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June 30, 2017

Robert Stein, Chairman  
Connecticut Siting Council  
Ten Franklin Square  
New Britain, CT 06051

Re: 1555 Line Rebuild Project

Dear Chairman Stein:

Attached are an original and fifteen (15) copies of a petition on behalf of The Connecticut Light and Power Company doing business as Eversource Energy ("Eversource") requesting a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed modifications to transmission line 1555 in the Town of New Milford, Connecticut ("Petition").

Prior to submitting this Petition, representatives from Eversource briefed municipal officials in New Milford about this line rebuild project (the "Project"). Eversource provided written notice of the proposed work to all abutters and the filing of this Petition with the Council. Maps and line lists identifying the abutting property owners who were notified of the Project are provided in Attachment A: 1555 Line Rebuild Project - Petition Mapping.

A check in the amount of \$625 for the required filing fee is also attached.

Sincerely,

A handwritten signature in blue ink, appearing to read "Kathleen M. Shanley".

Kathleen M. Shanley

Enclosure

cc:

Mayor David Gronbach, New Milford  
Kathy Castagnetta, Town Planner, New Milford



**THE CONNECTICUT LIGHT AND POWER COMPANY**  
**doing business as**  
**EVERSOURCE ENERGY**

**PETITION TO THE CONNECTICUT SITING COUNCIL  
FOR A DECLARATORY RULING OF  
NO SUBSTANTIAL ADVERSE ENVIRONMENTAL EFFECT  
FOR THE PROPOSED MODIFICATIONS TO EXISTING  
1555 LINE IN THE TOWN OF NEW MILFORD, CONNECTICUT**

1. The Connecticut Light and Power Company doing business as Eversource Energy ("Eversource" or the "Company") hereby petitions the Connecticut Siting Council ("Council") for a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need ("Certificate") is required pursuant to Section 16-50g et seq. of the Connecticut General Statutes for the modifications to the 1555 Line, a 115-kilovolt (kV) transmission line, located within existing transmission rights-of-way ("ROWs") in the Town of New Milford, as described herein (the "Project"). Eversource submits that no such Certificate is required because the proposed modifications would not have a substantial adverse environmental effect.

**2. Purpose of the Project**

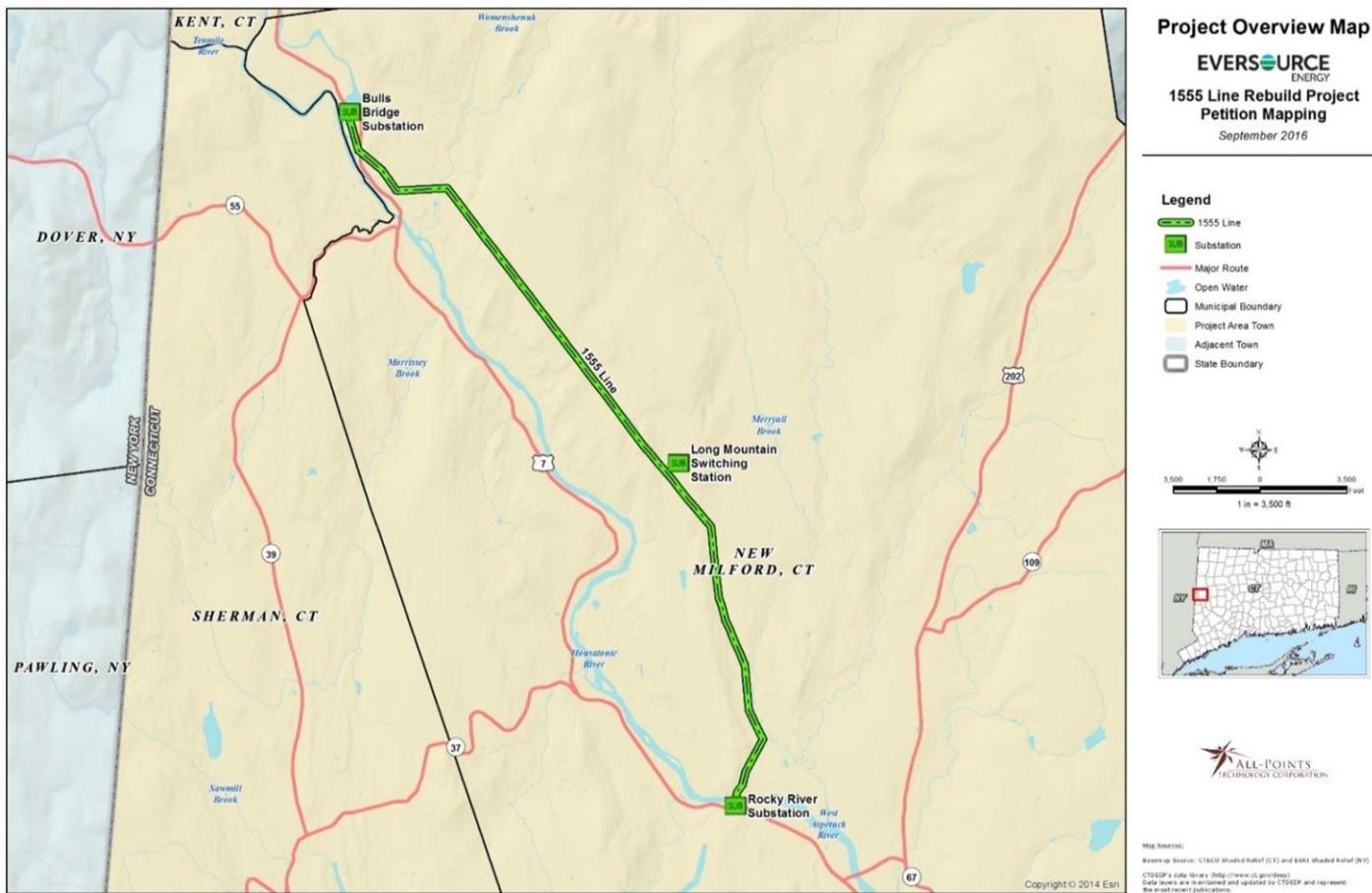
The purpose of the Project is to replace structures and reconductor approximately 6.6 miles of the 1555 Line entirely within Eversource's ROW that connects Bulls Bridge Substation, located at 781 Kent Road, and Rocky River Substation, located at 200 Kent Road.

The 1555 Line was originally built in the 1930's primarily on wood H-frame structures, many of which are exhibiting age-related degradation and cannot support the new conductor. The wood structures were identified as having one or more of the following deficiencies: rotting, cracks, leaning, bowing, split tops or woodpecker damage. In addition, the 1555 Line copper conductor has exceeded its planned service life, experienced a loss of strength and is in need of replacement.

At that time of the original installation, the National Electric Safety Code ("NESC") clearances did not require consideration for conductor sway due to wind ("blow out"). The existing H-Frame design within portions of the right-of-way will not meet the conductor blow-out clearance requirements set out in the 2012 NESC, which would result in the need for

additional easements from abutting private property owners to replace the existing structures with a similar H-frame design. The proposed Project would comply with the 2012 NESC clearance requirements and Eversource's engineering standards and it would avoid the need to acquire additional easements. The 1555 Line Figure 1 illustrates the general location of the proposed Project.

**Figure 1: Project Overview Map**



### **3. Project Description**

The Project scope consists of structure and conductor replacements on the 1555 Line for approximately 6.6 miles from Eversource's Bulls Bridge Substation to Rocky River Junction. Coincident with this upgrade, approximately 1228 feet of the 1555 Line will be relocated from its existing 50 foot-wide ROW to an existing adjacent 235 foot-wide ROW.

The Project requires the replacement of 63 wood structures and one steel lattice structure and the installation of three new steel structures. In the first section of the Project, thirty-seven wood structures would be replaced, from structure 577 located immediately south of Bulls Bridge Substation to structure 541 located at Gales Junction. In the second section, twenty-six wood structures and the one steel structure would be replaced, from structure 2627, located at Gales Junction to structure 2601 located at Rocky River Junction.<sup>1</sup> The existing structures are a mix of wood monopoles and wood H-frames, with the steel lattice structure located at the Rocky River Junction. All wood structures and the steel lattice structure will be replaced with weathering steel structures.

The Project also involves the installation of the following three structures within Eversource's existing ROW: one additional steel monopole structure (structure 2606-1) and two "stub" poles (structures 541-1 and 2627-1). Further, as many of the replacement structures for the 1555 line will increase in height, an additional structure replacement (structure 10126) is proposed on the adjacent 345-kV 321 Line to elevate the 321 Line at the point where it crosses over the 1555 Line to order to maintain required clearance from the 1555 Line.

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<sup>1</sup> The structure numbers on the 1555 Line within the existing ROW between Bulls Bridge Substation and Rocky River Substation are not sequential. The structures from Bulls Bridge Substation to Gales Junction (adjacent to the Long Mountain Switching Station) are numbered from 577 to 541 and 1555 Line structures from Gales Junction to Rocky Junction are numbered from 2627 to 2601.

Detail of the proposed scope of work from Bulls Bridge Substation to Rocky River Junction is provided as follows:

- a) Replacement of 33 single-circuit wood monopoles with 33 single-circuit direct embed weathering steel monopole structures.
- b) Replacement of 2 single-circuit wood monopoles with 2 direct-embed single-circuit weathering steel H-Frame structures.
- c) Replacement of 10 single-circuit wood H-Frame structures with 10 weathering steel, direct embed H-Frame structures.
- d) Replacement of 18 single-circuit wood H-Frame structures with 18 single-circuit direct-embed weathering steel<sup>2</sup>.
- e) Replacement of one existing single-circuit galvanized steel lattice tower with a single circuit direct-embed three-pole weathering steel structure (structure 2601).
- f) Installation of a new, 115-kV single-circuit direct-embed weathering steel monopole (structure 2606-1).
- g) Replacement of the 345-kV deadend direct-embed three-pole wood structure (structure 10126) with a new 345-kV deadend direct-embed three-pole weathering steel structure on the adjacent 345-kV 321 Line where the 321 Line crosses over the 1555 Line.
- h) Replacement of the existing 2/0 copper conductor and the 336 kcmil ACSR (aluminum conductor, steel reinforced) conductor with 556 kcmil ACSS (aluminum conductor, steel support) conductor, which would be supported on the new 115-kV structures.
- i) Installation of new optical ground wire (“OPGW”).
- j) Installation of two new 43-foot weathering steel “stub” poles (structures 541-1 and 2627-1) to support an all-dielectric self-supporting (“ADSS”) communication

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<sup>2</sup> Replacement structure 2607 will be relocated to the adjacent ROW where the 321 Line is located.

cable from structure 2627 to structure 2621. The OPGW cannot be installed between structures 541 and 2627 due to the NESC clearance requirements for the 1555 Line under the 345-kV 321 Line.

- k) Installation of lightning arrestors on eleven of the proposed structures.

The heights of the existing 1555 Line structures range between 34 to 97 feet above ground level. With the exception of 6 structures, all replacement structures will increase in height. In general, structure heights will increase to accommodate current NESC clearance requirements, conductor strain due to hilly terrain, in consideration of the increase in sag from the larger replacement conductor size or to facilitate crossings over other transmission lines.

Twenty-seven of the 63 structures being replaced will have height increases that are over 25 feet and are primarily concentrated in the section of the ROW from Gales Junction to Rocky River Junction. One structure, structure 2617, will increase in height by approximately 56 feet from its existing height (approximately 47 feet to 103 feet.) due to the elevation of proposed location of the structure 2616. The tallest structure in the ROW is existing structure 8038 on the 321 Line (at 139 feet), which will not be replaced.

The height of the existing deadend H-Frame structure on the 345-kV 321 Line is 83 feet. The replacement structure would have a height of approximately 106 feet.

Individual structure height information is provided in the Attachment H: Structure Heights.

The aerial maps in Attachment A depict the structure locations, work and pull pads to be used for the Project, wetland areas and other ROW features, access roads and other Project elements. The cross section drawings in Attachment B depict views along the ROWs of the existing and proposed typical structures.

#### **4. Existing Environment, Environmental Effects and Mitigation**

The Project would be constructed entirely within existing transmission ROWs between Bulls Bridge Substation and Rocky River Substation. The 1555 Line was originally constructed in 1930. The existing structure types supporting the 1555 Line include wood H-Frame, and wood monopole structures and a steel lattice structure. The width of the existing ROW

varies from 50 to 150 feet where the 1555 Line is the only line within the ROW. Where the ROW includes additional transmission lines, the ROW width varies from 295 to 340 feet.

From Bulls Bridge Substation south to structure 568, the 1555 Line is the sole transmission line occupying a 125 foot-wide ROW. From structures 568 to 545, the 1555 Line shares the ROW with the existing 345-kV 398 Line to Long Mountain Junction, where the 398 Line veers off to the northeast and the 1555 Line continues for approximately 800 feet as the sole transmission line in an existing ROW until arriving at Gales Junction.

Continuing east from Gales Junction, the 1555 Line shares the ROW with the 345-kV 321 Line to 1555 Line structure 2608. At this point the 1555 Line and 321 Line ROW split and the 1555 Line continues within a 50-foot-wide ROW for approximately 1228 feet before returning to the wider ROW occupied by the 321 Line and continuing to the Rocky River Junction. The 50-foot-wide section of the ROW is not sufficient to meet current NESC conductor blow out clearance requirements for the proposed conductor and structures, without acquiring additional easement rights along the length of this portion of the ROW. Consequently, to eliminate the need to acquire these additional rights, this portion of the 1555 Line, including structure 2607, would be relocated into the wider ROW and installed parallel to the 321 Line.

No expansion of the existing ROWs will be required for the Project. See cross sections in Attachment B. The Project would not have a substantial adverse environmental effect, for reasons explained more fully below.

#### Land Use

Land uses adjacent to the Project area consist of a mix of rural, residential, and recreational areas (golf course), agricultural lands, including horse pastures and paddocks, and other undeveloped lands such as forest areas, meadows, rivers (Housatonic and West Aspetuck). The Project area is traversed at two locations by the Housatonic Railroad, which currently provides regional freight service.

Though the Project would be traversing through some of these areas, will not impact adjacent land uses. Eversource will work with any affected property owners on restoration upon completion of the Project.

