proposing to complete maintenance work on the M127 Transmission Line which crosses through portions of Sunapee, Springfield, New London, Wilmot, Andover, and Franklin, New Hampshire. In the Town of New London, Eversource Energy is proposing to replace 14 utility structures. The maintenance work requires temporary wetland impacts for work pad placement and access to associated structures.		
<b>SECTION 3 - LOCATION OF PROPOSED ACTIVITY (RSA 482-A:3, XV(b)(3))</b>		
Town/City: New London		
<b>SECTION 4 - PROJECT TYPE (RSA 482-A:3, XV(b)(2))</b>		
Check all that apply:		
<input checked="" type="checkbox"/> Equipment repair and maintenance in ROW	<input type="checkbox"/> Natural Gas Lines	
<input checked="" type="checkbox"/> Overhead Electric Lines	<input type="checkbox"/> Water Supply Lines	
<input type="checkbox"/> Overhead Telephone or Cable Lines	<input type="checkbox"/> Sewer Lines	
<input type="checkbox"/> Vegetative maintenance within ROW (If access through private property is needed to reach the ROW, permission from the landowner(s) is required prior to conducting work.)	<input type="checkbox"/> Other: <u>None</u>	
<b>SECTION 5 - UTILITY PROVIDER (RSA 482-A:3, XV(b)(1))</b>		
UTILITY PROVIDER/COMPANY NAME: Eversource Energy		
AUTHORIZED REPRESENTATIVE LAST NAME, FIRST NAME, M.I.: Fennell, Jeremy		
MAILING ADDRESS: 13 Legends Drive		
TOWN/CITY: Hooksett	STATE: NH	ZIP CODE: 03106
<b>SECTION 6 - IMPACTED RESOURCES (RSA 482-A:3, XV(b)(2))</b>		
Check all that apply.		
<input checked="" type="checkbox"/> Temporary Non-Tidal Wetland		
<input checked="" type="checkbox"/> Temporary Intermittent Stream Crossing		
<input checked="" type="checkbox"/> Temporary (2-years maximum) Perennial Stream or River Crossing		

[utility@des.nh.gov](mailto:utility@des.nh.gov) or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

[www.des.nh.gov](http://www.des.nh.gov)

<b>SECTION 7 - ATTACHMENTS (RSA 482-A:3, XV))</b>		
Verify the following attachments are submitted with this form by checking each box below.		
<input checked="" type="checkbox"/>	<b>United States Geological Survey (USGS) Topographic Map</b> (at its original scale 1:24,000 or 1:25,000) with the project location(s) or utility corridor clearly identified (RSA 482-A:3, XV(b)(3)).	
<input checked="" type="checkbox"/>	The most recent National Wetland Inventory (NWI) map, <b>USGS topographic map</b> , or annotated aerial photograph showing wetland types crossed (optional, but verified for eligibility for an SPN by NHDES). See NHDES Wetland Permit Planning Tool (Env-Wt 406.03(b)(2)c.(5)).	
<input checked="" type="checkbox"/>	\$400 non-refundable filing fee per town, per year. Please make check or money order payable to: Treasurer - State of NH (RSA 482-A:3, XV(d)).	
<input checked="" type="checkbox"/>	The <b>DataCheck</b> identification number and an affirmation that recommendations have been received (Env-Wt 308.05(a)(2)).  Natural Heritage Bureau Identification ID: NHB <u>19</u> - <u>1905</u>  <i>Questions related to completing this process should be directed to the Natural Heritage Bureau.</i>	
<b>SECTION 8 - REQUIRED CERTIFICATIONS FROM AUTHORIZED UTILITY PROVIDER REPRESENTATIVE</b>		
By initialing each item and signing this application, the authorized representative affirms that (Env-Wt 308.05(b)(2)):		
Initials: JF	The project is not located in a PRA, except as provided in Env-Wt 407 and Env-Wt 521 where the applicant has met with the resource agencies (NHB, NHF&G, and NHDES) in a pre-notice meeting.	
Initials: JF	All recommendations of NHB and NHF&G have been received. And	
Initials: JF	The person responsible for the activity is aware of the limits of the SPN and applicable BMPs for the project, and will adhere to both.	
By initialing each item and signing this application, the authorized representative certifies that (Env-Wt 311.11(e)):		
Initials: JF	The information submitted on or within this notification is true, complete, and not misleading to the best of the signer's knowledge and belief. And	
Initials: JF	The signer understands that: <ul style="list-style-type: none"> <li>• The submission of false, incomplete, or misleading information constitutes grounds for NHDES to:                         <ol style="list-style-type: none"> <li>1. Deny the application.</li> <li>2. Revoke any approval that is granted based on the information. And</li> <li>3. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1.</li> </ol> </li> <li>• The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641. The signature shall constitute authorization for the municipal conservation commission and the Department to inspect the site of the proposed project.</li> </ul>	
<b>SECTION 9 - REQUIRED SIGNATURE FROM AUTHORIZED UTILITY PROVIDER REPRESENTATIVE</b>		
AUTHORIZED REPRESENTATIVE SIGNATURE: 	PRINT NAME LEGIBLY: Jeremy Fennell	DATE: 2/7/2020

[utility@des.nh.gov](mailto:utility@des.nh.gov) or (603) 271-2147




NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095  
[www.des.nh.gov](http://www.des.nh.gov)

**SECTION 10 - LOCAL RIVER MANAGEMENT ADVISORY COMMITTEE (LAC) SIGNATURE (Env-Wt 308.05)**

If a Utility Maintenance Notification is sought for a project that is within LAC jurisdiction and the Notification has not been signed by a legal representative of the LAC to indicate the right to intervene has been waived by the applicable LAC, NHDES will issue an incomplete letter to the applicant.

The signature below certifies that the Local River Management Advisory Committee waives its right to intervene per RSA 482-A:11.

N/A This project is *not* within a Designated River Corridor)

AUTHORIZED LAC REPRESENTATIVE SIGNATURE: 	PRINT NAME LEGIBLY: 	DATE: 
--	--	--

[utility@des.nh.gov](mailto:utility@des.nh.gov) or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

[www.des.nh.gov](http://www.des.nh.gov)

# **NHDES LAND RESOURCES MANAGEMENT PROGRAM MEETING NOTES**

**DATE:** January 30, 2020

**LOCATION:** NHDES Concord Office

**RE:** Pre-notification review meeting, per Env-Wt 521.06(a)(4); M127 Transmission Line Structure Replacement Project; Sunapee, Springfield, New London, Wilmot, Andover, Franklin

**ATTENDEES:** Jeremy Fennell, Eversource; Lindsey White, GZA GeoEnvironmental; Seta Detzel & Ryan Duquette, NHDES

**MEETING NOTES:**

- The project proposes temporary wetland impacts from swamp matting for access roads and work pads to replace ~77 pole structures and an OPGW overhead cable.
- A portion of the work pad for structure 154 impacts a floodplain wetland adjacent to a Tier 3 stream.
- There are no NHB hits for the project.
- No prime wetlands or prime wetland buffers are impacted by the project.
- No wetland conversion (from forested to PSS or PEM) is required.

**NHDES RECOMMENDATIONS:**

- Add note to the plan that swamp mats must be removed after one growing season.
- Verify wetland impact areas within the ROW that are near hits for “peatland” and confirm whether these areas are bog wetlands.
- Add note to the plan for additional erosion and sediment controls adjacent to the PRA such as a double row of siltation controls.



NEW HAMPSHIRE NATURAL HERITAGE BUREAU  
NHB DATACHECK RESULTS LETTER

---

**To:** Lindsey White, GZA GeoEnvironmental  
5 Commerce Park North  
Suite 201  
Bedford, NH 03110

**From:** NH Natural Heritage Bureau

**Date:** 6/24/2019 (valid for one year from this date)

**Re:** Review by NH Natural Heritage Bureau of request submitted 6/18/2019

**NHB File ID:** NHB19-1905

**Applicant:** Eversource Energy ROW

**Location:** New London  
Eversource Energy Right-of-Way (ROW)

**Project**

**Description:** Eversource is proposing to complete routine maintenance by replacing damaged utility pole structures along the existing M127 Transmission Line.

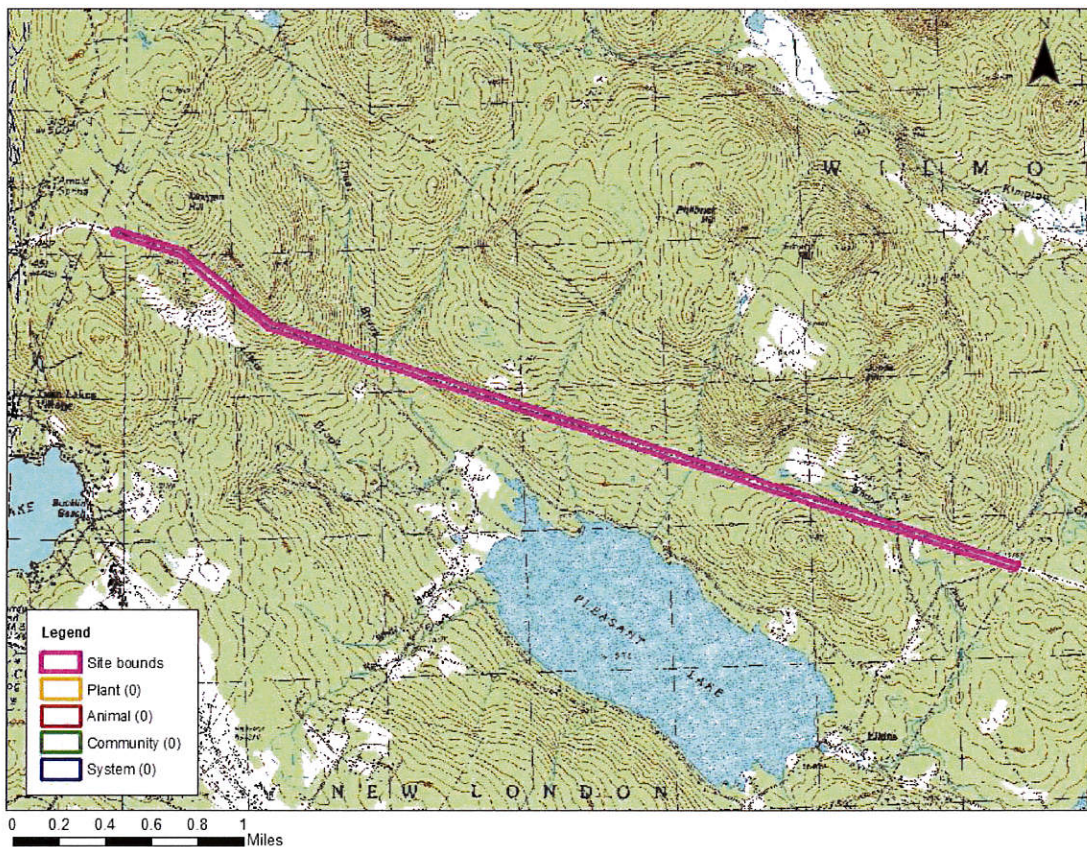
The NH Natural Heritage database has been checked by staff of the NH Natural Heritage Bureau and/or the NH Nongame and Endangered Species Program for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government.