### Clearing and Vegetation Removal

Tree clearing within the existing ROW would result in a total forested conversion (to scrub-shrub or herbaceous habitat) area of approximately 8.23 acres (0.13 acre cleared in wetlands). Tree clearing is required, along with vegetation removal, to accommodate access road installation and improvements, work and pull pad installation, and for conductor blow out. Converting forest (including forested wetland) to shrubland, or emergent vegetation along the transmission line ROW would modify, but not adversely affect, habitat. The creation of additional shrubland and early successional habitat (and the preservation of such existing habitat) along the ROW would represent a long-term benefit for many species of wildlife because shrubland habitat is otherwise declining in New England.

### Scenic, Recreational and Cultural Resources

The Project ROW traverses across two locally designated scenic roads: Front of the Mountain Road and Rooster Tail Hollow. The Project would minimize effects to these scenic resources by aligning the replacement structures immediately adjacent to the existing structures to the extent practical.

Except for the Housatonic River, there are no recreational use areas in the Project area and no public open space property or trails were identified following a desktop review of the Connecticut Department of Energy and Environmental Protection ("CT DEEP") GIS data, and field investigations. The Project ROW crosses Weantinoge Heritage Land Trust property at two locations southeast of Front of the Mountain Road and Bass Road.

A cultural (archaeological and historical) resources review of the proposed Project was conducted by Heritage Consultants, LLC ("Heritage") in March, October, and November 2016 and April 2017 (see Attachment E: Cultural Resources Report). This review included the following:

- A Phase I (preliminary archaeological and historical resources assessment) using a three-step approach to: 1) gather and present data regarding previously identified cultural resources situated within the vicinity of 1555 Line; 2) investigate the proposed project corridor's natural and historical characteristics;

and 3) evaluate the need for completing additional cultural resources investigations.

- A Phase IB cultural resources reconnaissance survey (shovel testing) where Project activities are proposed in areas that have been determined by the Phase I to have a moderate/high potential for yielding intact archaeological deposits.
- A Phase II National Register testing and evaluation of sites identified during the Phase IB survey and deemed potentially significant under Criterion D of the National Register of Historic Places (“NRHP”).

The results of these surveys are documented in the Cultural Resources Report and were submitted to the Connecticut State Historic Preservation Office (“SHPO”) and the Tribal Historic Preservation Office(s) (“THPO”) of the Mashantucket Pequot Tribal Nation, the Mohegan Tribe of Connecticut Indians, and the Wampanoag Tribe of Gay Head (Aquinnah) in April 2017. Copies of these submittals are provided in Attachment E.

The Phase II survey identified one archaeological site in proximity to Project activities that is considered eligible for listing to the NRHP. As recommended by Heritage, Eversource will utilize temporary matting at this location to avoid ground disturbance. Eversource would comply with any additional mitigation requirements, if requested by the SHPO and/or the THPO.

The cultural resources review determined that no state or NRHP listed properties or historic districts (built or above-ground resources) are located within or adjacent to the Project ROW. The closest historic property is the Merwinsville Hotel, located at 1 Browns Forge Road, approximately 450 feet southwest of the ROW. Due to the location of this NRHP listed property, which is at a lower elevation than the ROW, and the presence of intervening vegetation (mature forest) and rugged topography, no significant visual impact to the viewshed of this NRHP property is anticipated.

#### Wetlands, Watercourses, Waterbodies and Flood Zones

Eversource contracted All-Points Technology Corporation, P.C. (“APT”) to identify and delineate water resources in August 2016 (see Attachment C: Wetlands and Watercourses Report). Water resources within the Project area are depicted on the

mapsheets provided in Attachment A and include inland wetlands, watercourses (perennial and intermittent streams), a pond, one potential vernal pool, and Federal Emergency Management Agency (“FEMA”) Flood Zones. All work in or near these areas would be conducted in accordance with the Eversource’s 2016 Construction & Maintenance Environmental Requirements, Best Management Practices Manual for Massachusetts and Connecticut (“BMPs”) and with the conditions of applicable regulatory permit conditions and approvals. Detail on each of these resource areas is provided below.

#### *Wetlands*

Wetlands in the Project area were identified and delineated in accordance with industry standard methodology. A total of 28 wetlands were identified in or proximate to the Project area.

Permanent wetland effects would result from the replacement of three existing structures (566, 2622 and 2633) which are located in wetlands. These structures include one steel monopole (structure 556), and two steel H-frame structures (structures 2622 and 2623). The placement of these structures would result in approximately 100 square feet of permanent effects. In order to minimize disturbance to the wetlands, the existing wood structures will be cut approximately 10 inches above grade and removed and the pole butts will be left in place.

The Project will result in approximately 1.74 acres of temporary effects to wetlands which are associated with temporary use of construction mats for access roads and work pads. All construction mats will be promptly removed upon Project completion and wetland areas will be restored in accordance with Eversource’s BMPs.

In addition to the effects described above, tree clearing for temporary work pads in wetlands will result in some habitat conversion. Tree clearing in forested wetland areas will result in the temporary modification of approximately 0.13 acre of palustrine forested (“PFO”) wetlands to palustrine scrub shrub (“PSS”) wetlands, representing a temporary cover type change to wetland habitat, but not a net loss of wetlands. Work activities in wetlands, including the proposed tree clearing, will be conducted in accordance with the Eversource BMPs and comply with Project permits and approvals.

Anticipated effects to wetlands from the Project are detailed on Table W-1.

*Watercourses and Waterbodies*

A total of 18 watercourses and waterbodies were delineated within the Project area. These include 7 perennial watercourses (three named and four unnamed), 11 intermittent watercourses, and Ladner Pond. Named watercourses include the Housatonic River (two locations), Womenshenuk Brook, and West Aspetuck River.

Many of the watercourses within the Project ROW are currently traversed by existing access roads, and crossed via culverts or stone (hard-bottom) crossings. Project effects to watercourses are associated with the restoration of three existing access road stone crossings, and installation of one new stone crossing resulting in approximately 80 square feet of permanent effects to one intermittent watercourse (S7). The new stone crossing will replace a temporary culvert which will be installed during construction and removed upon completion.

In addition, temporary matting will be used to span a total of four watercourses associated with one access road crossing and three work pads. Temporary matting will be removed immediately following construction. All watercourse crossings will be constructed in accordance with Eversource's BMPs.

The following Table W-1 provides a summary of Project effects to wetlands and watercourses:

Table W-1: Summary of Project Effects to Wetlands and Watercourses

Wetland / Watercourse ID	200 Scale Petition Mapping Sheet No.	Wetland / Watercourse Effects ( $\pm$ square feet)		
		Temporary (Matting and Culvert)	Permanent (Structures and Stone Stream Crossing)	Secondary** (Tree Clearing)
W1	1	724	0	194
W8 / S7	3	2,311 1,960*	80 (S7)*	0
W11	4	225	0	0
W13	4	10,242	20	0
W14	5	6,049	0	726
W15	6	3,088	0	0
W18	8	26,147	80	4,414
W22	9,10	15,318	0	0
W23	10	8,536 277*	0	0
W24	10	737	0	0
W25	10	292*	0	292
TOTAL		75,906 (1.74 acres)	180	5,626 (0.13 acres)

\*Alternate access only

\*\*Secondary effects from tree clearing overlap temporary matting, thus effects are not cumulative

### *Vernal Pools*

Project wetland areas were inspected for potential vernal pool habitat in August and September 2016 using identified physical and hydrologic characteristics. Project wetlands are predominantly characterized by hillside seepage wetlands and intermittent and perennial riparian corridors that lack suitable vernal pool hydrology and morphology. Only one potential vernal pool, an old farm pond located in Wetland W18 north of Rooster Tail Hollow (on Map Sheet 8), was observed within the Project ROW. This area was resurveyed on May 9, 2017 and confirmed to be a vernal pool based on the presence of two vernal pool indicator species (see Attachment D: Potential Vernal Pool Survey). Temporary matting would be utilized for work pad construction within the vernal pool envelope (within 100 feet) to avoid

permanent alteration of this habitat area. All proposed work within the vernal pool envelope would occur within the existing maintained ROW. In addition, if work is conducted within the active vernal pool season (March through June), Eversource would implement measures to facilitate unencumbered amphibian access to and from this vernal pool such as syncopated silt fencing or elevated matting.

#### *FEMA Flood Zones*

The Project ROW extends across 100-year FEMA flood zones associated with the Housatonic River, Womenshenuk Brook, and the West Aspetuck River and 500-year flood zones of the Housatonic River and West Aspetuck River. Two of the replacement structures are proposed to be located within 500-year flood zones; No transmission line structures are proposed within a 100-year flood zone. In addition, the following work activities and materials would be located within 100-year flood zones: portions of temporary matted work pads at proposed structures 574, 575, 577 and 2608; two temporary matted pull pads adjacent to structures 574 and 575; improvements to approximately 300 linear feet of existing access road between structures 574 and 575; and approximately 100 linear feet of proposed temporary matted access road between structures 2607 and 2608.

Eversource would utilize its BMPs to minimize any impacts in these areas including the use of construction mats for work pads to ensure that hydrology is not adversely affected. All construction mats would be removed after the Project is complete. Areas of disturbance would be promptly stabilized in order to minimize the potential for soil erosion and the discharge of sediment into nearby resource areas. Prior to significant storm events, Eversource will secure the construction mats to impede lateral movement during temporary flooding.

In areas where gravel is used for access, grading and soil removal would occur prior to installation, to ensure no net increases in fill. Accordingly, the Project would have a de minimis effect on the flood storage capacity of the affected flood zones.

#### *Water Supply*

Based on the August 1, 2016 New Milford Aquifer Protection Areas (“APA”) map maintained by the CT DEEP, approximately 2,000 linear feet of the Project ROW

(between structures 2608 and 2603) is located within the Fort Hill Road, Level A APA. Best practices for the proper storage, secondary containment, and handling of diesel fuel, motor oil, grease and other lubricants, would be used to protect water quality within the APA. During construction, Eversource would require its contractors to strictly adhere to any additional Project-specific regulatory requirements regarding the storage and handling of any petroleum products used during the work. Construction activities would conform to Eversource's BMP Manual, as well as to the requirements of Project-specific plans (e.g., Stormwater Pollution Control Plan; Spill Prevention and Control Plan), which would be prepared prior to the commencement of construction.

The Project is not located within a public water supply watershed and no public supply reservoirs or public water supply wells are located within the Project area. No private water supply wells were observed within the Project area during field investigation activities.

#### Wildlife and Habitat

The Project would not have a substantial adverse environmental effect on wildlife or wildlife habitat. Eversource has corresponded with the CT DEEP Bureau of Natural Resources – Wildlife Division, Natural Diversity Database (“NDDB”) regarding state-listed species within the Project area. The correspondence indicates that state-listed species and critical habitat are present within the Project ROW. Eversource conducted a field review with CT DEEP on August 16, 2016 and agreed on protection strategies for the identified critical habitat and state-listed species. Eversource submitted written correspondence to the CT DEEP NDDB and received concurrence that the protection strategies that were outlined for state-listed species that might be affected by Project activities are sufficient. Eversource will adhere to the approved protection measures, and any additional protection strategies that may be identified by CT DEEP.

In addition to coordinating with the CT DEEP for the protection of the state-listed species, Eversource is consulting with the U.S. Fish and Wildlife Service (“USFWS”) regarding federally-listed species as a part of the Section 7 consultation process that is required for the Project’s U.S. Army Corps of Engineers permit application filing. The only federally-listed species potentially occurring in the vicinity of the Project is the

northern long-eared bat (“NLEB”). The minimal tree clearing required for the Project would not impact known NLEB hibernacula. If requested by USFWS, Eversource will adhere to any necessary NLEB protection measures.

#### Visual Effects

Some tree clearing is required for the Project in order to accommodate the installation of work pads, pull pads, and access roads and for conductor blow out. All replacement structures will utilize weathering steel, which, except for the lattice structure replacement, will approximate the look of the original wood structures. Replacement structures will be located as close as possible to the existing structures, except for structure 2607 which will be relocated to the 321 Line ROW, as noted earlier.

The Project will result in some change to the visual character of the line, though Eversource does not believe that the change will result in a significant impact. As noted above, some of the replacement structures would change design from the existing structures (two monopoles will be replaced with H-frames and other H-frame structures will be replaced with monopoles). These visual effects would be somewhat mitigated by utilizing weathering steel for the new structures to replace the existing wood structures.

In addition to some design changes, many of the replacement structure heights will be greater than the existing structures and a portion of the proposed heights of the replacement structures are 25 feet or greater. However, a large portion of the structures that will have these greater height increases will be located in the ROW from Gales Junction to the Housatonic River (structures 2627 to 2601) and where the 1555 Line is collocated in the ROW with the 321 Line. The 321 Line is a 345-kV line that has structure heights that are roughly comparable to the proposed heights of the new 1555 Line structures – some of the new 1555 Line structures will be shorter than the closest 321 Line structures and others will be taller than the closest 321 Line structures. The abutting land use in this section of the ROW is primarily undeveloped land; accordingly, the replacement structures are not expected to result in visual impacts to abutters and this portion of the line has only one road crossing. There are some residential abutters at the beginning of this section of the line as it comes out of Gales Junction, however these structures (2625 through 2622) are H-frame structures that are not changing in design

and, though they are increasing in height, the new structures will be of equal or lesser height than the adjacent 321 Line structures

#### Sound Levels along the Transmission ROW

There would be no changes to the sound levels along the transmission corridor after completion of the Project.

#### Air Quality

The potential for short-term, localized effects on air quality may result, primarily from fugitive dust and equipment emissions. To minimize the amount of dust generated by construction activities, the extent of exposed/disturbed areas at any one time would be minimized. Vehicle emissions will be limited by requiring contractors to properly maintain construction equipment and vehicles, and by minimizing the idling time of equipment and vehicles, including diesel construction equipment, in accordance with Connecticut regulatory requirements. Temporary gravel tracking pads would be installed at points of construction vehicle ingress/egress to minimize the potential for equipment to track dirt onto local roads. To further minimize dust, water may be used to wet down disturbed soils or work areas with heavy tracking as needed.

#### Radio and Television Interference

There will be no increase in radio interference or audible noise from the operation of the new transmission facilities.

### **5. Traffic, Construction Sequence and Detail**

#### Traffic/Traffic Management

Construction vehicles and equipment associated with the work would include pickup trucks, bucket trucks, concrete trucks, drill rigs, front loaders, reel trailers, bulldozers, wood chippers, cranes, forklifts, side booms, dump trucks and cranes. Pullers and tensioners will be used for the line work.

Construction-related vehicular and equipment movements would occur on public roads in the Project area. However, the Project-related traffic is generally expected to be temporary and highly localized in the vicinity of the ROW and staging areas. Due to phasing of

construction work, these Project-related traffic movements are not expected to significantly affect transportation patterns or levels of service on public roads.

To safely move construction vehicles and equipment onto and off of the ROW while minimizing disruptions to vehicular traffic along public roads, Eversource or its Project contractor would, as appropriate, work with representatives of New Milford and/or the Connecticut Department of Transportation (“ConnDOT”) to develop and implement traffic management procedures, as needed. The construction contractor is typically responsible for posting and maintaining construction warning signs along public roads near work sites and for coordinating the use of flaggers or police personnel to direct traffic, as necessary.

### **Construction Sequence**

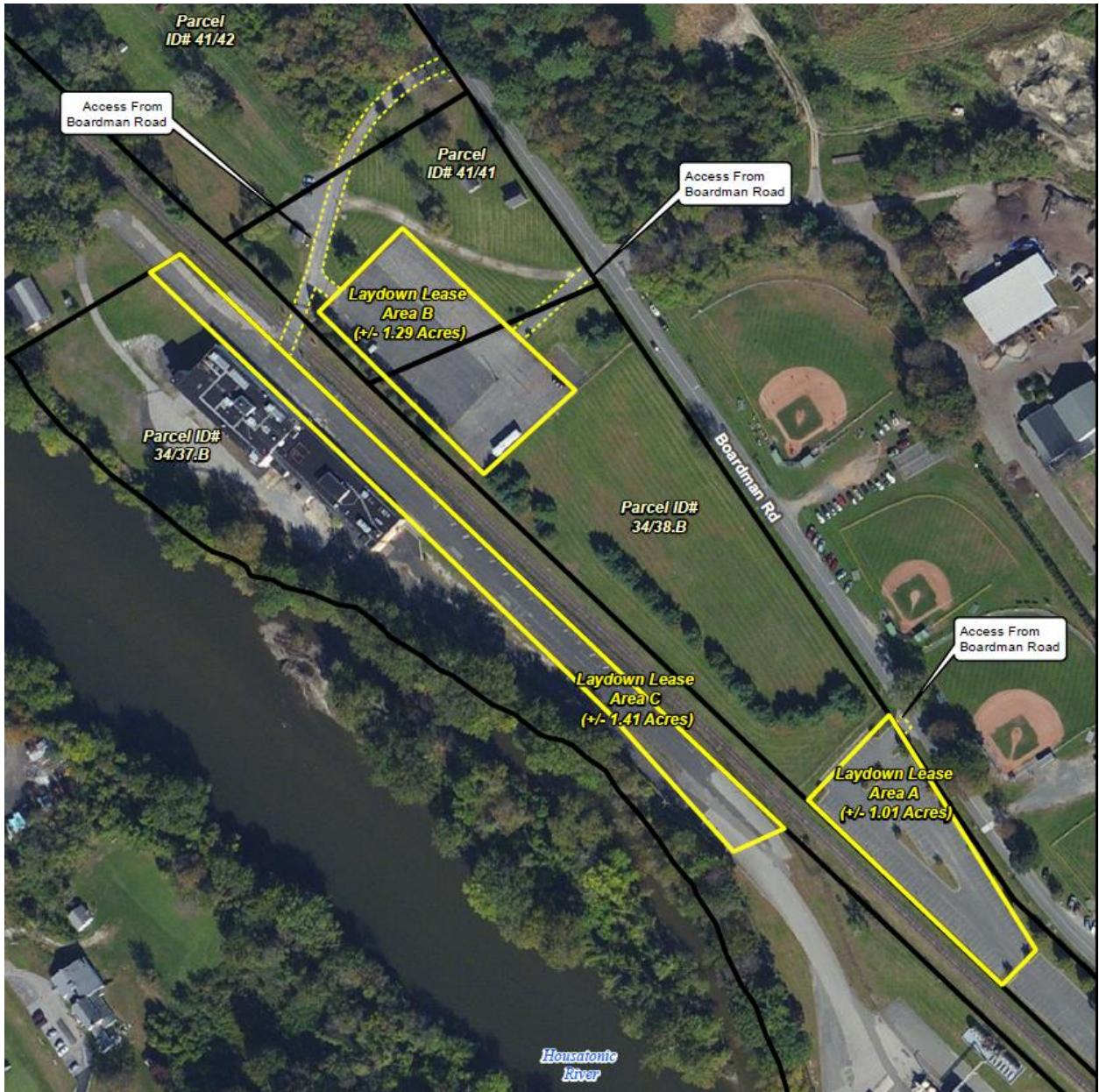
Preparation of the ROW would include the following activities:

#### **Establishing Staging Areas**

The proposed three staging/laydown (“Staging”) areas for the Project are at 69 Boardman Road in the Town of New Milford. The property owner is Medical Instill Technologies, Inc. The staging areas are approximately four acres total in size and located on the parking lots of the property. See Figure 2.

The Staging areas would be used to store construction materials, equipment, tools, and supplies (including conductors, cable reels, insulators, hardware, poles and mats) for the Project. Two office trailers and Conex storage containers may be located at a Staging area. Components removed during the work (structures, conductor, hardware and insulators) may be temporarily accumulated and stored at the Staging areas prior to removal off-site for salvage and/or disposal. The Staging areas may also be used by construction crew members for parking personal vehicles as well as for construction vehicles and equipment storage, and for performing minor maintenance, when needed, on construction equipment. An environmental review of each potential staging area location would be completed and erosion and sedimentation (“E&S”) controls would be installed and maintained until completion of the work in accordance with Project permits and Eversource’s BMPs.

Figure 2: Staging and Laydown Areas



### Clearing and Vegetation Removal

Clearing will be accomplished using mechanical methods and typically requires the use of flatbed trucks, brush hogs or other types of mowing equipment, skidders, forwarders, bucket trucks for canopy trimming, feller bunchers for mechanical tree cutting, wood chippers, log trucks, and chip vans. Eversource would conduct vegetation removal activities in accordance with its BMPs.

Construction mats will be used to provide a stable base for clearing equipment across watercourses or within wetlands. Such temporary support would minimize rutting in wetlands and would be removed after the clearing activities are completed.

Eversource would require the contractor to use low-impact clearing methods to remove brush vegetation to protect wetlands, watercourses, state-listed species and their habitats, and cultural resources. Low-impact clearing incorporates a variety of approaches, techniques, and equipment to minimize site disturbance. Eversource would require the clearing contractor to use some or all of the following low-impact clearing methods, depending on site-specific considerations:

- Take into consideration soil and weather conditions when scheduling vegetation removal activities, such as during periods of heavy rainfall.
- Maximize the use of uplands for clearing access routes.
- Use appropriate sized equipment for the site conditions, where possible, to minimize impacts.
- Where practical, cut brush close to the ground, leaving root systems and stumps, to provide additional soil stability.

#### Soil Erosion and Sediment Control Installation

Project construction would conform to best management practices for E&S control, including those provided in the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control* and the Eversource's BMPs.

Typical E&S control measures include, but are not limited to, straw blankets, hay bales, silt fencing, check dams, berms, swales, and sediment basins. Silt fence would be installed prior to construction to demarcate the line of construction and prevent migration of sediment or construction materials into wetlands and watercourses. Temporary E&S control measures would be maintained and inspected throughout the Project to ensure their integrity and effectiveness. Following completion of construction, seeding and mulching or hydroseeding would occur to permanently stabilize previously disturbed areas. The temporary E&S control measures would remain in place until the Project work is complete and all disturbed areas have been stabilized.

### Access Roads and Work Pads

Access to each proposed transmission structure location will be required during Project construction. As a result of maintenance activities some access roads are already established and Eversource will utilize these existing access roads to the extent possible. However, some new access roads will be required. Timber matting will be utilized to construct temporary access roads through wetland areas to reach certain structure locations. The access roads expected to be used for the proposed Project are illustrated on the maps in Attachment A.

Existing access roads may need to be improved (graded, widened, and/or reinforced) with additional stone material in order to accommodate the safe passage of construction vehicles and equipment. Access road improvements typically include trimming adjacent vegetation and widening roads, as needed, to provide a minimum travel surface that is approximately 16 feet wide (additional width up to 20 feet may be needed at turning or passing locations). Access roads would typically be graveled; however, where access roads traverse streams or wetlands, timber construction mats or stone would be used. E&S controls would be installed as necessary before the commencement of any improvements to or development of access roads.

At each transmission line structure site, a work pad is required to stage material for final on-site assembly and/or removal, and to provide a safe, level work base for the construction equipment. Typical work pads would be approximately 100 feet by 100 feet except in most locations and the pulling areas would be approximately 150 feet by 150 feet as limited by the size of the ROW in contours.

A typical (upland) installation of a work pad at a structure location involves several steps: (1) removal of vegetation, (2) grading to create a level work area, and (3) removal of the upper three to six inches of topsoil (which is usually unsuitable to support the necessary construction activities). The removed topsoil would be temporarily stockpiled within the ROW, typically near the work pad. A rock base, which allows drainage, would be layered on top of filter fabric, if necessary. Additional layers of rock with dirt/rock fines (processed gravel) are typically placed over this rock base.

To facilitate future transmission line maintenance, structure work pads and pull pads in uplands would be left in place, unless the property owner requests their removal.

Access roads and work pads located within improved areas would typically be removed and the area restored, unless the property owner requests that they remain in place. No new permanent access roads or work pads are proposed in water resource areas.

The preliminary locations and configuration of the work pads, as determined based on the environmental field studies and constructability reviews, are shown on Attachment A.

#### Foundation Installation

All structures will have direct embed foundations. This work would require the use of equipment such as augers, drill rigs, and dump trucks. If groundwater is encountered, and when working within wetlands, pumping (vacuum) trucks or other suitable equipment would be used to pump water from the excavated areas as the shaft is being drilled or as the structure is being set. The water would then be discharged in accordance with applicable federal requirements.

#### Structure Assembly/Installation

Replacement structure sections, structure components and hardware would be delivered to the individual structure locations using flat-bed trucks and assembled on-site using a crane and bucket trucks. After assembly, the area around the foundation would be backfilled with processed gravel.

#### Conductor and Shield Wire Installation/Removal

The installation of the new conductors, OPGW and Alumoweld shield wire would occur after the new structures have been erected. The equipment required for these activities would include conductor reels, conductor pulling and tensioning rigs, and bucket trucks. The removal of the existing conductor and shield wire would take place during the installation of the new conductor/OPGW because the existing conductor and shield wire will be used as pulling lines.

#### Restoration

Once the new structures are erected and the line is energized, the existing structures would be demolished and removed. ROW restoration activities would also include the removal of construction debris, signage, flagging, and temporary fencing, as well as the

removal of construction mats, pull pads and structure work pads that are designated for removal. Areas affected by construction would be re-graded as practical and stabilized using re-vegetation or other measures before removing temporary E&S controls. Eversource will work with the applicable property owner for the restoration or permanent removal of any stone walls that would be impacted during construction.

#### Waste Management

Waste materials, such as structure components (i.e., wood and steel from the removed structures, conductor, shield wire, associated hardware, etc.) and any other construction debris would be disposed of in accordance with Eversource's BMPs, applicable regulations or recycled consistent with applicable rules and regulations and Eversource policies.

Excess soils would be managed in accordance with the Company's BMPs, applicable regulations and disposal facility policies.

#### Noise

During construction, any impacts to existing noise levels would be short-term and localized in the vicinity of the work sites. There would be no change to the noise levels along the transmission ROW from the operation of the rebuilt line.

### **6. Electric and Magnetic Fields**

Electric and magnetic fields ("EMF") are forms of energy that surround an electrical device. Electric fields are produced within the area surrounding a conducting object (e.g., a wire) when a voltage is applied to it and are measured in units of kilovolts per meter ("kV/m"). The level of an EF near an energized power line depends on the applied voltage, the distance between the conductors, and the distance to the measurement location.

Magnetic fields are produced within the area surrounding a conductor or device that is carrying an electric current and are measured in units of milliGauss ("mG"). The level of the magnetic field near line conductors carrying current depends on the magnitude of the current, the distance between conductors, and the distance from the conductors to the measurement location.

Both electric and magnetic fields decrease rapidly as the distance from the source increases, and even more rapidly from electric equipment in comparison to line conductors. Electric field levels are further weakened by obstructions such as trees, structures, buildings or walls, while magnetic fields can pass through most materials. In the case of parallel lines of circuit conductors, the levels of electric and magnetic fields are also dependent on the phasings of the circuits.

The Project will change the electric and magnetic fields along the transmission corridor. Changes to the electric fields arise from changes to the line geometry and conductor size within the ROW, while changes to the magnetic fields arise from both the changes to the line geometry within the ROW and the change in line loads based on future state for post-construction calculations (year 2023 vs. 2018). It should be noted that both the electric and magnetic fields in much of the corridor are dominated by the existing 345-kV transmission lines, which will remain essentially unchanged as a result of this Project.

For the rebuilt transmission lines, the configuration of the parallel lines on the ROW changes along the length of the project. Therefore, to calculate the electric and magnetic fields, the rebuild section of the ROW has been broken into five sub-sections:

- Section 1 between Rocky River Station and Structure 2602;
- Section 2 between Structure 2602 and Structure 2620;
- Section 3 between Structure 2620 and Long Mountain Junction;
- Section 4 between Long Mountain Junction and South Kent Rd; and
- Section 5 between South Kent Rd and Bulls Bridge Station.

These calculations are shown in the figures and Table E.1. See Attachment F: EMF Graphs for the magnetic field calculations are shown in Figures E-1 through E-5. Electric field calculations are shown in Figures E-6 through E-10.

The electric and magnetic fields in the vicinity of the project would not significantly change as a result of this work. Within the ROW, there will be small increases and decreases to the electric and magnetic fields in different locations along the line. At and beyond the ROW edges, the differences would be negligible.