It was determined that, although there was a NHB record (e.g., rare wildlife, plant, and/or natural community) present in the vicinity, we do not expect that it will be impacted by the proposed project. This determination was made based on the project information submitted via the NHB Datacheck Tool on 6/18/2019, and cannot be used for any other project.



MAP OF PROJECT BOUNDARIES FOR: **NHB19-1905**

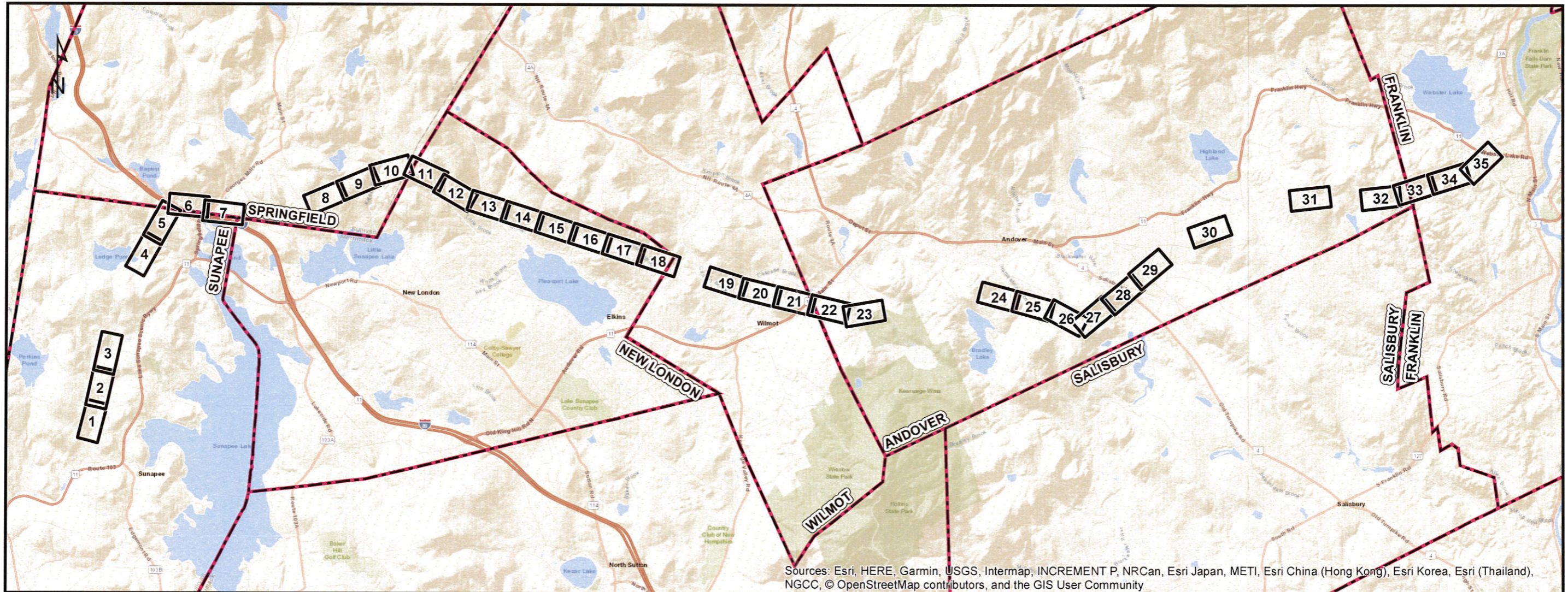
**NHB19-1905**



# 2020 M127 TRANSMISSION LINE STRUCTURE REPLACEMENT PROJECT

SUNAPEE, SPRINGFIELD, NEW LONDON, WILMOT, ANDOVER, & FRANKLIN,  
NEW HAMPSHIRE

1/24/2020



PREPARED FOR

**EVERSOURCE**  
ENERGY

## INDEX OF FIGURES

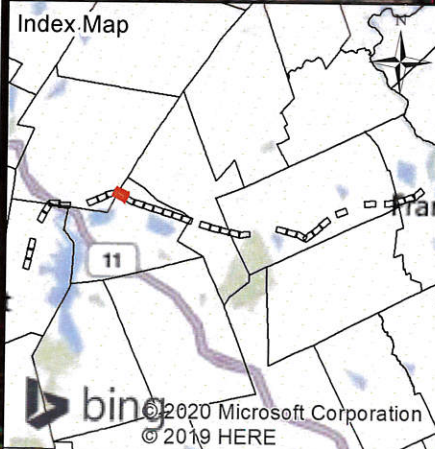
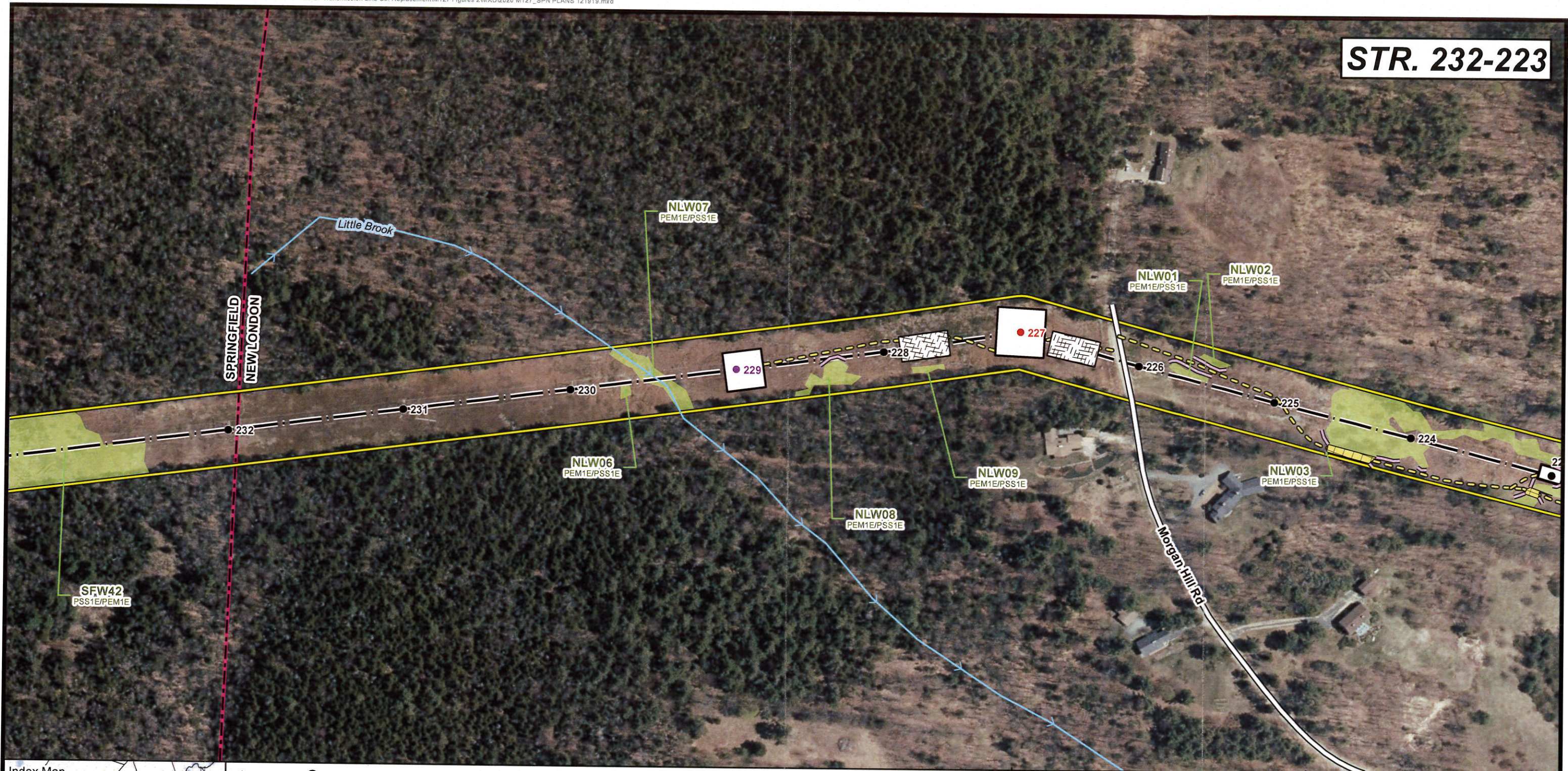
1 inch = 8,502 feet

T1: TITLE SHEET  
1-35: MAP SHEETS  
S1: NOTES  
S2: DETAILS

PREPARED BY

**GZA** GZA GeoEnvironmental, Inc.  
Engineers and Scientists  
www.gza.com

# STR. 232-223



← Sunapee      Current Town: **Springfield/New London**      Franklin →

● EXISTING STRUCTURE - NO PROPOSED WORK	▭ TOWN BOUNDARY
● EXISTING STRUCTURE - TO BE REMOVED	▨ POTENTIAL VERNAL POOL
● EXISTING STRUCTURE - TO BE REPLACED	▭ WORK PAD
● EXISTING STRUCTURE - FIBER REPLACE	▨ PULL PAD LOCATION
— PRIMARY ACCESS	— EROSION CONTROL
— SECONDARY ACCESS	
▨ TIMBER MATTING	
▨ WETLAND	
— TRANSMISSION LINE	
— DOT ROADS	
▨ PEATLAND HABITAT	
▨ FLOODPLAIN WETLAND ADJACENT TO T3+ WATERCOURSE	
— NHD FLOWLINE	
— APPROXIMATE ROW	

NOTES:  
 1. AERIAL IMAGERY WAS OBTAINED FROM UNH GRANIT AND IS DATED TO 2015.  
 2. DATA INCLUDING "STRUCTURES", "TRANSMISSION LINE", "WETLAND" AND "APPROXIMATE ROW" WERE PROVIDED BY EVERSOURCE ENERGY.  
 3. DATA INCLUDING "DOT ROADS", "NHD FLOWLINES", AND "TOWN BOUNDARY" WERE OBTAINED VIA UNH GRANIT.  
 4. PEATLAND HABITAT WAS MAPPED USING THE WILDLIFE ACTION PLAN DATA LAYER OBTAINED FROM NH GRANIT CLEARINGHOUSE.  
 5. FLOODPLAIN WETLANDS ADJACENT TO TIER 3 STREAMS WERE IDENTIFIED USING THE NHDES WETLAND PERMIT PLANNING TOOL.