**Table E-1. Tabulated Electric and Magnetic Field Calculations at ROW Edges**

Magnetic Field Calculations (mG - AAL)	South ROW Edge		Max in ROW		North ROW Edge	
	Pre	Post	Pre	Post	Pre	Post
Rocky River to Str 2602	6.66	7.91	130.17	152.82	5.89	7.36
Str 2602 to Str 2620	6.66	7.97	130.17	152.91	9.45	13.6
Str 2620 to Long Mountain Jct	6.66	7.91	130.17	152.76	9.45	12.28
Long Mountain Jct to S Kent Rd	9.03	10.14	285.79	323.73	56.84	64.38
S Kent Rd to Bulls Bridge S/S	1.22	1.27	6.71	6.87	1.02	1.08
Electric Field Calculations (kV/m)	South ROW Edge		Max in ROW		North ROW Edge	
	Pre	Post	Pre	Post	Pre	Post
Rocky River to Str 2602	0.18	0.18	5.07	5.17	0.29	0.39
Str 2602 to Str 2620	0.18	0.18	5.07	4.96	0.29	0.25
Str 2620 to Long Mountain Jct	0.18	0.18	5.07	5.17	0.29	0.23
Long Mountain Jct to S Kent Rd	0.22	0.23	3.94	3.94	0.95	0.95
S Kent Rd to Bulls Bridge S/S	0.21	0.22	0.92	0.93	0.11	0.13

There are no state or federal limits for electric or magnetic field levels at the edge of a transmission line ROW. However, the International Council on Electromagnetic Safety (“ICES”) and the International Commission on Non-ionizing Radiation Protection (“ICNIRP”) have issued guideline limits for long-term public exposures to these fields.

All of the modeled values at the edge of the ROW are well below these international guidelines which are summarized in Table E-2:

**Table E-2: Reference levels for whole body exposure to 60-Hz fields: general public**

Organization Recommending Limit	Magnetic Fields (mG)	Electric Fields (kV/m)
ICNIRP Restriction Level	2,000	4.2
ICES Maximum Permissible Exposure	9,040	5
		10*

\*This is an exception within transmission line ROWs because people do not spend a substantial amount of time at these locations and very specific conditions are needed before a response is likely to occur (i.e. a person must be well-insulated from ground and must contact a grounded conductor) (ICES, 2002, p. 27).

While the ICNIRP guideline for electric fields is exceeded in the immediate vicinity of the 345-kV line, this drops to below 4.2 kV/m within 45 feet of the 345-kV transmission line and no homes would have such exposure. Additionally, these calculations do not account for any shielding of vegetation in the area.

## **7. Municipal and Property Owner Outreach**

In August and November 2016, Eversource consulted with the municipal officials in the Town of New Milford (“Town”) to brief them on the proposed Project. Additionally, in February 2017, Eversource consulted with the Town regarding Eversource’s desire to obtain off ROW access across the Town’s property on Scovill Street. The Town of New Milford approved Eversource’s request for temporary off ROW access in June 2017. Eversource also provided representatives of the Town of New Milford with written notice of the Petition filing.

In January 2017, Eversource initiated outreach to property owners located along the ROW. In conjunction with the submission of this Petition, all abutting property owners were notified of the filing and provided information on how to obtain additional information on the Project, as well as how to submit comments to the Council. Further, Eversource representatives will contact adjacent property owners to provide advance notification to them as to the start of construction activities and will continue to update property owners throughout construction and restoration.

## **8. Construction Schedule and Hours**

Eversource proposes to begin construction during the summer of 2017 and expects that the construction, including restoration, would be completed by summer 2018. Normal construction work hours would be Monday through Saturday from 7:00 AM to 7:00 PM. Sunday hours may be necessary due to unforeseen conditions such as inclement weather, outage constraints, and/or critical path activities.

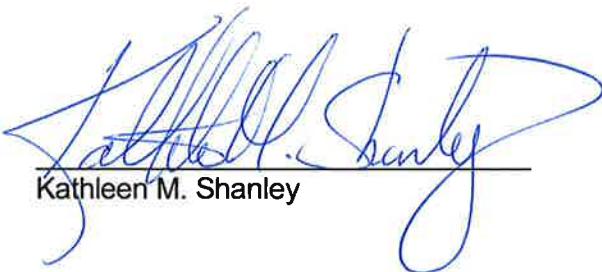
## **9. Section 16-50k(a) of the Connecticut General Statutes provides that a Certificate of Environmental Compatibility and Public Need is needed for proposed modifications of a facility that the Council determines would have a “substantial adverse environmental effect.” Eversource respectfully submits that the proposed modifications would not result in a substantial adverse effect on the environment or ecology, nor would they damage existing**

scenic, historical or recreational values. Accordingly, Eversource requests that the Council issue a declaratory ruling that the proposed modifications would have no substantial adverse environmental effect and, therefore, no Certificate is required.

**10. Communications regarding this Petition for a Declaratory Ruling should be directed to:**

Kathleen M. Shanley  
Manager – Transmission Siting  
Eversource Energy  
PO Box 270  
Hartford, CT 06141-0270  
Telephone: (860) 728-4527

By:



Kathleen M. Shanley

**List of Attachments**

- Attachment A: 1555 Line Rebuild Project – Petition Mapping
- Attachment B: Existing/Proposed ROW Cross Sections
- Attachment C: Wetlands and Watercourses Report
- Attachment D: Vernal Pool Survey
- Attachment E: Cultural Heritage Reports
- Attachment F: EMF Graphs
- Attachment G: Letter to the Abutters and Affidavit
- Attachment H: Structure Heights



## ATTACHMENT A



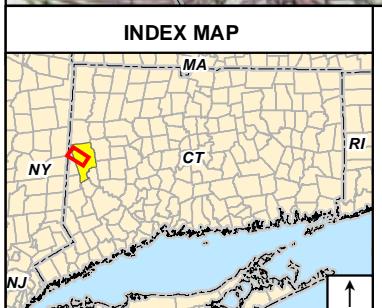
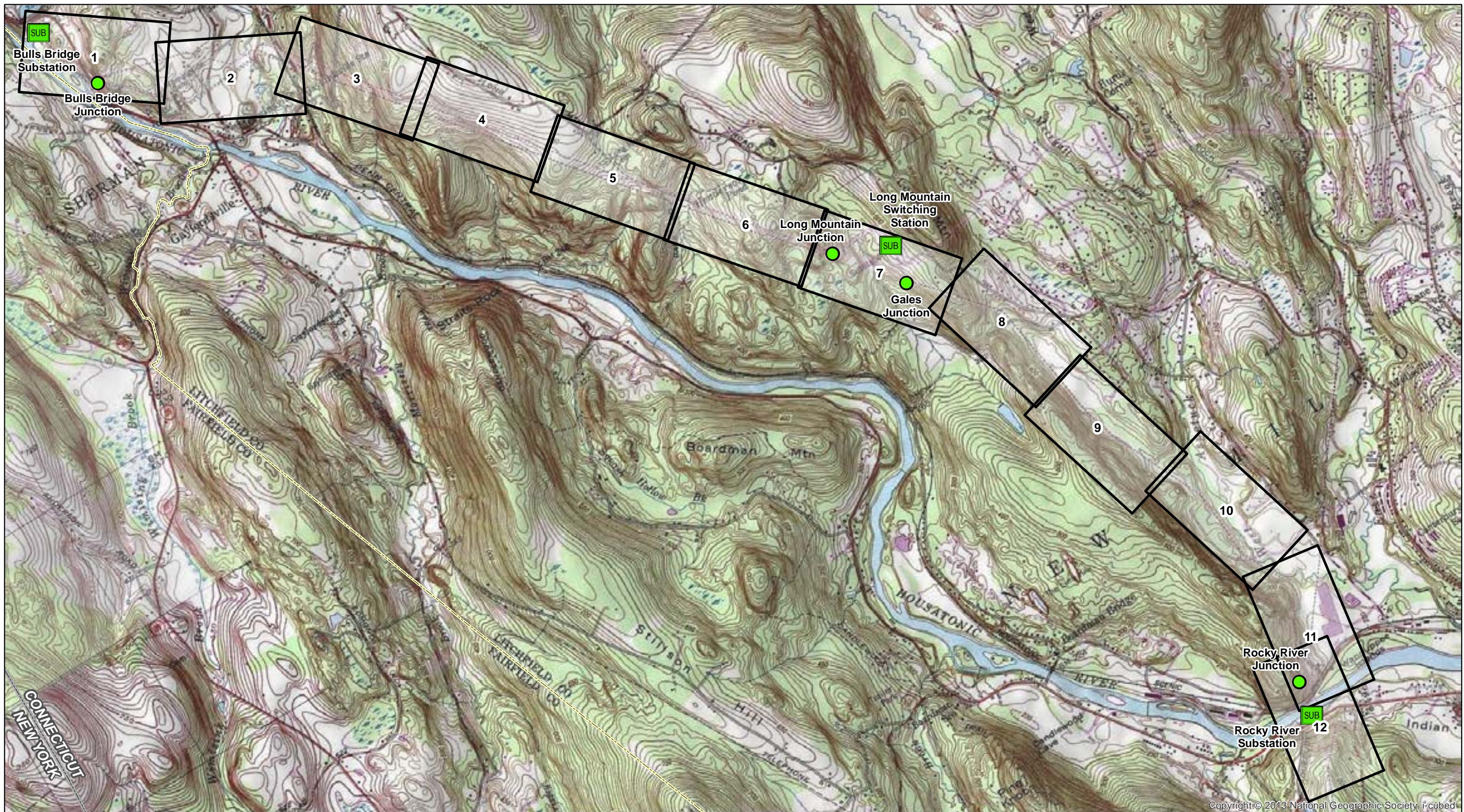


# **1555 Line Rebuild Project**

## **Town of New Milford, Connecticut**

**JUNE 2017**

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**Legend**

- Substation
- Junction
- Mapsheet
- Municipal Boundary

1 inch = 2,000 feet  
0 1,000 2,000  
Feet

**1555 Line Rebuild Project  
New Milford, Connecticut**

**Index**

June 2017

**EVERSOURCE**  
ENERGY

**ALL-POINTS**  
TECHNOLOGY CORPORATION

**DAVISON**  
ENVIRONMENTAL

**MAPSHEET 1 of 12****1555 Line Rebuild Project****Existing Structures 577 to 571****Town of New Milford, Connecticut****AREA DESCRIPTION***Existing Land Use & Resource Areas*

- Golf course
- Residential
- Eversource owned property
- Housatonic River
- Undeveloped, forest
- CTDEEP Critical Habitat
- Natural Diversity Database Area

**RIGHT-OF-WAY DESCRIPTION***Right-of-Way Land Use & Resource Areas*

- Maintained ROW
- Eversource owned property from structures 577 to 574
- Natural Diversity Database Area (entire mapsheet ROW)
- CTDEEP Critical Habitat adjacent to structure 572

*Water Resources*

- Wetlands – W1, W2, W3, W4
- Wetland Cover Types – PSS, PEM, PFO
- Watercourses – S1 (Housatonic River), S2
- 100-year floodplain of Housatonic River

*Wetland and Watercourse Crossings*

- None

*Right-of-Way Vegetation*

- Scrub-shrub
- Forest

*Access*

- Structures 577 to 574: existing access from Kent Road (U.S. Route 7)
- Structures 573 to 571: existing access from South Kent Road (via 398 Line ROW)

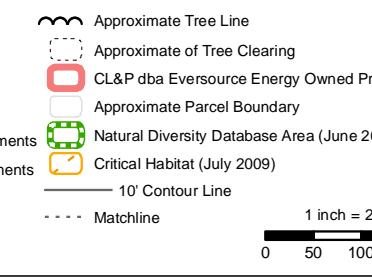
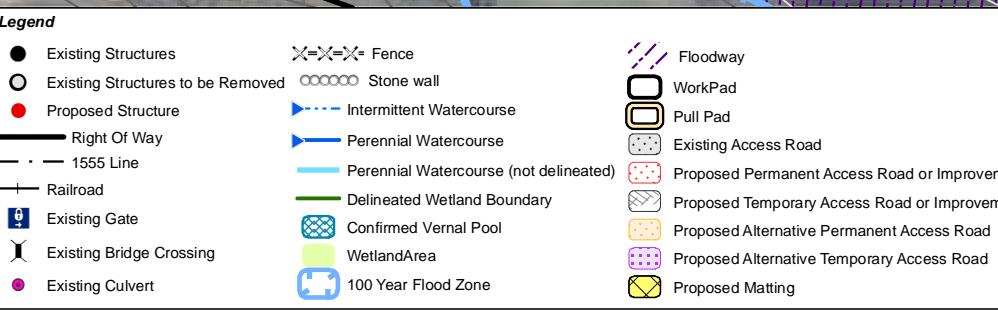
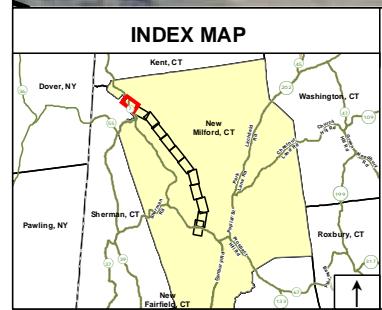
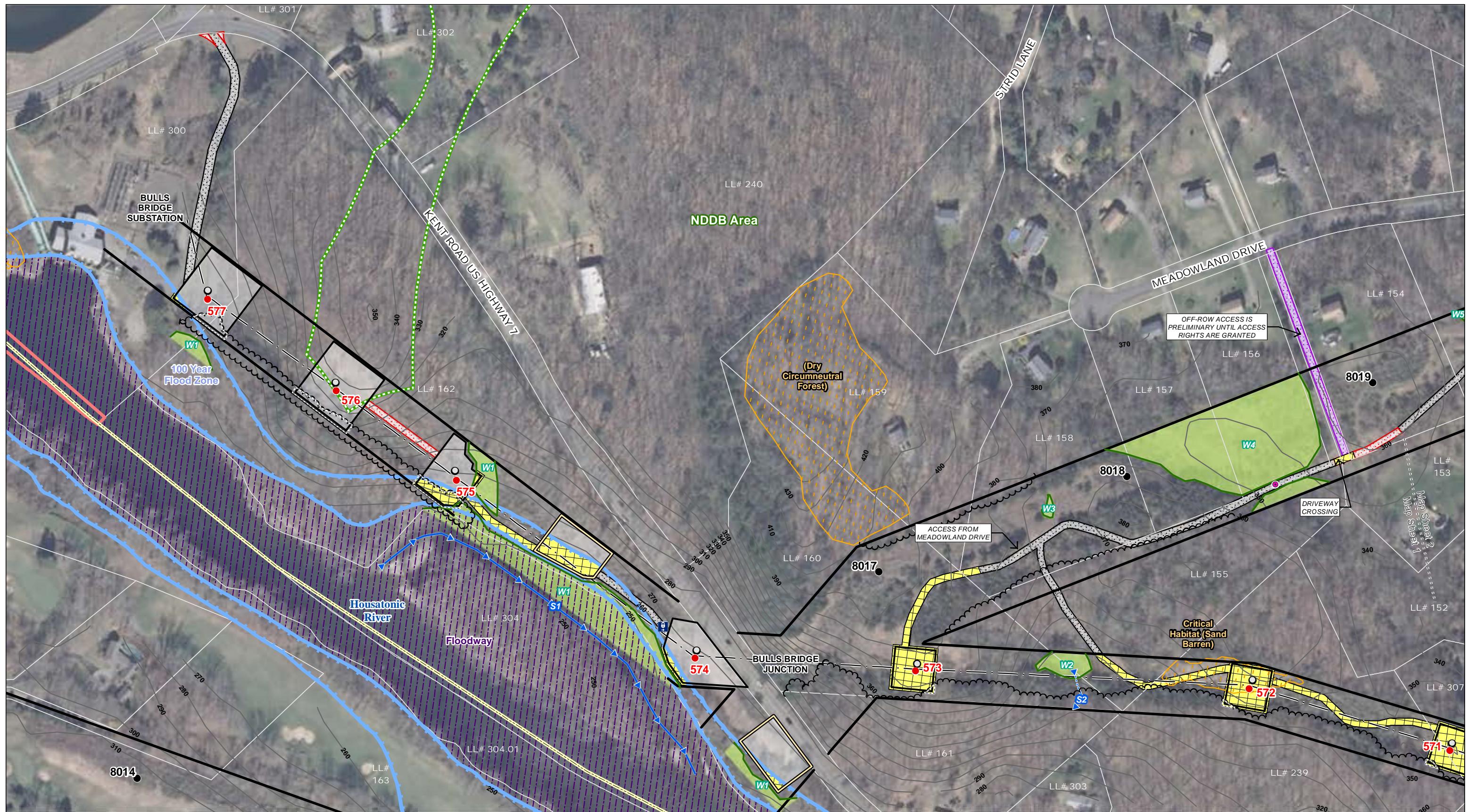
*Road Crossings*