0      100      200      400  
 Feet

**M127 STRUCTURE REPLACEMENT PROJECT**

2020 PERMITTING PLANS  
 JANUARY 24, 2020

SUNAPEE, SPRINGFIELD, NEW LONDON,  
 WILMOT, ANDOVER, & FRANKLIN  
 NEW HAMPSHIRE  
 PAGE 11 OF 35

Project No.: 04.0190923.09

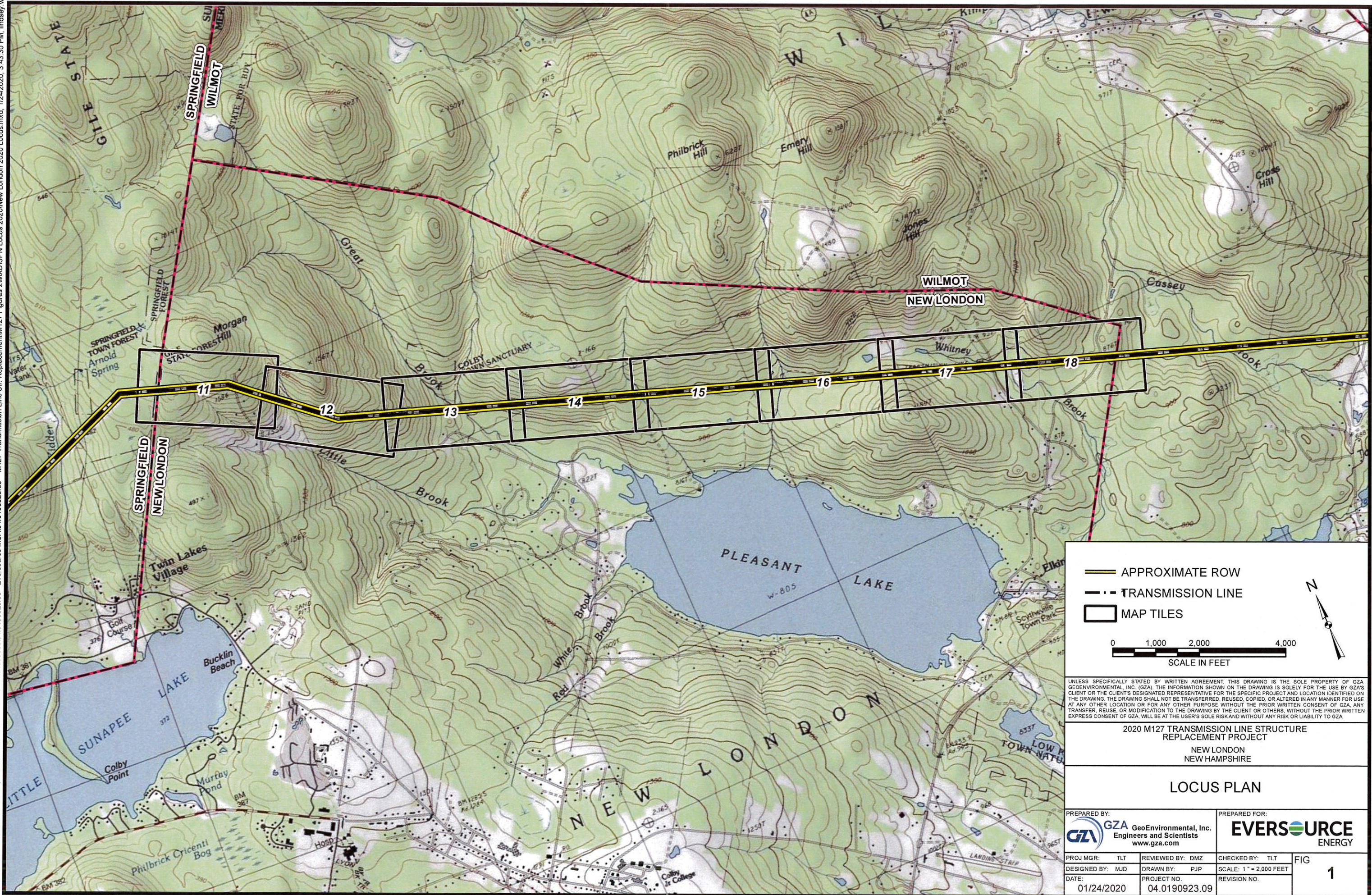
**EVERSOURCE ENERGY**

**GZA** GZA GeoEnvironmental, Inc.  
 Engineers and Scientists  
 www.gza.com

1 inch = 200 feet



© 2020 - GZA GeoEnvironmental, Inc. I:\GZA\Bedford\Jobs\04.Jobs\0190923.00 - Eversource MSA\04.0190923.00 - M127 Transmission Line Str. Replacement\M127 Figures 2\MXD\SPN Locus 2020\New London 2020 Locus.mxd, 1/24/2020, 3:43:30 PM, lindsey.white



APPROXIMATE ROW  
 TRANSMISSION LINE  
 MAP TILES

0 1,000 2,000 4,000  
 SCALE IN FEET

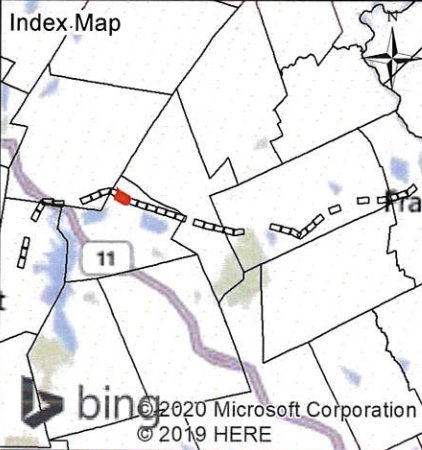
UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR THE USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

2020 M127 TRANSMISSION LINE STRUCTURE  
 REPLACEMENT PROJECT  
 NEW LONDON  
 NEW HAMPSHIRE

LOCUS PLAN

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED BY: EVERSOURCE ENERGY	
PROJ MGR: TLT	REVIEWED BY: DMZ	CHECKED BY: TLT	FIG 1
DESIGNED BY: MJD	DRAWN BY: PJP	SCALE: 1" = 2,000 FEET	
DATE: 01/24/2020	PROJECT NO. 04.0190923.09	REVISION NO.	

**STR. 224-217**



**Sunapee** ← **Current Town: New London** → **Franklin**

- EXISTING STRUCTURE - NO PROPOSED WORK
- EXISTING STRUCTURE - TO BE REMOVED
- EXISTING STRUCTURE - TO BE REPLACED
- EXISTING STRUCTURE - FIBER REPLACE
- PRIMARY ACCESS
- SECONDARY ACCESS
- TIMBER MATTING
- WETLAND
- TRANSMISSION LINE
- DOT ROADS
- PEATLAND HABITAT
- FLOODPLAIN WETLAND ADJACENT TO T3+ WATERCOURSE
- NHD FLOWLINE
- APPROXIMATE ROW

- TOWN BOUNDARY
- POTENTIAL VERNAL POOL
- WORK PAD
- PULL PAD LOCATION
- EROSION CONTROL

**NOTES:**

1. AERIAL IMAGERY WAS OBTAINED FROM UNH GRANIT AND IS DATED TO 2015.
2. DATA INCLUDING "STRUCTURES", "TRANSMISSION LINE", "WETLAND" AND "APPROXIMATE ROW" WERE PROVIDED BY EVERSOURCE ENERGY.
3. DATA INCLUDING "DOT ROADS", "NHD FLOWLINES", AND "TOWN BOUNDARY" WERE OBTAINED VIA UNH GRANIT.
4. PEATLAND HABITAT WAS MAPPED USING THE WILDLIFE ACTION PLAN DATA LAYER OBTAINED FROM NH GRANIT CLEARINGHOUSE.
5. FLOODPLAIN WETLANDS ADJACENT TO TIER 3 STREAMS WERE IDENTIFIED USING THE NHDES WETLAND PERMIT PLANNING TOOL.

0 100 200 400 Feet

**M127 STRUCTURE REPLACEMENT PROJECT**

2020 PERMITTING PLANS  
JANUARY 24, 2020

SUNAPEE, SPRINGFIELD, NEW LONDON, WILMOT, ANDOVER, & FRANKLIN  
NEW HAMPSHIRE  
PAGE 12 OF 35

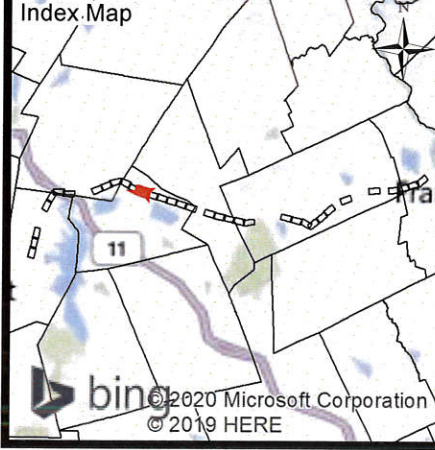
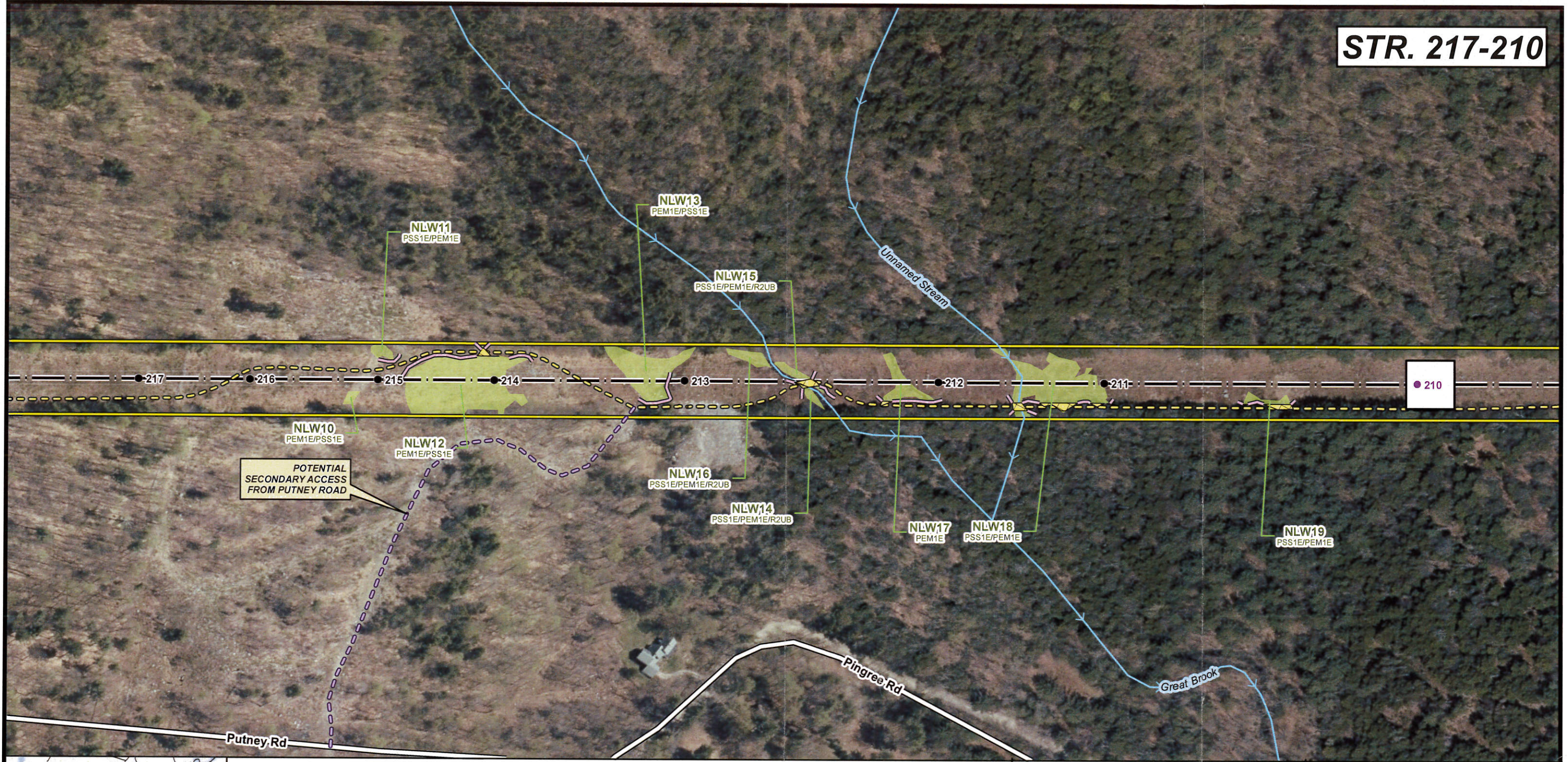
Project No.: 04.0190923.09

**EVERSOURCE ENERGY**

**GZA GeoEnvironmental, Inc.**  
Engineers and Scientists  
www.gza.com

1 inch = 200 feet

**STR. 217-210**



**Sunapee** ← **Current Town: New London** → **Franklin**

- EXISTING STRUCTURE - NO PROPOSED WORK
- EXISTING STRUCTURE - TO BE REMOVED
- EXISTING STRUCTURE - TO BE REPLACED
- EXISTING STRUCTURE - FIBER REPLACE
- PRIMARY ACCESS
- SECONDARY ACCESS
- TIMBER MATTING
- WETLAND
- TRANSMISSION LINE
- DOT ROADS
- PEATLAND HABITAT
- FLOODPLAIN WETLAND ADJACENT TO T3+ WATERCOURSE
- NHD FLOWLINE
- APPROXIMATE ROW
- TOWN BOUNDARY
- POTENTIAL VERNAL POOL
- WORK PAD
- PULL PAD LOCATION
- EROSION CONTROL

**NOTES:**

1. AERIAL IMAGERY WAS OBTAINED FROM UNH GRANIT AND IS DATED TO 2015.
2. DATA INCLUDING "STRUCTURES", "TRANSMISSION LINE", "WETLAND" AND "APPROXIMATE ROW" WERE PROVIDED BY EVERSOURCE ENERGY.
3. DATA INCLUDING "DOT ROADS", "NHD FLOWLINES", AND "TOWN BOUNDARY" WERE OBTAINED VIA UNH GRANIT.
4. PEATLAND HABITAT WAS MAPPED USING THE WILDLIFE ACTION PLAN DATA LAYER OBTAINED FROM NH GRANIT CLEARINGHOUSE.
5. FLOODPLAIN WETLANDS ADJACENT TO TIER 3 STREAMS WERE IDENTIFIED USING THE NHDES WETLAND PERMIT PLANNING TOOL.

0 100 200 400 Feet

**M127 STRUCTURE REPLACEMENT PROJECT**

2020 PERMITTING PLANS  
JANUARY 24, 2020

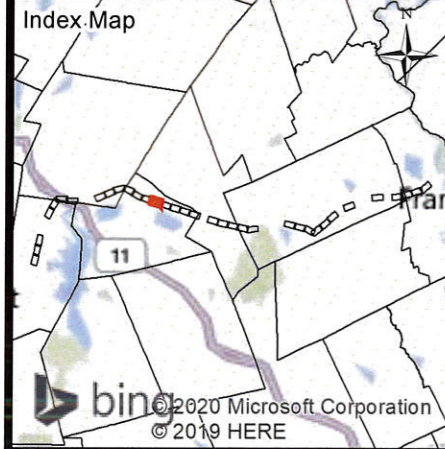
SUNAPEE, SPRINGFIELD, NEW LONDON, WILMOT, ANDOVER, & FRANKLIN  
NEW HAMPSHIRE  
PAGE 13 OF 35

Project No.: 04.0190923.09

**EVERSOURCE ENERGY**

**GZA GeoEnvironmental, Inc.**  
Engineers and Scientists  
www.gza.com

1 inch = 200 feet



← Sunapee      Current Town: **New London**      Franklin →

<ul style="list-style-type: none"> <li>● EXISTING STRUCTURE - NO PROPOSED WORK</li> <li>● EXISTING STRUCTURE - TO BE REMOVED</li> <li>● EXISTING STRUCTURE - TO BE REPLACED</li> <li>● EXISTING STRUCTURE - FIBER REPLACE</li> <li>— PRIMARY ACCESS</li> <li>— SECONDARY ACCESS</li> <li>— TIMBER MATTING</li> <li>— WETLAND</li> <li>— TRANSMISSION LINE</li> <li>— DOT ROADS</li> <li>— PEATLAND HABITAT</li> <li>— FLOODPLAIN WETLAND ADJACENT TO T3+ WATERCOURSE</li> <li>— NHD FLOWLINE</li> <li>— APPROXIMATE ROW</li> </ul>	<ul style="list-style-type: none"> <li>▭ TOWN BOUNDARY</li> <li>▭ POTENTIAL VERNAL POOL</li> <li>▭ WORK PAD</li> <li>▭ PULL PAD LOCATION</li> <li>— EROSION CONTROL</li> </ul>	<p>NOTES:</p> <ol style="list-style-type: none"> <li>1. AERIAL IMAGERY WAS OBTAINED FROM UNH GRANIT AND IS DATED TO 2015.</li> <li>2. DATA INCLUDING "STRUCTURES", "TRANSMISSION LINE", "WETLAND" AND "APPROXIMATE ROW" WERE PROVIDED BY EVERSOURCE ENERGY.</li> <li>3. DATA INCLUDING "DOT ROADS", "NHD FLOWLINES", AND "TOWN BOUNDARY" WERE OBTAINED VIA UNH GRANIT.</li> <li>4. PEATLAND HABITAT WAS MAPPED USING THE WILDLIFE ACTION PLAN DATA LAYER OBTAINED FROM NH GRANIT CLEARINGHOUSE.</li> <li>5. FLOODPLAIN WETLANDS ADJACENT TO TIER 3 STREAMS WERE IDENTIFIED USING THE NHDES WETLAND PERMIT PLANNING TOOL.</li> </ol>
--	--	---

0    100    200    400  
Feet

**M127 STRUCTURE REPLACEMENT PROJECT**

2020 PERMITTING PLANS  
JANUARY 24, 2020

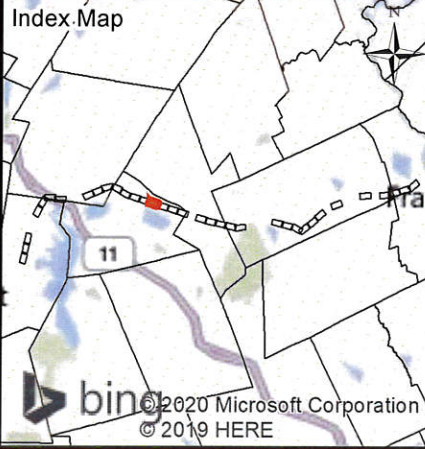
SUNAPEE, SPRINGFIELD, NEW LONDON,  
WILMOT, ANDOVER, & FRANKLIN  
NEW HAMPSHIRE  
PAGE 14 OF 35