- Kent Road (U.S. Route 7)

*Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing*

- 170 feet / 0 feet

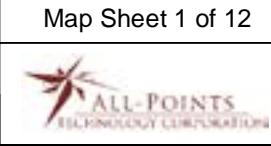
ABUTTERS TO PROJECT RIGHT-OF-WAY		
Line List	Owner Name (Now or Formerly)	Site Address
153	EDWIN G & JOYCE C BATES	51 MEADOWLAND DRIVE
154	GEORGE J & ANNA M ASSAD	53 MEADOWLAND DRIVE
155	TOWN OF NEW MILFORD	MEADOWLAND DRIVE
156	JOHN & STEPHANIE B HASTINGS	57 MEADOWLAND DRIVE
157	BRIAN J MCEVOY & SHARON FITZPATRICK	61 MEADOWLAND DRIVE
158	JOHN R & PAMELA C WAYAWOTSKI	69 MEADOWLAND DRIVE
159	CHRISTOPHER ALAN CHIAPETTA	70 MEADOWLAND DRIVE
160	TOWN OF NEW MILFORD	KENT ROAD
161	ADRIENNE PAEZ	734 KENT ROAD
162	BALMORAL FARMS INC	KENT ROAD
239	DAWN RILEY	712 KENT ROAD
300	FIRSTLIGHT HYDRO GENERATING COMPANY C/O DUFF & PHELPS LLC	781 KENT ROAD
304	HOUSATONIC RIVER	
307	GARRETT & TASIA CLARK	706 KENT ROAD



0 50 100 200  
1 inch = 200 feet  
Feet

**EVERSOURCE**  
ENERGY

**1555 Line Rebuild Project**  
New Milford, Connecticut



Map Sheet 1 of 12

June 2017

**MAPSHEET 2 of 12****1555 Line Rebuild Project****Existing Structures 570 to 567****Town of New Milford, Connecticut****AREA DESCRIPTION***Existing Land Use & Resource Areas*

- Residential
- Eversource owned property
- Undeveloped, forest
- Natural Diversity Database Area

**RIGHT-OF-WAY DESCRIPTION***Right-of-Way Land Use & Resource Areas*

- Maintained ROW
- Residential from structure 570 to South Kent Road
- Housatonic Railroad between structure 567 and Browns Forge Road
- Natural Diversity Database Area from structure 570 to 568

*Water Resources*

- Wetlands – W5, W6, W7
- Wetland Cover Types – PSS, PEM
- Watercourses – S3, S4, S5 (Womenshenuk Brook)
- 100-year floodplain of Womenshenuk Brook

*Wetland and Watercourse Crossings*

- None

*Right-of-Way Vegetation*

- Scrub-shrub
- Forest
- House/yard
- Meadow

*Access*

- Structure 570 to 568: proposed access from South Kent Road
- Structures 567: existing off-ROW access from Brown's Forge Road

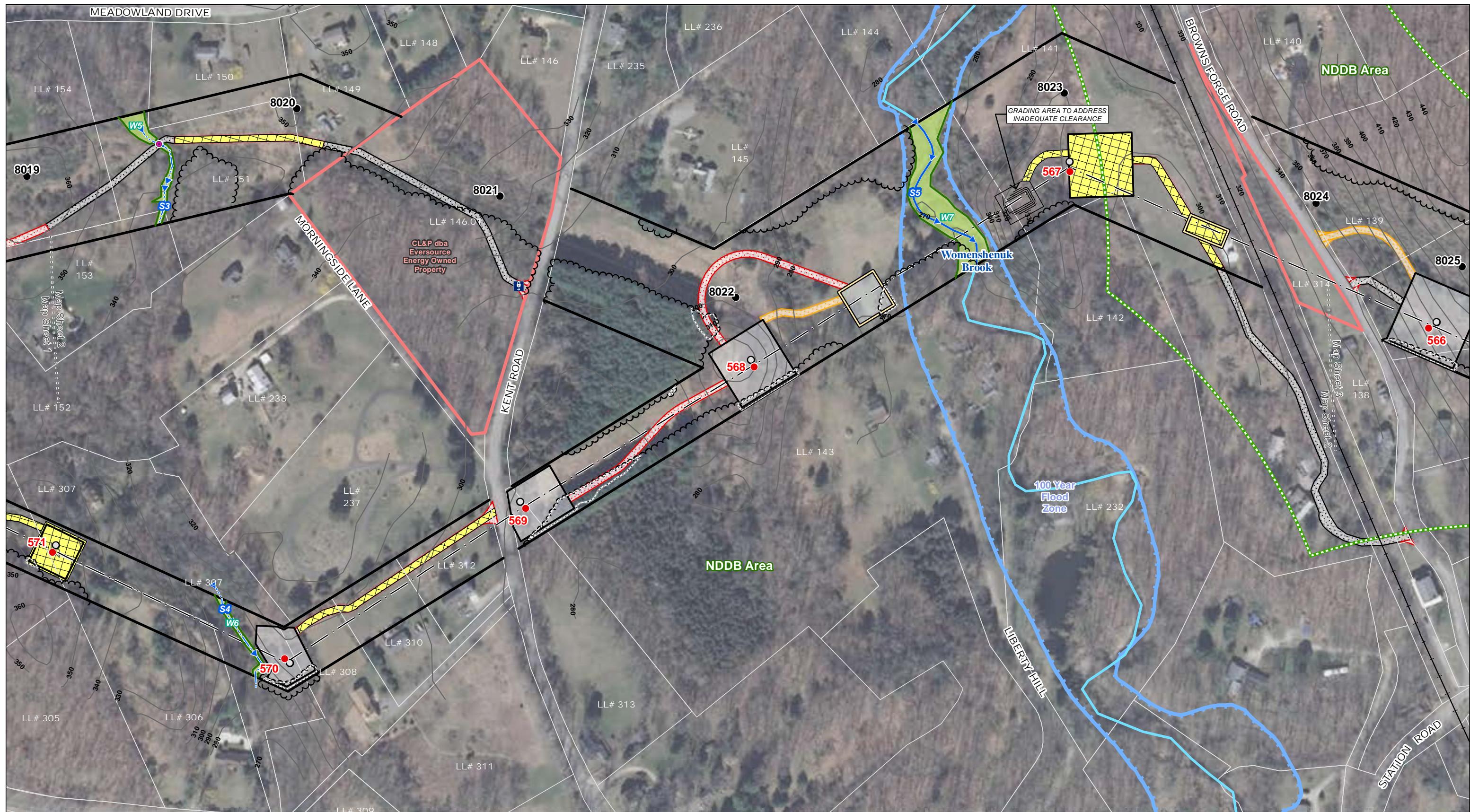
*Road Crossings*

- South Kent Road
- Brown's Forge Road

*Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing*

- 125 feet (Structures 567 & 568) / 0 feet
- 170 feet (Structures 569 & 570) / 0 feet

ABUTTERS TO PROJECT RIGHT-OF-WAY		
Line List	Owner Name (Now or Formerly)	Site Address
138	SUSAN GRISSELL	15 BROWNS FORGE ROAD
140	MICHAEL R SACHAR	26 BROWNS FORGE ROAD
141	DELTA PRIME PROPERTIES LLC	9 BROWNS FORGE ROAD
142	STEVEN LLOYD BARRETT & ANITA FISHER	LIBERTY HILL
143	KATHARINE H REED	23 LIBERTY HILL
144	COLLEEN M CHAMBERLIN	24 ORATORY LANE
145	ORATORY OF THE LITTLE WAY IN	8 ORATORY LANE
146.01	THE CONNECTICUT LIGHT & POWER COMPANY (EVERSOURCE)	SOUTH KENT ROAD
149	DEWEY & GLENDA L JACKSON	21 MEADOWLAND DRIVE
150	FRANK L & BARBARA S BUZZUTTO	27 MEADOWLAND DRIVE
151	TOWN OF NEW MILFORD	MEADOWLAND DRIVE
152	MARK A & SUSAN J BROOKS	15 MORNINGSIDE LANE
237	MORNINGSIDE CEMETERY	MORNINGSIDE LANE
306	BURTIS P RANSOM JR	708 KENT ROAD
307	GARRETT & TASIA CLARK	706 KENT ROAD
308	FABIO ABREU & ADRIANA E SOUZA	17 SOUTH KENT ROAD
310	CHARLES & JUDIE GRENIER	19 SOUTH KENT ROAD
312	CARMEN I SCUDERI	21 SOUTH KENT ROAD
313	THEODORE M BERSON C/O ESTATE OF E BERSON	12 SOUTH KENT ROAD
314	THE CONNECTICUT LIGHT & POWER COMPANY (EVERSOURCE)	BROWNS FORGE ROAD



**MAPSHEET 3 of 12****1555 Line Rebuild Project****Existing Structures 566 to 562****Town of New Milford, Connecticut****AREA DESCRIPTION***Existing Land Use & Resource Areas*

- Residential
- Undeveloped, forest
- Agricultural
- Natural Diversity Database Area

**RIGHT-OF-WAY DESCRIPTION***Right-of-Way Land Use & Resource Areas*

- Maintained ROW
- Agricultural proximate to structure 561
- Natural Diversity Database Area from structures 563 to 561

*Water Resources*

- Wetlands – W8, W9
- Wetland Cover Types – PSS, PEM, PFO
- Watercourses – S6, S7

*Wetland and Watercourse Crossings*

- Wetland W8 – construction mats for work pad and alternate access road
- Watercourse S6 (intermittent) – hard bottom (stone ford) on existing access roads at two locations
- Watercourse S7 (intermittent) – proposed culvert for alternate access road

*Right-of-Way Vegetation*

- Scrub-shrub
- Old field
- Pasture

*Access*

- Structure 566: existing access from Brown's Forge Road
- Structures 565 and 564: existing access from Front of the Mountain Road
- Structures 563 to 562: existing off-ROW access from Long Mountain Road