Project No.: 04.0190923.09 1 inch = 200 feet

**EVERSOURCE ENERGY**

**GZA GeoEnvironmental, Inc.**  
Engineers and Scientists  
www.gza.com

# STR. 202-195



← Sunapee      **Current Town: New London**      Franklin →

<ul style="list-style-type: none"> <li>● EXISTING STRUCTURE - NO PROPOSED WORK</li> <li>● EXISTING STRUCTURE - TO BE REMOVED</li> <li>● EXISTING STRUCTURE - TO BE REPLACED</li> <li>● EXISTING STRUCTURE - FIBER REPLACE</li> <li>— PRIMARY ACCESS</li> <li>— SECONDARY ACCESS</li> <li>■ TIMBER MATTING</li> <li>■ WETLAND</li> <li>— TRANSMISSION LINE</li> <li>— DOT ROADS</li> <li>■ PEATLAND HABITAT</li> <li>■ FLOODPLAIN WETLAND ADJACENT TO T3+ WATERCOURSE</li> <li>— NHD FLOWLINE</li> <li>— APPROXIMATE ROW</li> </ul>	<ul style="list-style-type: none"> <li>■ TOWN BOUNDARY</li> <li>■ POTENTIAL VERNAL POOL</li> <li>■ WORK PAD</li> <li>■ PULL PAD LOCATION</li> <li>— EROSION CONTROL</li> </ul>	<p>NOTES:</p> <ol style="list-style-type: none"> <li>1. AERIAL IMAGERY WAS OBTAINED FROM UNH GRANIT AND IS DATED TO 2015.</li> <li>2. DATA INCLUDING "STRUCTURES", "TRANSMISSION LINE", "WETLAND" AND "APPROXIMATE ROW" WERE PROVIDED BY EVERSOURCE ENERGY.</li> <li>3. DATA INCLUDING "DOT ROADS", "NHD FLOWLINES", AND "TOWN BOUNDARY" WERE OBTAINED VIA UNH GRANIT.</li> <li>4. PEATLAND HABITAT WAS MAPPED USING THE WILDLIFE ACTION PLAN DATA LAYER OBTAINED FROM NH GRANIT CLEARINGHOUSE.</li> <li>5. FLOODPLAIN WETLANDS ADJACENT TO TIER 3 STREAMS WERE IDENTIFIED USING THE NHDES WETLAND PERMIT PLANNING TOOL.</li> </ol>
--	--	---

0      100      200      400  
Feet

**M127 STRUCTURE REPLACEMENT PROJECT**

2020 PERMITTING PLANS  
JANUARY 24, 2020

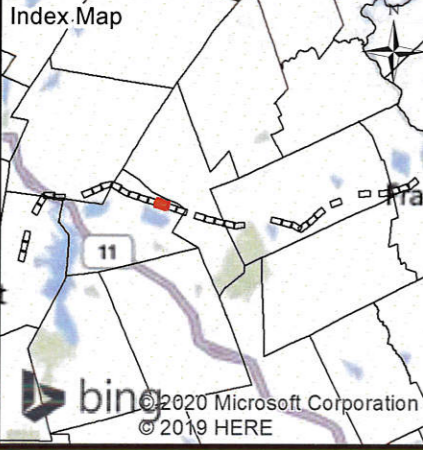
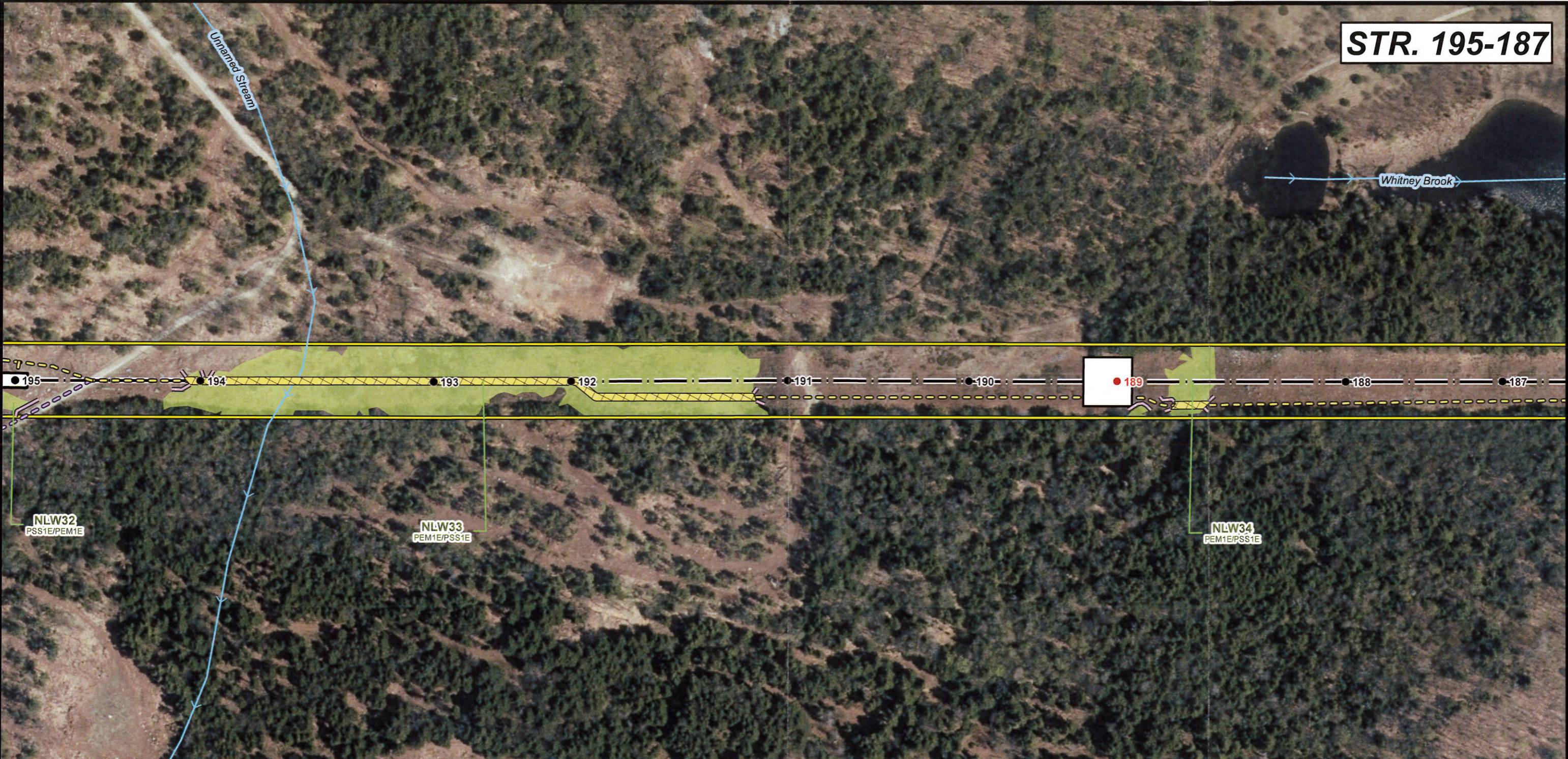
SUNAPEE, SPRINGFIELD, NEW LONDON,  
WILMOT, ANDOVER, & FRANKLIN  
NEW HAMPSHIRE  
PAGE 15 OF 35

Project No.: 04.0190923.09 1 inch = 200 feet

**EVERSOURCE ENERGY**

**GZA GeoEnvironmental, Inc.**  
Engineers and Scientists  
www.gza.com

**STR. 195-187**



- Sunapee** ←      **Current Town: New London**      **Franklin** →
- EXISTING STRUCTURE - NO PROPOSED WORK
  - EXISTING STRUCTURE - TO BE REMOVED
  - EXISTING STRUCTURE - TO BE REPLACED
  - EXISTING STRUCTURE - FIBER REPLACE
  - PRIMARY ACCESS
  - SECONDARY ACCESS
  - TIMBER MATTING
  - WETLAND
  - TRANSMISSION LINE
  - DOT ROADS
  - PEATLAND HABITAT
  - FLOODPLAIN WETLAND ADJACENT TO T3+ WATERCOURSE
  - NHD FLOWLINE
  - APPROXIMATE ROW
  - TOWN BOUNDARY
  - POTENTIAL VERNAL POOL
  - WORK PAD
  - PULL PAD LOCATION
  - EROSION CONTROL

**NOTES:**

1. AERIAL IMAGERY WAS OBTAINED FROM UNH GRANIT AND IS DATED TO 2015.
2. DATA INCLUDING "STRUCTURES", "TRANSMISSION LINE", "WETLAND" AND "APPROXIMATE ROW" WERE PROVIDED BY EVERSOURCE ENERGY.
3. DATA INCLUDING "DOT ROADS", "NHD FLOWLINES", AND "TOWN BOUNDARY" WERE OBTAINED VIA UNH GRANIT.
4. PEATLAND HABITAT WAS MAPPED USING THE WILDLIFE ACTION PLAN DATA LAYER OBTAINED FROM NH GRANIT CLEARINGHOUSE.
5. FLOODPLAIN WETLANDS ADJACENT TO TIER 3 STREAMS WERE IDENTIFIED USING THE NHDES WETLAND PERMIT PLANNING TOOL.