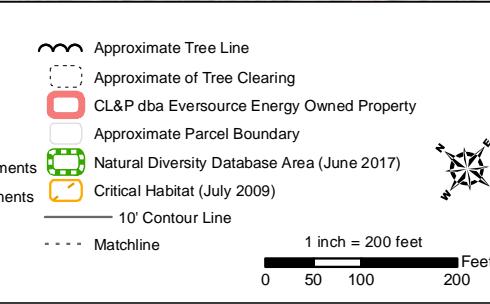
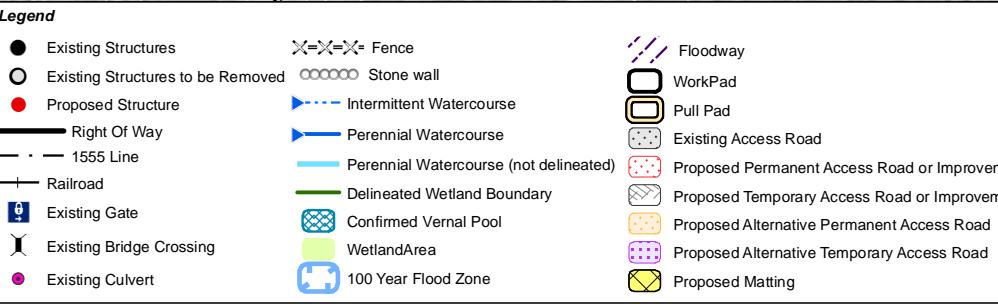
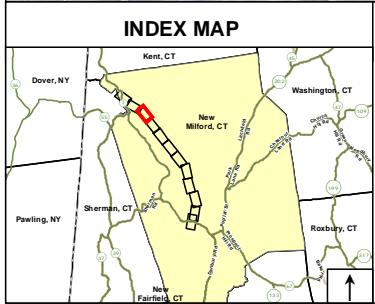
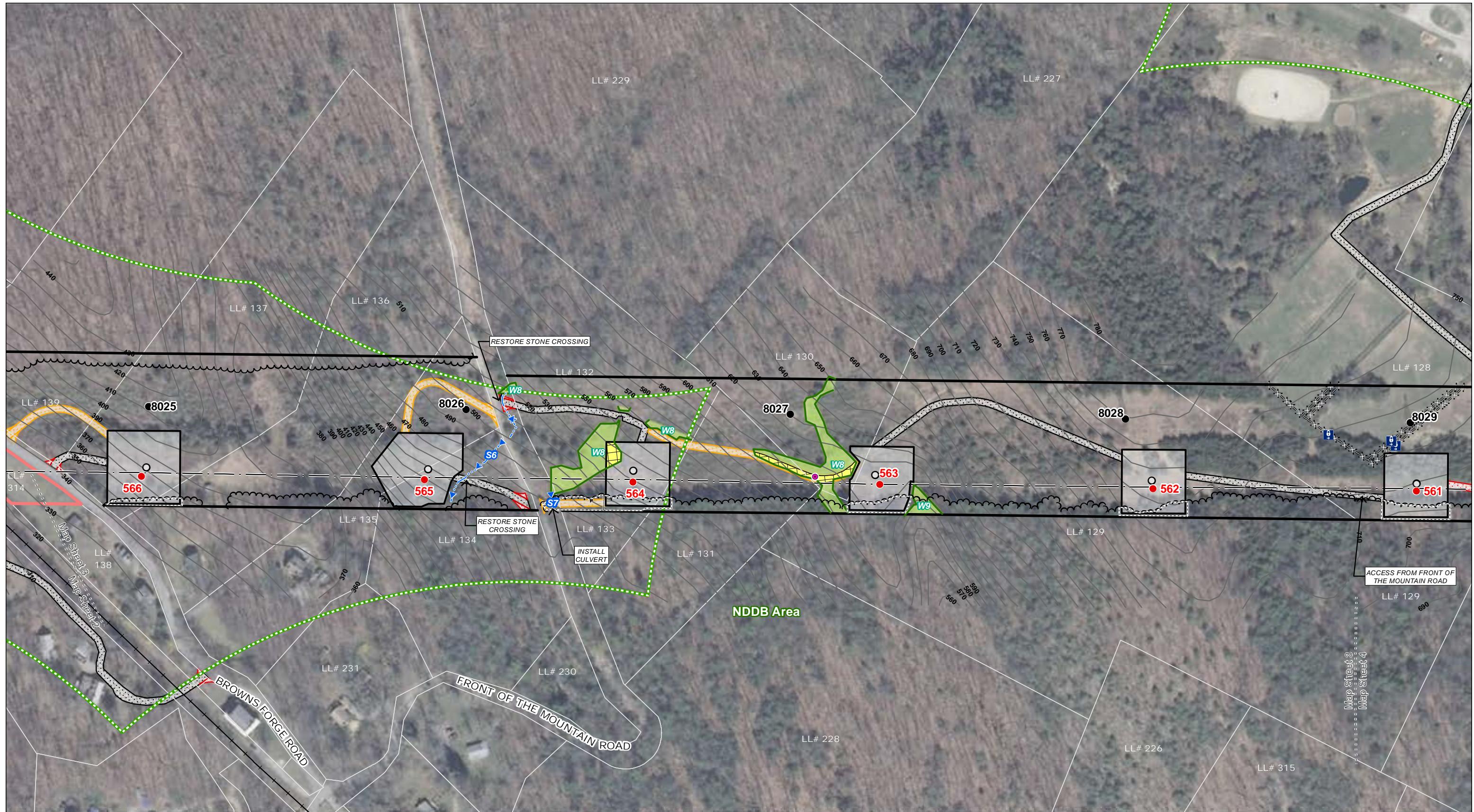
*Road Crossings*

- Brown's Forge Road
- Front of the Mountain Road

*Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing*

- 125 feet / 0 feet

ABUTTERS TO PROJECT RIGHT-OF-WAY		
Line List	Owner Name (Now or Formerly)	Site Address
128	HEATHER M CARLSON	LONG MOUNTAIN ROAD
129	LONG MOUNTAIN TOWER LLC C/O DALE BARTON	LONG MOUNTAIN ROAD
130	WEANTINOGE HERITAGE LAND TRUST INC	FRONT OF THE MOUNTAIN
131	DAVID C & TAMARA S ROSS	FRONT OF THE MOUNTAIN
132	WEANTINOGE HERITAGE LAND TRUST INC	FRONT OF THE MOUNTAIN
133	NORA LONGOBARDO TRUSTEE	FRONT OF THE MOUNTAIN
134	NORA LONGOBARDO TRUSTEE	FRONT OF THE MOUNTAIN
135	GEORGE J & JOAN B CHRISTOPHERSEN LIVING TRUSTEE, GEORGE J & JOAN B CHRISTOPHERSEN COTRSTS	14 BROWNS FORGE ROAD
136	JOHN V & SANDRA L TRIMARCHI	18 BROWNS FORGE ROAD
137	NORA LONGOBARDO TRUSTEE	FRONT OF THE MOUNTAIN
138	SUSAN GRISSELL	15 BROWNS FORGE ROAD
139	MALCOLM R BRUNI & RICHARD P MORTORFF	57 FRONT OF THE MOUNTAIN



**MAPSHEET 4 of 12****1555 Line Rebuild Project****Existing Structures 561 to 556****Town of New Milford, Connecticut****AREA DESCRIPTION***Existing Land Use & Resource Areas*

- Residential
- Undeveloped, forest
- Agricultural
- Natural Diversity Database Area

**RIGHT-OF-WAY DESCRIPTION***Right-of-Way Land Use & Resource Areas*

- Maintained ROW
- Agricultural adjacent to structure 561
- Natural Diversity Database Area from structures 561 to 560

*Water Resources*

- Wetlands – W10, W11, W12, W13
- Wetland Cover Types – PSS, PEM
- Watercourses – S8

*Wetland and Watercourse Crossings*

- Wetland W11 – construction mats for work pad
- Wetland W13 – construction mats for work pad

*Right-of-Way Vegetation*

- Scrub-shrub
- Old field
- Pasture

*Access*

- Structures 561 to 557: existing off-ROW access from Long Mountain Road
- Structures 556: existing off-ROW access from Bass Road

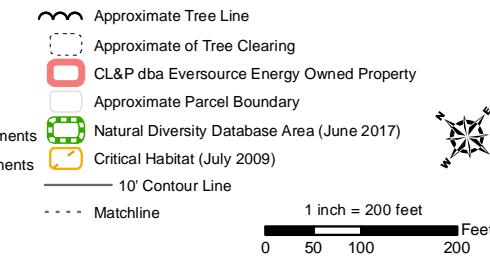
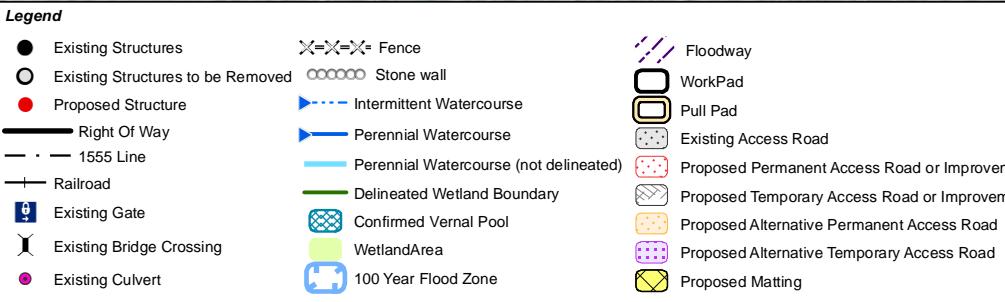
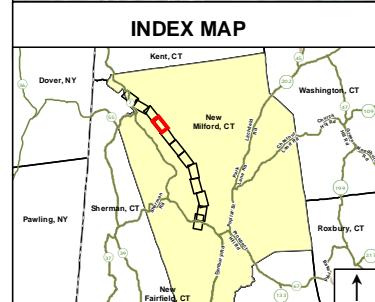
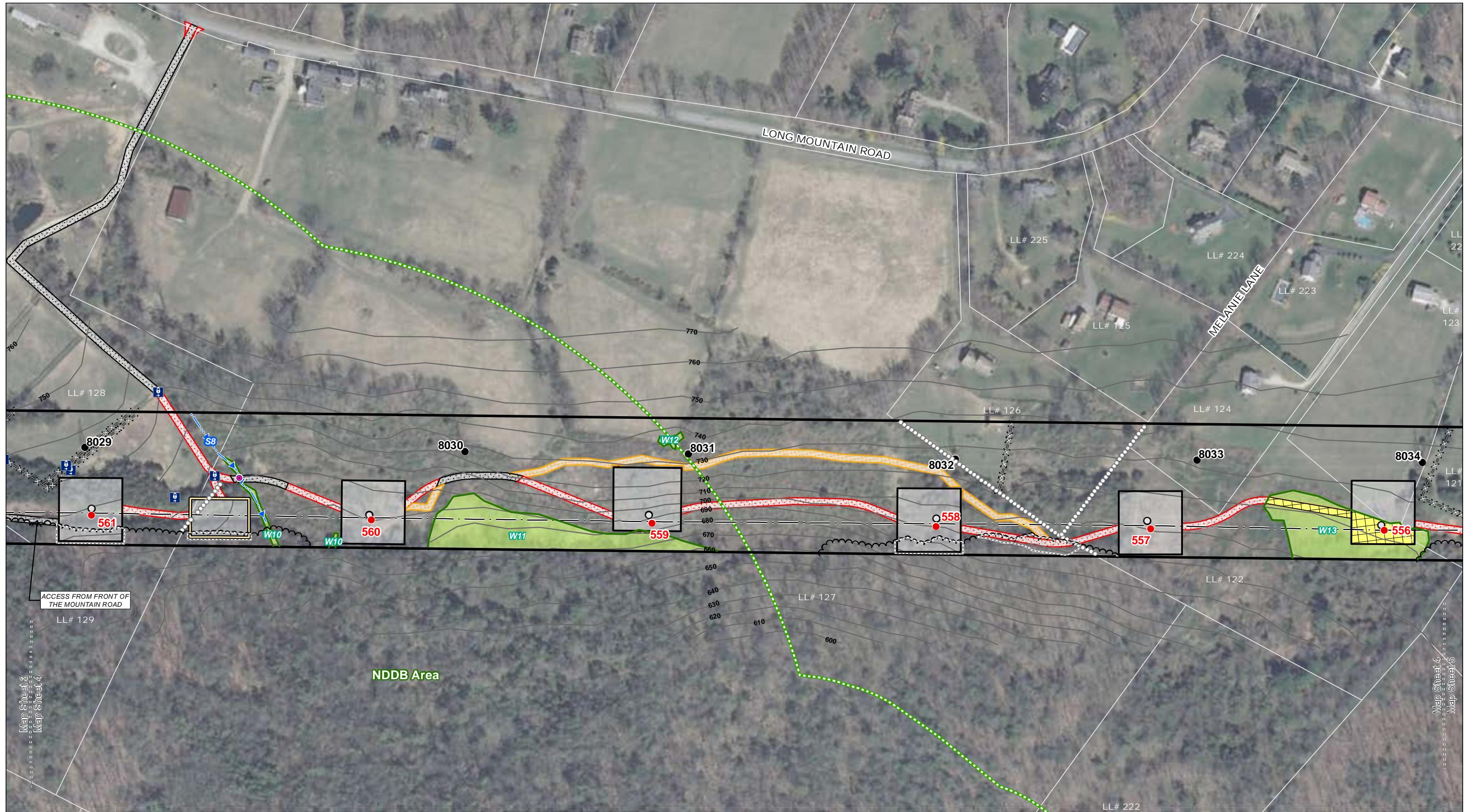
*Road Crossings*

- None

*Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing*

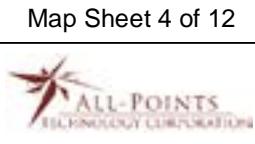
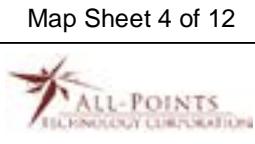
- 125 feet / 0 feet

ABUTTERS TO PROJECT RIGHT-OF-WAY		
Line List	Owner Name (Now or Formerly)	Site Address
121	RICHARD W & SUSAN H ODELL	415 LONG MOUNTAIN ROAD
122	JOSE M ALVAREZ	LONG MOUNTAIN ROAD
123	ANNA E KOCZON	419 LONG MOUNTAIN ROAD
124	GINA VENDITELLI	6 MELANIE LANE
125	THOMAS D WELLS & PATRICIA L SUTTON	429 LONG MOUNTAIN ROAD
126	WILLIAM E IV & LORI Z RIPLEY	435 LONG MOUNTAIN ROAD
127	BRIAN G & BARBARA J PRATO	467 LONG MOUNTAIN ROAD
128	HEATHER M CARLSON	LONG MOUNTAIN ROAD
129	LONG MOUNTAIN TOWER LLC C/O DALE BARTON	LONG MOUNTAIN ROAD



**EVERSOURCE**  
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**1555 Line Rebuild Project**  
New Milford, Connecticut



**MAPSHEET 5 of 12****1555 Line Rebuild Project****Existing Structures 555 to 551****Town of New Milford, Connecticut****AREA DESCRIPTION***Existing Land Use & Resource Areas*

- Residential
- Undeveloped, forest
- Natural Diversity Database Area

**RIGHT-OF-WAY DESCRIPTION***Right-of-Way Land Use & Resource Areas*

- Maintained ROW
- Residential adjacent to structure 555
- Natural Diversity Database Area from structure 553 to 551