0 100 200 400 Feet

**M127 STRUCTURE REPLACEMENT PROJECT**

2020 PERMITTING PLANS  
JANUARY 24, 2020

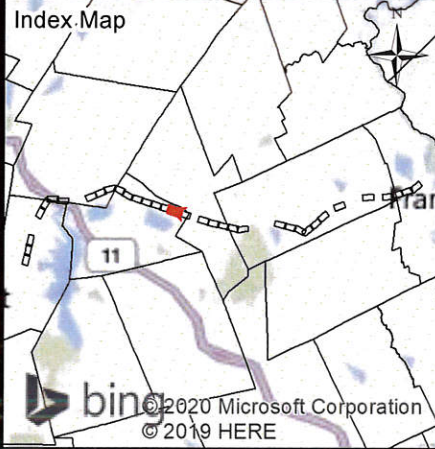
SUNAPEE, SPRINGFIELD, NEW LONDON,  
WILMOT, ANDOVER, & FRANKLIN  
NEW HAMPSHIRE  
PAGE 16 OF 35

Project No.: 04.0190923.09      1 inch = 200 feet

**EVERSOURCE ENERGY**

**GZA GeoEnvironmental, Inc.**  
Engineers and Scientists  
www.gza.com

**STR. 187-180**



- Sunapee**
- EXISTING STRUCTURE - NO PROPOSED WORK
  - EXISTING STRUCTURE - TO BE REMOVED
  - EXISTING STRUCTURE - TO BE REPLACED
  - EXISTING STRUCTURE - FIBER REPLACE
  - PRIMARY ACCESS
  - SECONDARY ACCESS
  - TIMBER MATTING
  - WETLAND
  - TRANSMISSION LINE
  - DOT ROADS
  - PEATLAND HABITAT
  - FLOODPLAIN WETLAND ADJACENT TO T3+ WATERCOURSE
  - NHD FLOWLINE
  - APPROXIMATE ROW

- Current Town: New London**
- TOWN BOUNDARY
  - POTENTIAL VERNAL POOL
  - WORK PAD
  - PULL PAD LOCATION
  - EROSION CONTROL

**Franklin**

NOTES:

1. AERIAL IMAGERY WAS OBTAINED FROM UNH GRANIT AND IS DATED TO 2015.
2. DATA INCLUDING "STRUCTURES", "TRANSMISSION LINE", "WETLAND" AND "APPROXIMATE ROW" WERE PROVIDED BY EVERSOURCE ENERGY.
3. DATA INCLUDING "DOT ROADS", "NHD FLOWLINES", AND "TOWN BOUNDARY" WERE OBTAINED VIA UNH GRANIT.
4. PEATLAND HABITAT WAS MAPPED USING THE WILDLIFE ACTION PLAN DATA LAYER OBTAINED FROM NH GRANIT CLEARINGHOUSE.
5. FLOODPLAIN WETLANDS ADJACENT TO TIER 3 STREAMS WERE IDENTIFIED USING THE NHDES WETLAND PERMIT PLANNING TOOL.



**M127 STRUCTURE REPLACEMENT PROJECT**

2020 PERMITTING PLANS  
JANUARY 24, 2020

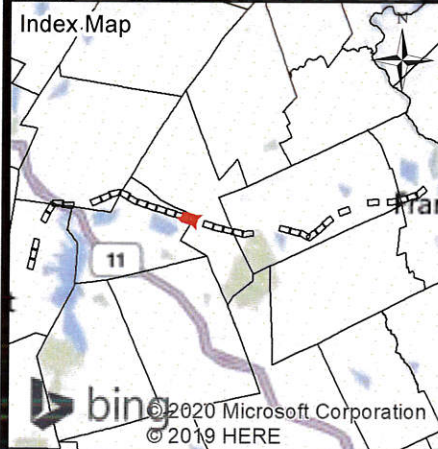
SUNAPEE, SPRINGFIELD, NEW LONDON, WILMOT, ANDOVER, & FRANKLIN  
NEW HAMPSHIRE  
PAGE 17 OF 35

Project No.: 04.0190923.09

**EVERSOURCE ENERGY**

**GZA GeoEnvironmental, Inc.**  
Engineers and Scientists  
www.gza.com

1 inch = 200 feet



← Sunapee      Current Town: **New London/Wilmot**      Franklin →

<ul style="list-style-type: none"> <li>● EXISTING STRUCTURE - NO PROPOSED WORK</li> <li>● EXISTING STRUCTURE - TO BE REMOVED</li> <li>● EXISTING STRUCTURE - TO BE REPLACED</li> <li>● EXISTING STRUCTURE - FIBER REPLACE</li> <li>○ PRIMARY ACCESS</li> <li>○ SECONDARY ACCESS</li> <li>▨ TIMBER MATTING</li> <li>▨ WETLAND</li> <li>▨ TRANSMISSION LINE</li> <li>▨ DOT ROADS</li> <li>▨ PEATLAND HABITAT</li> <li>▨ FLOODPLAIN WETLAND ADJACENT TO T3+ WATERCOURSE</li> <li>▨ NHD FLOWLINE</li> <li>▨ APPROXIMATE ROW</li> </ul>	<ul style="list-style-type: none"> <li>▨ TOWN BOUNDARY</li> <li>▨ POTENTIAL VERNAL POOL</li> <li>▨ WORK PAD</li> <li>▨ PULL PAD LOCATION</li> <li>▨ EROSION CONTROL</li> </ul>
--	--

NOTES:

1. AERIAL IMAGERY WAS OBTAINED FROM UNH GRANIT AND IS DATED TO 2015.
2. DATA INCLUDING "STRUCTURES", "TRANSMISSION LINE", "WETLAND" AND "APPROXIMATE ROW" WERE PROVIDED BY EVERSOURCE ENERGY.
3. DATA INCLUDING "DOT ROADS", "NHD FLOWLINES", AND "TOWN BOUNDARY" WERE OBTAINED VIA UNH GRANIT.
4. PEATLAND HABITAT WAS MAPPED USING THE WILDLIFE ACTION PLAN DATA LAYER OBTAINED FROM NH GRANIT CLEARINGHOUSE.
5. FLOODPLAIN WETLANDS ADJACENT TO TIER 3 STREAMS WERE IDENTIFIED USING THE NHDES WETLAND PERMIT PLANNING TOOL.

0      100      200      400  
Feet

**M127 STRUCTURE REPLACEMENT PROJECT**

2020 PERMITTING PLANS  
JANUARY 24, 2020

SUNAPEE, SPRINGFIELD, NEW LONDON,  
WILMOT, ANDOVER, & FRANKLIN  
NEW HAMPSHIRE  
PAGE 18 OF 35

Project No.: 04.0190923.09 1 inch = 200 feet

**EVERSOURCE ENERGY**

**GZA** GeoEnvironmental, Inc.  
Engineers and Scientists  
www.gza.com



© 2020 - GZA GeoEnvironmental, Inc. \\GZA\Bedford\Jobs\04\_190923\_00 - Eversource MSA\04\_0190923\_09 - M127 Transmission Line Str. Replacement\M127\Figures 2\MXD\2020 M127 Note Sheet 1.mxd, 2/3/2020, 11:00:52 AM, lindsay.white