*Water Resources*

- Wetlands – W14, W15
- Wetland Cover Types – PSS, PEM
- Watercourses – None

*Wetland and Watercourse Crossings*

- Wetland W14 – construction mats for work pad

*Right-of-Way Vegetation*

- Scrub-shrub
- Old field

*Access*

- Structures 555 to 551: existing off-ROW access from Bass Road

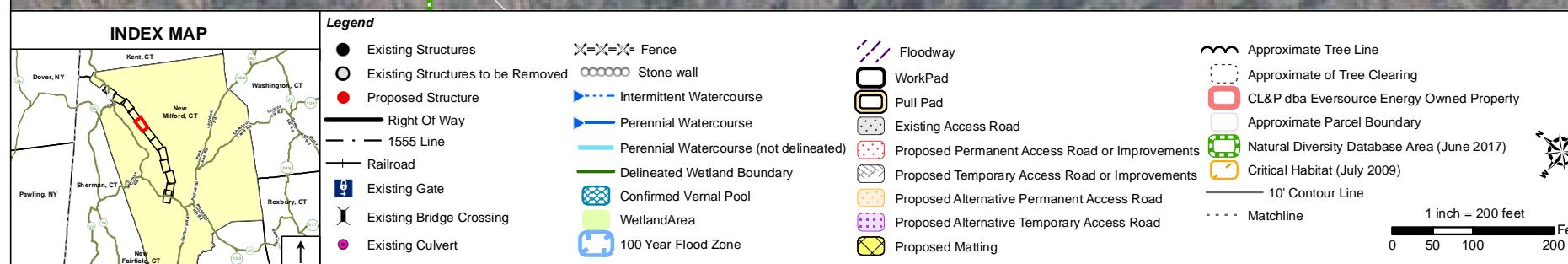
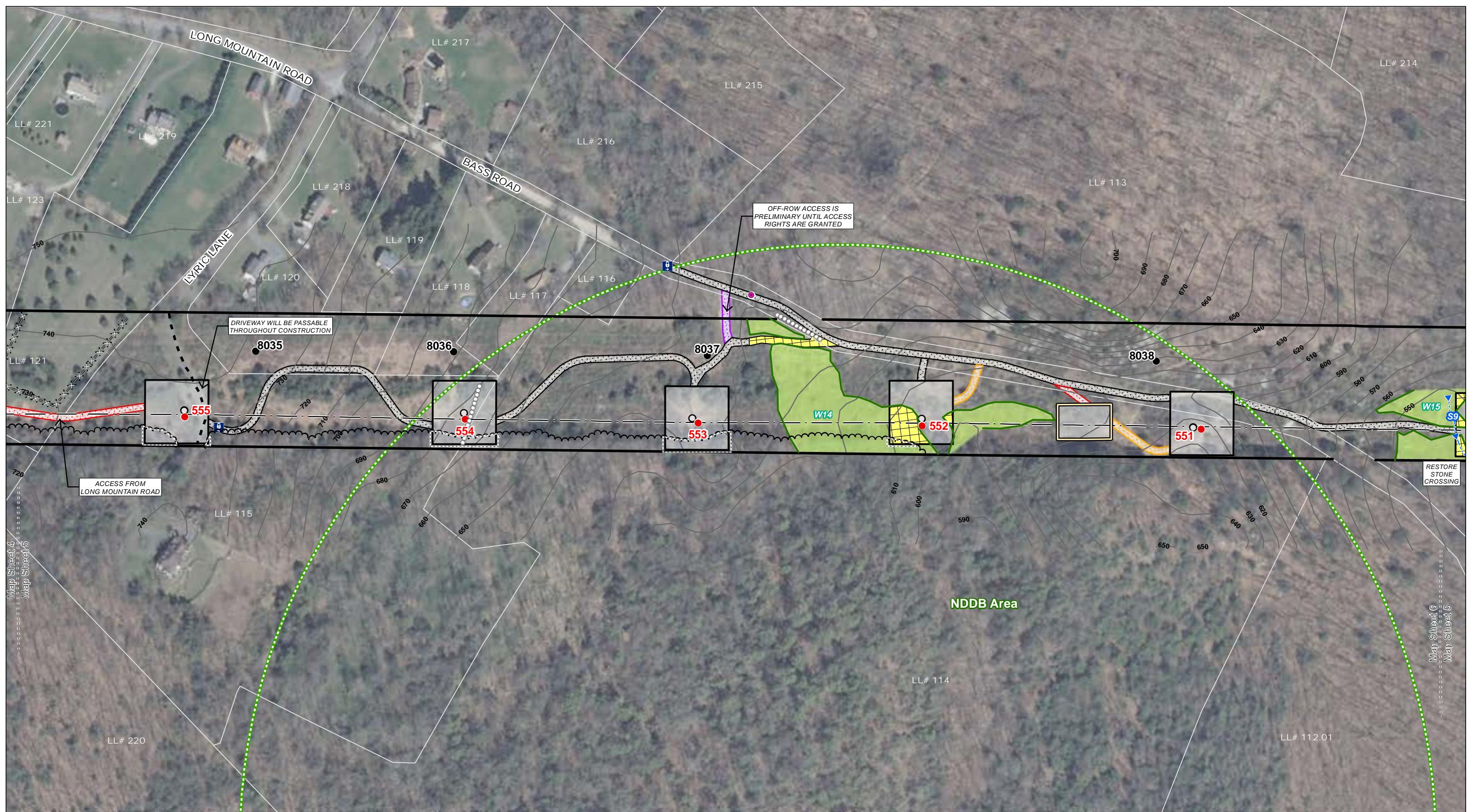
*Road Crossings*

- None

*Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing*

- 125 feet / 0 feet

ABUTTERS TO PROJECT RIGHT-OF-WAY		
Line List	Owner Name (Now or Formerly)	Site Address
112.01	WEANTINOGE HERITAGE LAND TRUST INC	BASS ROAD
113	WEANTINOGE HERITAGE LAND TRUST INC	RIVER ROAD
114	WEANTINOGE HERITAGE LAND TRUST INC	BASS ROAD
115	GARY & DEBORAH A COOLBETH	5 LYRIC LANE
116	LONG MOUNTAIN CEMETERY	BASS ROAD
117	DONALD A CAMPBELL & THERESE DUCEY	14 BASS ROAD
118	RICHARD J & RENEE M DEMOSS	12 BASS ROAD
119	LAURIE J STILWELL	10 BASS ROAD
120	RICHARD & SHREE RAMSAWAK	3 LYRIC LANE
121	RICHARD W & SUSAN H ODELL	415 LONG MOUNTAIN ROAD



## EVERSOURCE ENERGY

Map Sheet 5 of 12



ALL-POINTS  
TECHNOLOGY CORPORATION

**MAPSHEET 6 of 12****1555 Line Rebuild Project****Existing Structures 550 to 546****Town of New Milford, Connecticut****AREA DESCRIPTION***Existing Land Use & Resource Areas*

- Residential
- Undeveloped, forest
- Natural Diversity Database Area

**RIGHT-OF-WAY DESCRIPTION***Right-of-Way Land Use & Resource Areas*

- Maintained ROW
- Natural Diversity Database Area adjacent to structure 550

*Water Resources*

- Wetlands – W15
- Wetland Cover Types – PSS, PEM
- Watercourses – S9, S10 (unnamed perennial)

*Wetland and Watercourse Crossings*

- Wetland W15 – construction mats for work pad
- Watercourse S9 (intermittent) – hard bottom (stone ford) on existing access
- Watercourse S10 (perennial) – construction mat span for stream crossing

*Right-of-Way Vegetation*

- Scrub-shrub

*Access*

- Structures 550 to 546: existing off-ROW access from Bass Road

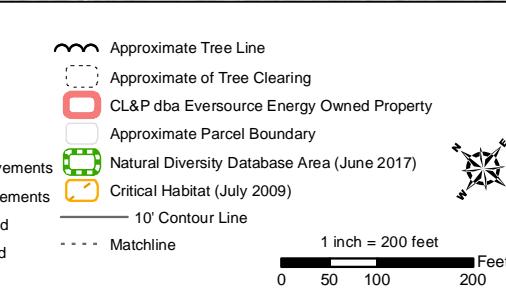
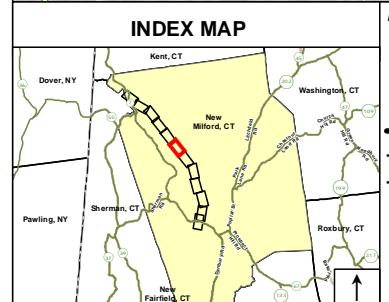
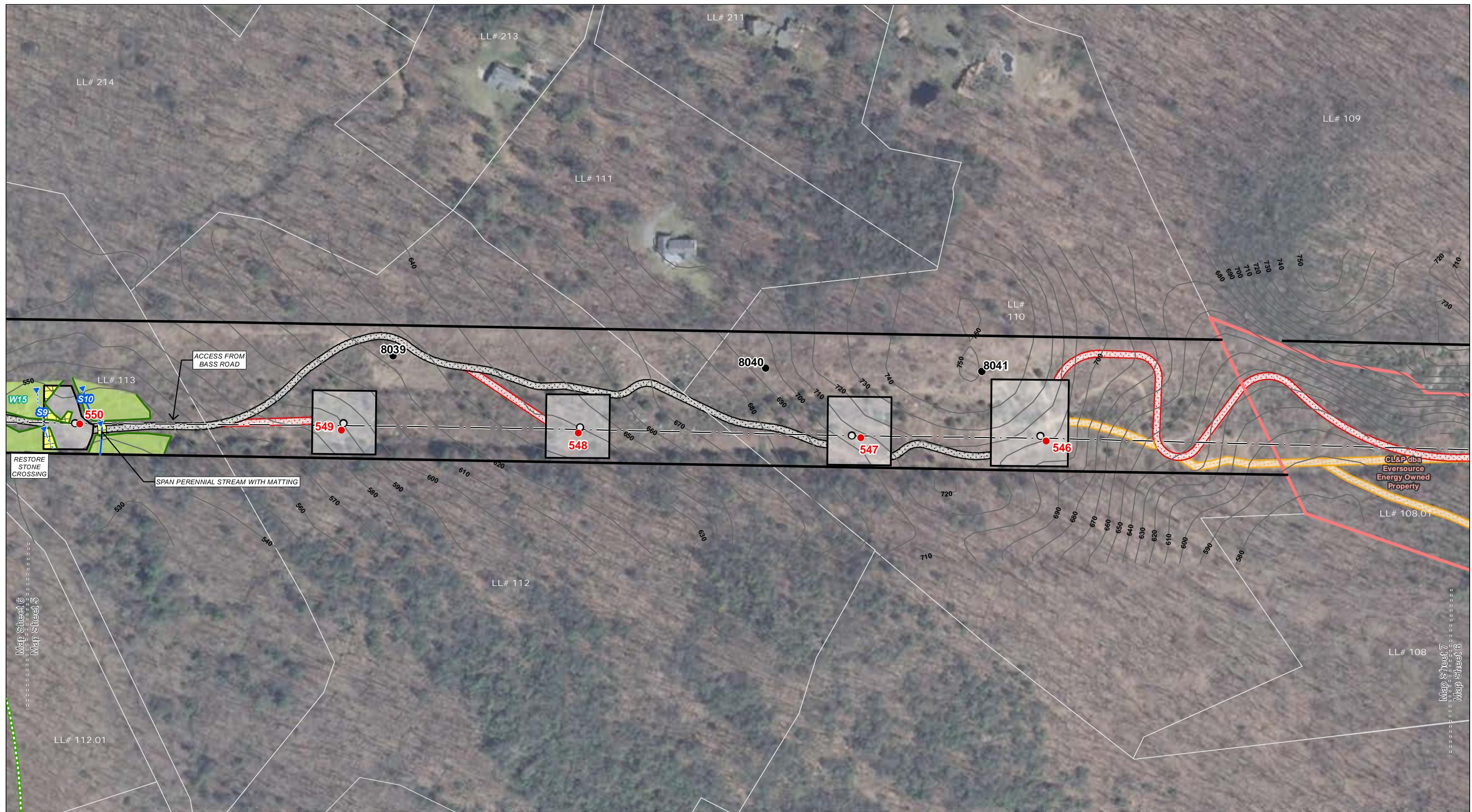
*Road Crossings*

- None

*Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing*

- 125 feet / 0 feet

ABUTTERS TO PROJECT RIGHT-OF-WAY		
Line List	Owner Name (Now or Formerly)	Site Address
108.01	THE CONNECTICUT LIGHT & POWER COMPANY (EVERSOURCE)	LONG MOUNTAIN ROAD
110	ROBERT C MEEK & JOAN A POND	277 LONG MOUNTAIN ROAD
111	GARY C & PHYLLIS GUENDELSBERGER	19 DEEP WOODS LANE
112	WEANTINOGE HERITAGE LAND TRUST INC	BASS ROAD
113	WEANTINOGE HERITAGE LAND TRUST INC	RIVER ROAD



**MAPSHEET 7 of 12****1555 Line Rebuild Project****Existing Structures 545 to 2626****Town of New Milford, Connecticut****AREA DESCRIPTION***Existing Land Use & Resource Areas*

- Residential
- Undeveloped, forest
- Eversource owned property (Long Mountain Switching Station)
- Natural Diversity Database Area

**RIGHT-OF-WAY DESCRIPTION***Right-of-Way Land Use & Resource Areas*

- Maintained ROW
- Eversource owned property at structures 545, and 541 to 2626
- Natural Diversity Database Area from structure 543 to 542

*Water Resources*

- Wetlands – W16, W17, W17-1, W17-2
- Wetland Cover Types – PSS, PFO
- Watercourses – S11 (unnamed perennial), S12, S13, S13-1