**CONSTRUCTION SEQUENCE:**

1. WETLAND BOUNDARIES TO BE CLEARLY MARKED PRIOR TO THE START OF CONSTRUCTION.
2. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAIL PROVIDED, AS NECESSARY.
3. WETLAND IMPACTS ASSOCIATED WITH WETLAND CROSSINGS ARE REQUIRED FOR ACCESS BETWEEN STRUCTURES WITHIN THE RIGHT OF WAY. CONSTRUCTION ACTIVITIES SHALL OCCUR DURING PERIODS OF LOW FLOW.
4. ADEQUATE PRECAUTION SHALL BE EXERCISED TO AVOID SPILLAGE OF FUEL OILS, CHEMICALS, OR SIMILAR SUBSTANCES; NO FUELS, LUBRICANTS, CHEMICALS OR SIMILAR SUBSTANCES SHALL BE STORED BENEATH TREES OR IN THE VICINITY OF ANY WETLANDS, RIVER, STREAM OR OTHER BODY OF WATER; OR IN THE VICINITY OF NATURAL OR MAN-MADE CHANNELS LEADING THERETO. NO POWER EQUIPMENT SHALL BE STORED, MAINTAINED, OR FUELED IN ANY AREA ADJACENT TO A WETLAND, RIVER, STREAM OR OTHER BODY OF WATER.
5. REMOVE COMPLETELY ALL CONTAMINATION FROM ANY SPILLAGE OF CHEMICALS OR PETROLEUM PRODUCT WITH COMPLETE REHABILITATION OF THE AFFECTED AREA.
6. ACCESS ROUTES HAVE BEEN SELECTED TO PREVENT DEGRADATION OF THE RIGHT-OF-WAY AND MINIMIZE ENVIRONMENTAL IMPACT. OPERATIONS SHALL BE CONFINED TO THE SPECIFIED ACCESS ROUTES WITHIN THE PROPOSED WETLAND IMPACT AREA. ACCESS ROUTES SHALL NOT EXCEED A 16 FOOT-WIDTH.
7. IMPACT TO VEGETATION WITHIN WETLANDS WILL BE LIMITED TO THE EXTENT NECESSARY TO PLACE THE TIMBER MATS WHERE REQUIRED.
8. LOW GROWING VARIETIES OF VEGETATION ADJACENT TO WETLANDS SHALL BE PRESERVED TO THE EXTENT POSSIBLE. STUMPS AND ROCKS SHALL NOT BE REMOVED, AND THERE SHALL BE NO EXCAVATIONS, FILLS OR GRADING DONE ADJACENT TO WETLANDS, UNLESS MINOR EXCAVATIONS IS NEEDED FOR ACCESS.
9. TIMBER MATS WILL BE USED ALONG ACCESS ROUTES WITHIN WETLAND AREAS. THESE MATS ARE CONSTRUCTED OF HEAVY TIMBERS OR COMPOSITE MATERIAL, BOLTED TOGETHER, AND ARE PLACED END-TO-END IN THE WETLAND TO SUPPORT HEAVY EQUIPMENT. ALL SWAMP MATS SHALL BE PLACED AND REMOVED SO AS NOT TO CAUSE ANY RUTS, CHANNELS OR DEPRESSIONS, OR OTHERWISE CAUSE ANY UNDUE DISTURBANCE TO WETLANDS.
10. IF TIMBER MAT BMP IS NOT SUFFICIENT DUE TO HIGH WATER, ADDITIONAL BMP'S MAY INCLUDE THE PLACEMENT OF GEOTEXTILE FABRIC, 3"-4" STONE, AND GRAVEL TO PROVIDE A SUITABLE ROAD BED. A TEMPORARY CULVERT MAY BE REQUIRED IN AREAS OF HIGH FLOW TO MAINTAIN HYDROLOGIC CONNECTIVITY. ALL MATERIAL WILL BE REMOVED FROM JURISDICTIONAL AREAS AFTER CONSTRUCTION COMPLETION.
11. NO MATERIAL SHALL BE PLACED IN ANY LOCATION OR IN ANY MANNER SO AS TO IMPAIR SURFACE WATER FLOW INTO, THROUGH OR OUT OF ANY WETLAND AREA. NO INSTALLATION SHALL CREATE AN IMPOUNDMENT THAT WILL IMPEDE THE FLOW OF WATER OR CAUSE FLOODING.
12. NO MATERIAL SHALL BE TAKEN FROM THE WETLANDS AREA EXCEPT THAT WHICH MUST NECESSARILY BE REMOVED FOR THE STRUCTURE OR FOUNDATION PLACEMENT OR STABILIZATION. ALL EXCESS MATERIAL TAKEN FROM THE WETLAND WILL BE REMOVED FROM THE SITE.
13. ANY PROPOSED SUPPORT FILLS SHALL BE CLEAN GRAVEL AND STONE, FREE OF WASTE METAL PRODUCTS, ORGANIC MATERIALS AND SIMILAR DEBRIS AND SHALL NOT EXCEED THE AMOUNT PERMITTED. THIS ALLOWABLE FILL IS THE ONLY FILL THAT MAY REMAIN IN THE WETLAND AFTER CONSTRUCTION. ALL CUT AND FILLS SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
14. INSTALL NEW POLES IN THE LOCATIONS DESIGNATED ON THE PERMITTING PLANS.
15. CABLE INSTALLATION WILL BE PERFORMED IN A MANNER SO AS TO AVOID, OR LIMIT TO THE MAXIMUM EXTENT POSSIBLE, TRAVERSING WETLANDS WITH HEAVY EQUIPMENT. IN SOME CASES, A HELICOPTER MAY BE USED DURING THE INSTALLATION TO MINIMIZE IMPACTS.
16. REMOVAL OF THE OLD POLE WILL OCCUR ONCE THE CABLE HAS BEEN INSTALLED ON THE NEW STRUCTURE. THE OLD STRUCTURES WILL BE REMOVED FROM THE SITE. POLES WILL BE CUT AT THE GROUND SURFACE. FOOTINGS WILL BE ABANDONED IN PLACE TO MINIMIZE IMPACTS.
17. ALL SWAMP MATS, MATERIAL, AND DEBRIS WILL BE REMOVED FROM THE WORK AREA UPON THE COMPLETION OF CONSTRUCTION.
18. UPLAND DISTURBED AREAS SHALL BE RESTORED AND STABILIZED UPON COMPLETION OF CONSTRUCTION. WORK PAD RESTORATION SHOULD INCLUDE REDUCING THE WORK PAD TO A 30 BY 60 FOOT AREA, AND REDUCING SLOPES TO A MAXIMUM OF 25%. STOCKPILED MATERIAL SHOULD BE SPREAD TO REDUCE ANY UNNECESSARY SLOPES. GRAVEL WORK PADS AND SLOPES SHOULD BE SCARIFIED TO A MINIMUM OF 3" BEFORE SPREADING TOPSOIL/LOAM.
19. ALL TEMPORARY WETLAND IMPACTS WILL BE RE-GRADED TO ORIGINAL CONTOURS FOLLOWING CONSTRUCTION. NEW ENGLAND EROSION CONTROL/RESTORATION MIX, AVAILABLE THROUGH NEW ENGLAND WETLAND PLANTS, INC., 820 WEST STREET, AMHERST, MA 01002, 413-548-8000, OR EQUIVALENT SEED MIX SHALL BE APPLIED IN WETLAND AREAS THAT ARE NOT INUNDATED, AS NECESSARY.
20. SEDIMENT AND EROSION CONTROL MEASURES WILL BE EVALUATED AND REMOVED IF NECESSARY UPON THE COMPLETION OF CONSTRUCTION.

**WINTER CONSTRUCTION NOTES**

1. PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED. STABILIZATION METHODS SHALL INCLUDE SEEDING AND MULCH, AND INSTALLATION OF EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
2. DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE TEMPORARILY STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

3. AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL (NHDOT 304.3).

**GENERAL NOTES:**

OWNER: EVERSOURCE ENERGY  
13 LEGENDS DRIVE  
HOOKSETT, NH 03106

1. BASE PLAN PROVIDED BY EVERSOURCE ENERGY. EVERSOURCE ENERGY PROVIDED THE WETLAND DATA. EVERSOURCE ENERGY PROVIDED THE UTILITY DESIGN.
2. JURISDICTIONAL WETLANDS WERE DELINEATED BY NORMANDEAU AND PROVIDED BY EVERSOURCE ENERGY IN 2017. WETLANDS WERE DELINEATED IN ACCORDANCE WITH THE 1987 U.S. ARMY CORPS OF ENGINEERS' "WETLANDS DELINEATION MANUAL, TECHNICAL REPORT Y-87-1," AND REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTH CENTRAL AND NORTHEAST REGION," JANUARY 2012. WETLANDS WILL BE REVIEWED BY GZA GEOENVIRONMENTAL, INC. IN 2019.
3. GZA EVALUATED WETLANDS AS POTENTIAL VERNAL POOLS DURING AUGUST AND SEPTEMBER 2019 IN ACCORDANCE WITH "IDENTIFICATION AND DOCUMENTATION OF VERNAL POOLS IN NEW HAMPSHIRE," 1997, NEW HAMPSHIRE FISH AND GAME DEPARTMENT, NONGAME AND ANDANGERED WILDLIFE PROGRAM.
4. GZA PERFORMED A WETLANDS FUNCTION AND VALUES ASSESSMENT IN AUGUST AND SEPTEMBER 2019 IN ACCORDANCE WITH THE ACOE'S "HIGHWAY METHODOLOGY WORKBOOK SUPPLEMENT," SEPTEMBER 1999, IN THE TOWNS OF SUNAPEE, NEW LONDON, AND ANDOVER.
5. SITE PLAN IS FOR PERMITTING PURPOSES ONLY AND DOES NOT REPRESENT A PROPERTY BOUNDARY SURVEY.
6. THE PROJECT WILL BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.
7. IN ACCORANCE WITH ENV-WQ 1505.02, THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
  - A MINIMUM 85 PERCENT VEGETATED GROWTH HAS BEEN ESTABLISHED
  - A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL HAS BEEN INSTALLED
  - OR, EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.



**EROSION CONTROL NOTES:**

1. INSTALLATION OF EROSION CONTROL GRINDINGS AND/OR SILT FENCES SHALL BE COMPLETE PRIOR TO THE START OF WORK IN ANY GIVEN AREA. EROSION CONTROLS SHALL BE USED DURING CONSTRUCTION AND REMOVED WHEN ALL SLOPES HAVE A HEALTHY STAND OF VEGETATION COVER. EROSION CONTROL MEASURES SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER .25" OR GREATER RAINFALL EVENTS.
2. AS REQUIRED, CONSTRUCT TEMPORARY BERMS, SILTATION FENCES, SEDIMENT TRAPS, ETC. TO PREVENT EROSION & SEDIMENTATION OF WETLANDS.
3. THE WORK AREA SHALL BE GRADED AND OTHERWISE SHAPED IN SUCH A MANNER AS TO MINIMIZE SOIL EROSION, SILTATION OF DRAINAGE CHANNELS, DAMAGE TO EXISTING VEGETATION, AND DAMAGE TO PROPERTY OUTSIDE LIMITS OF THE WORK AREA. EROSION CONTROL GRINDINGS WILL BE NECESSARY TO ACCOMPLISH THIS END.
4. ANY STRIPPED TOPSOIL SHALL BE STOCKPILED, WITHOUT COMPACTION, AND STABILIZED WITH BMPS.
5. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 15 TO SEPTEMBER 15. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING WINTER MONTHS, PLANT ANNUAL RYEGRASS PRIOR TO OCTOBER 15TH.
6. EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY HALF-INCH OF RAINFALL.
7. TIMBER MATTS MUST BE REMOVED AFTER ONE GROWING SEASON.
8. DOUBLE ROW OF SILTATION CONTROLS REQUIRED AT WETLAND WMW24.

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA (GEOENVIRONMENTAL, INC. (GZA)). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR THE USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

**2020 - M127 TRANSMISSION LINE STRUCTURE REPLACEMENT PROJECT**  
SUNAPEE, SPRINGFIELD, NEW LONDON, WILMOT, ANDOVER, & FRANKLIN  
NEW HAMPSHIRE

**NOTES**

PREPARED BY:  <b>GZA</b> GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: 	
PROJ MGR: LEW	REVIEWED BY: TLT	CHECKED BY: DMZ	SHEET
DESIGNED BY: MJD	DRAWN BY: MJD	SCALE:	<b>1</b>
DATE: 02/03/2020	PROJECT NO. 04.0190923.09	REVISION NO.	

© 2019 - GZA GeoEnvironmental, Inc. \GZA\Bedford\Jobs\04\Jobs\0190923\04\190923\00 - Eversource MSA\04\0190923\00 - Eversource MSA\04\0190923\09 - M127 Transmission Line Str. Replacement\M127 Figures 2\MXD\2020 SDF\M127\_Notes\_Sheet\_2.mxd, 9/18/2019, 1:05:19 PM, lindsey.white

### Best Management Practices (BMP's) for Straw wattles

#### Definition and purpose:

Straw wattles are burlap rolls filled with straw that trap sediment and interrupt water flow by reducing slope lengths.

#### Applications:

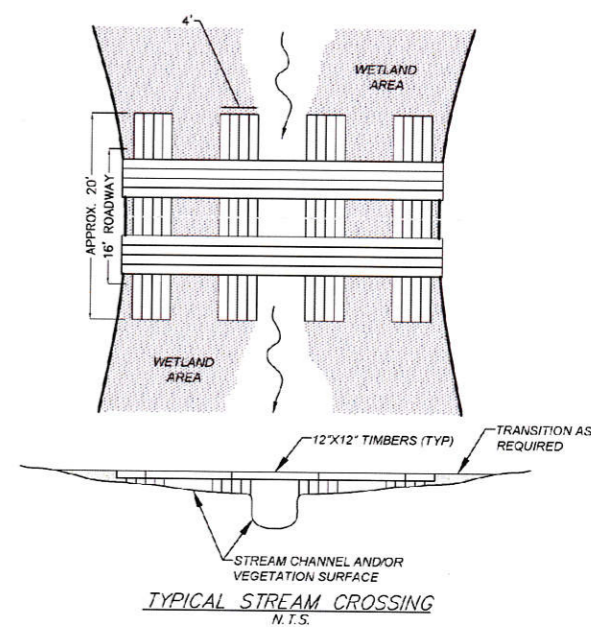
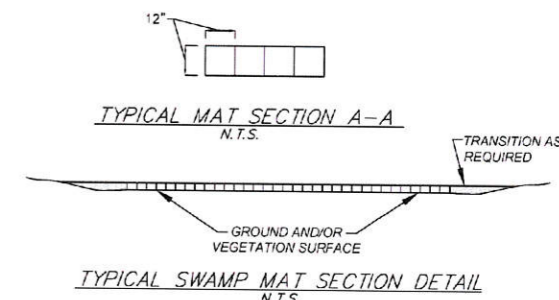
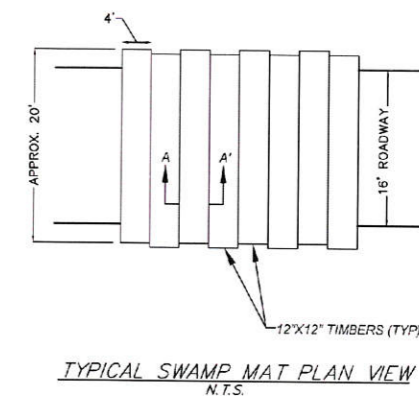
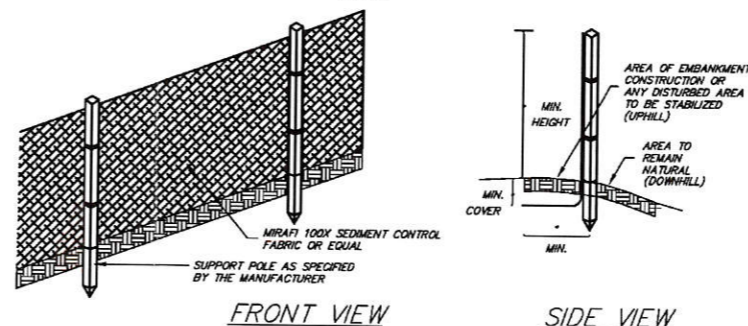
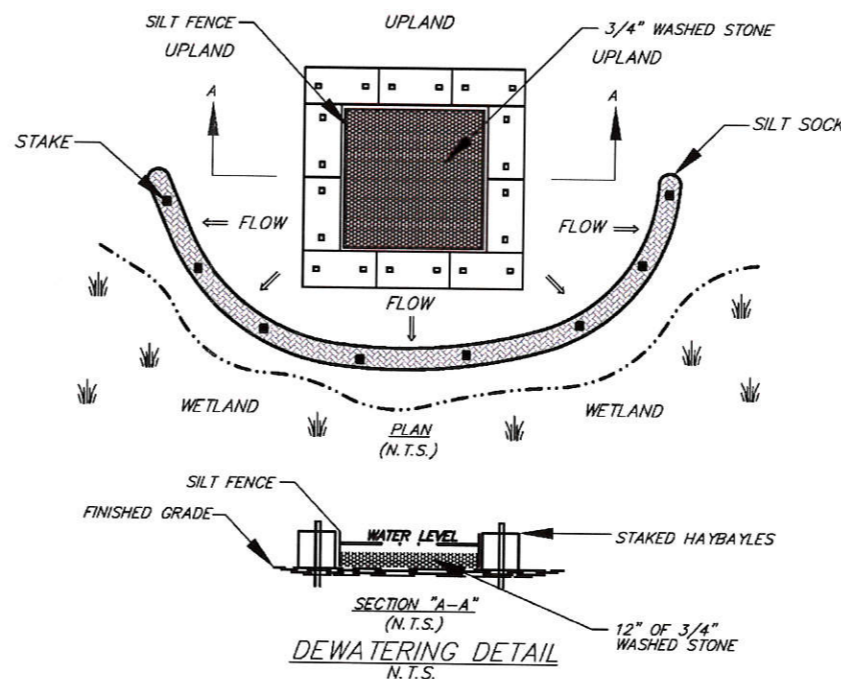
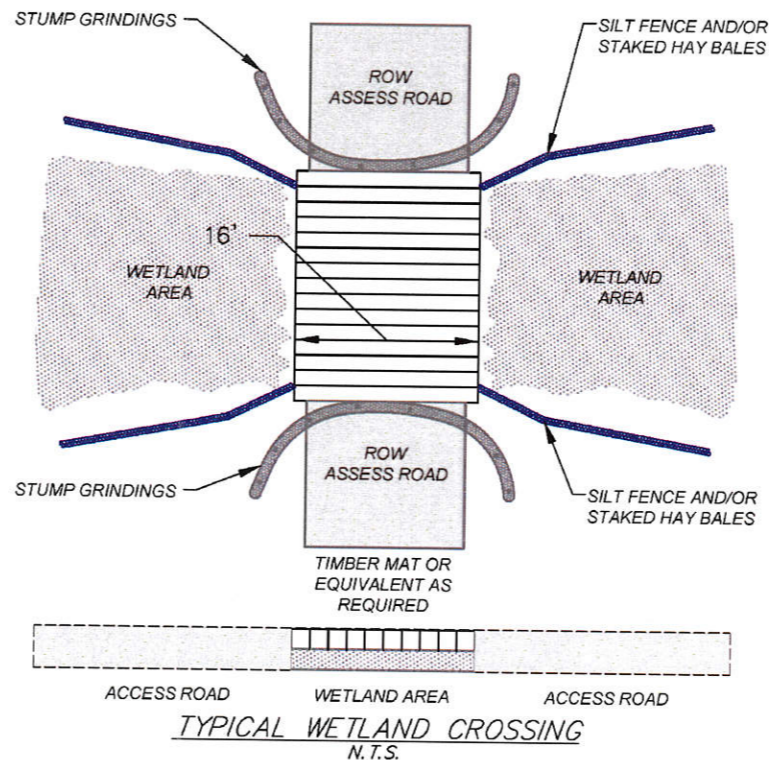
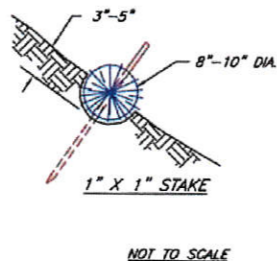
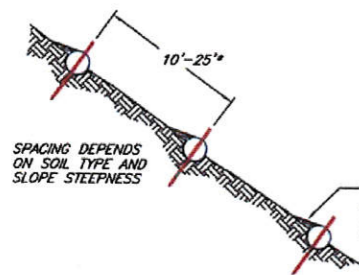
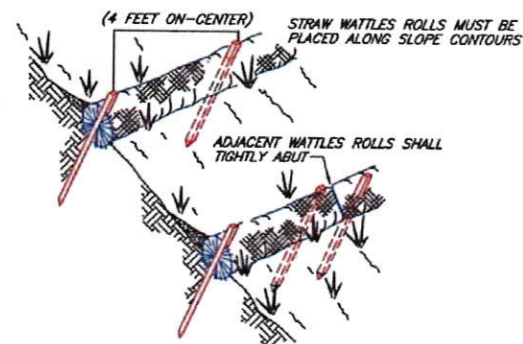
- \* Along erodible or unstabilized slopes
- \* Spread overland waterflow
- \* Trap sediment
- \* Around storm drain inlets to slow water and settle out sediment
- \* Overlap ends approximately 6 inches

#### Installation:

Straw wattles are installed parallel to slope contours and perpendicular to sheet flow.

Spacing\* - Dependent on slope length, soil steepness and soil type (general range 10 - 25').

Trenching - 2"-5" inch trench  
Stacking - at each end and four foot on center (i.e. 25 foot wattle uses 6 stacks)



#### NOTES (SILT FENCE)

1. THE HEIGHT OF THE BARRIER SHALL NOT EXCEED 36 INCHES.
2. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND SECURELY SEALED. SEE MANUFACTURER'S RECOMMENDATIONS.
3. POSTS SHALL BE PLACED AT A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL BE AS MANUFACTURER RECOMMENDS.
4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 6 INCHES WIDE AND 6 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE OF THE BARRIER IN ACCORDANCE WITH RECOMMENDATIONS
5. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE, AND WILL EXTEND A MINIMUM OF 8 INCHES INTO THE TRENCH. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
6. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
7. FABRIC BARRIERS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
8. FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST ONCE DAILY DURING PROLONGED RAINFALL AND ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
9. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
10. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
11. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR THE USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

2020 - M127 TRANSMISSION LINE  
STRUCTURE REPLACEMENT PROJECT  
SUNAPEE, NEW LONDON, ANDOVER, & FRANKLIN,  
NEW HAMPSHIRE

#### DETAILS

PREPARED BY: <b>GZA</b> GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: <b>EVERSOURCE</b> ENERGY	
PROJ MGR: TL	REVIEWED BY: DMZ	CHECKED BY: TL	SHEET <b>2</b>
DESIGNED BY: MJD	DRAWN BY: MJD	SCALE:	
DATE: 09/18/2019	PROJECT NO. 04.0190923.09	REVISION NO.	