*Wetland and Watercourse Crossings*

- None

*Right-of-Way Vegetation*

- Scrub-shrub
- Forest

*Access*

- Structures 545 to 2626: existing access from Long Mountain Road

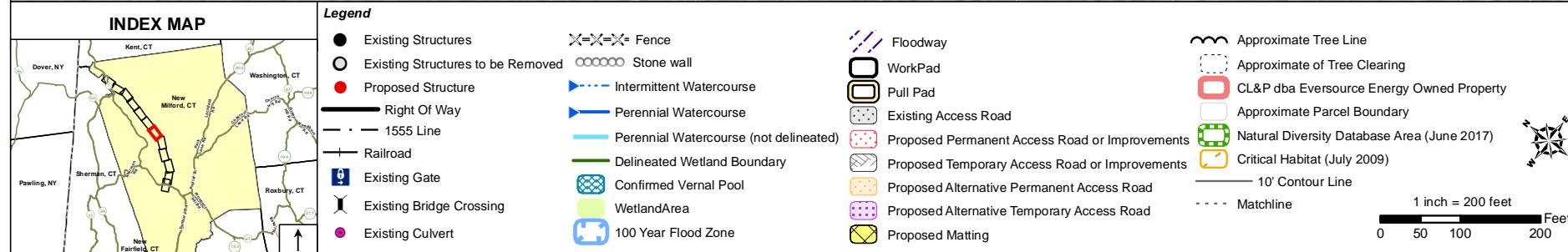
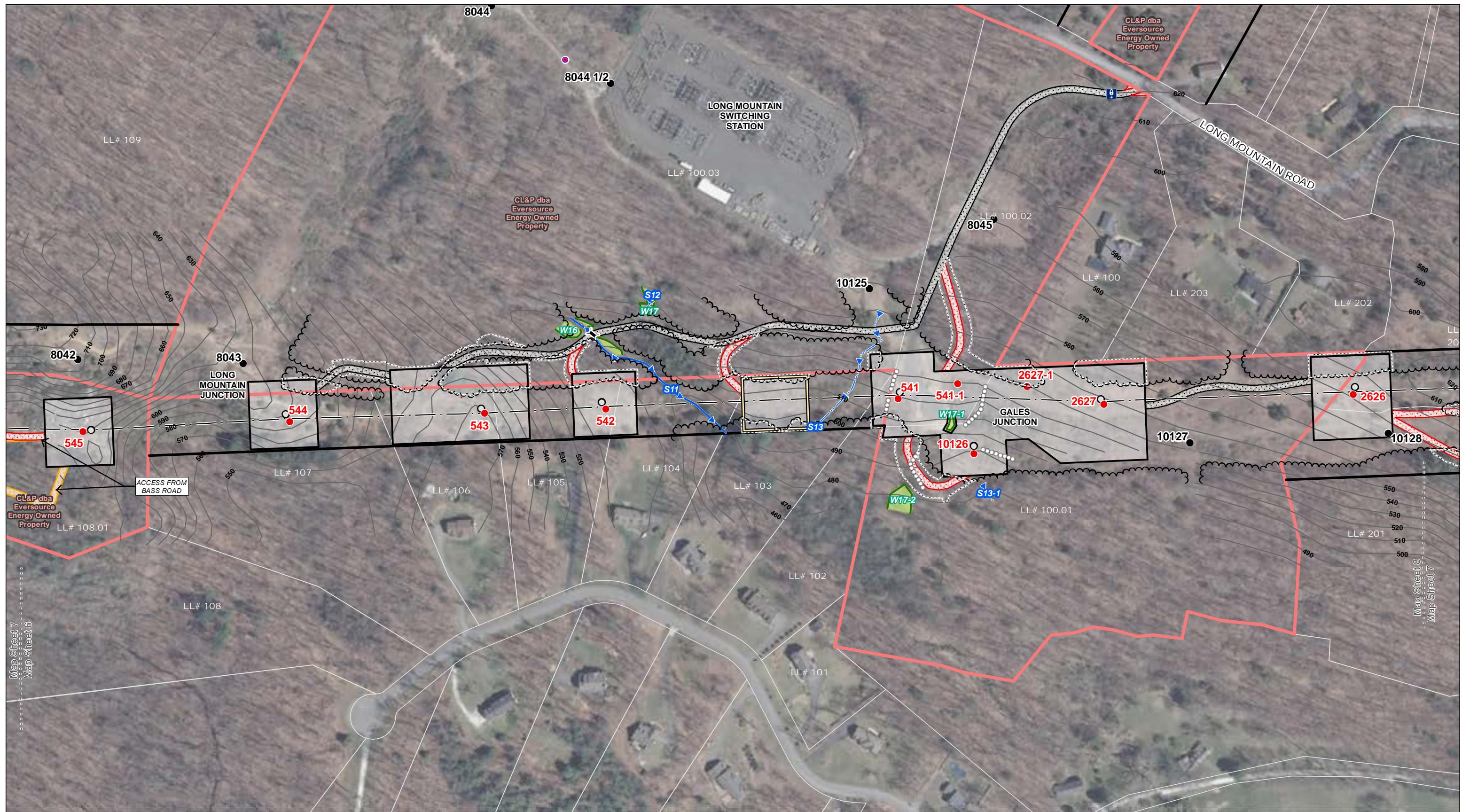
*Road Crossings*

- Long Mountain Road

*Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing*

- 125 feet / 0 feet

ABUTTERS TO PROJECT RIGHT-OF-WAY		
Line List	Owner Name (Now or Formerly)	Site Address
100	MICHAEL & MARY BURTON	151 LONG MOUNTAIN ROAD
100.01	THE CONNECTICUT LIGHT & POWER COMPANY (EVERSOURCE)	ROOSTER TAIL HIGHWAY
100.02	THE CONNECTICUT LIGHT & POWER COMPANY (EVERSOURCE)	LONG MOUNTAIN ROAD
100.03	THE CONNECTICUT LIGHT & POWER COMPANY (EVERSOURCE)	LONG MOUNTAIN ROAD
102	TIMOTHY X & DIANE WITKOWSKI	18 DEER WOODS DRIVE
103	MATTHEW & JENNIFER HALLACKER	20 DEER WOODS DRIVE
104	MICHAEL UHRIN & KATHRYN DAINO	24 DEER WOODS DRIVE
105	DAVID P & ANGELA C CHASTAIN	26 DEER WOODS DRIVE
106	JOHN & LAURA M SANTORO	28 DEER WOODS DRIVE
107	JOHN WALLACE & DANA FAIRCHILD	30 DEER WOODS DRIVE
108	JAMES & MARION HILL	32 DEER WOODS DRIVE
109	WEANTINOGE HERITAGE LAND TRUST INC	LONG MOUNTAIN ROAD
108.01	THE CONNECTICUT LIGHT & POWER COMPANY (EVERSOURCE)	LONG MOUNTAIN ROAD
200	NINA E DUNLAP	140 LONG MOUNTAIN ROAD
202	GEORGE V SCHOEPP	145 LONG MOUNTAIN ROAD
203	RICCARDO AZZONI	147 LONG MOUNTAIN ROAD



## EVERSOURCE ENERGY

Map Sheet 7 of 12



ALL-POINTS  
TECHNOLOGY COMMUNICATIONS

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**MAPSHEET 8 of 12****1555 Line Rebuild Project****Existing Structures 2625 to 2619****Town of New Milford, Connecticut****AREA DESCRIPTION***Existing Land Use & Resource Areas*

- Residential
- Undeveloped, forest
- Ladner Pond
- Eversource owned property
- Natural Diversity Database Area

**RIGHT-OF-WAY DESCRIPTION***Right-of-Way Land Use & Resource Areas*

- Maintained ROW
- Eversource owned property at structure 2623
- Natural Diversity Database Area from structure 2620 to 2619

*Water Resources*

- Wetlands – W18, W19, W20
- Wetland Cover Types – PSS, PEM, PFO, POW
- Watercourses – S14, Ladner Pond
- Potential Vernal Pools – PVP1

*Wetland and Watercourse Crossings*

- Wetland W14 – construction mats for work pad
- Watercourse S14 (intermittent) – construction mats for work pad

*Right-of-Way Vegetation*

- Scrub-shrub
- Forest

*Access*

- Structures 2625 and 2624: existing access from Long Mountain Road
- Structures 2623 and 2619: existing access from Rooster Tail Hollow

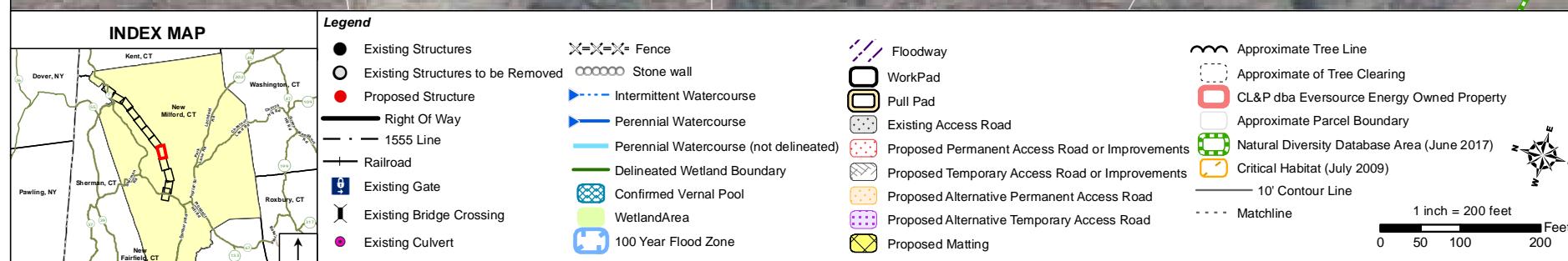
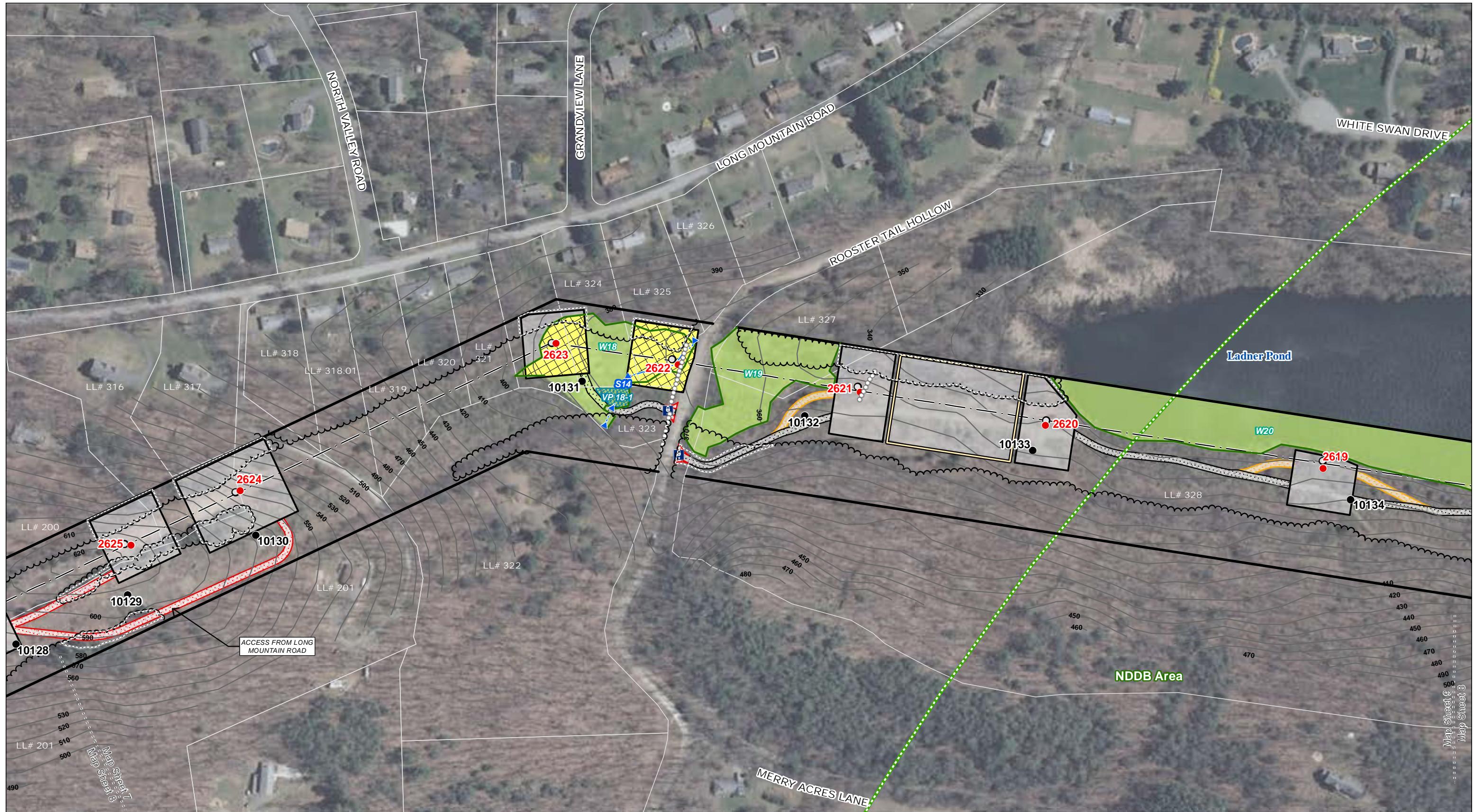
*Road Crossings*

- Rooster Tail Hollow

*Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing*

- 125 feet / 0 feet

<b>ABUTTERS TO PROJECT RIGHT-OF-WAY</b>		
<b>Line List</b>	<b>Owner Name (Now or Formerly)</b>	<b>Site Address</b>
200	NINA E DUNLAP	140 LONG MOUNTAIN ROAD
201	STEPHEN K & ANN MARIE DOLPH	115 LONG MOUNTAIN ROAD
316	EDWARD R & DENISE D KUSHMEREK	125 LONG MOUNTAIN ROAD
317	TERRY & SHELLY A WOZNEY	119 LONG MOUNTAIN ROAD
318	JUDITH C REINER	113 LONG MOUNTAIN ROAD
319	KATHERINE G AUSTIN	109 LONG MOUNTAIN ROAD
320	DAVID A & BONNIE L LATHROP	107 LONG MOUNTAIN ROAD
321	JOSEPH F KOPROSKI L/U MICHAEL A & JOSEPH J KOPROSKI	105 LONG MOUNTAIN ROAD
322	TIMOTHY J & ROSEANN C KELLER	50 ROOSTER TAIL HIGHWAY
323	ESTATE OF JOHN DOCKTOR	ROOSTER TAIL HIGHWAY
324	BRIAN C BOLLARO & JENNIFER HUDSON	101 LONG MOUNTAIN ROAD
325	COURTNEY G COLLINS & J KARPARI	99 LONG MOUNTAIN ROAD
326	MICHELLE K CATTUTI	97 LONG MOUNTAIN ROAD
327	MARK T & THOMAS D ALTERMATT	ROOSTER TAIL HIGHWAY
328	MARK T & THOMAS D ALTERMATT	ROOSTER TAIL HIGHWAY



**1555 Line Rebuild Project**  
New Milford, Connecticut

Map Sheet 8 of 12

ALL-POINTS  
TECHNOLOGY CORPORATION

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**MAPSHEET 9 of 12**  
**1555 Line Rebuild Project**  
**Existing Structures 2618 to 2613**  
**Town of New Milford, Connecticut**

**AREA DESCRIPTION**

*Existing Land Use & Resource Areas*

- Undeveloped, forest
- Ladner Pond
- Natural Diversity Database Area

<b>ABUTTERS TO PROJECT RIGHT-OF-WAY</b>		
<b>Line List</b>	<b>Owner Name (Now or Formerly)</b>	<b>Site Address</b>
321.01	HELEN A LILLIS	ASPETUCK RIDGE ROAD
328	MARK T & THOMAS D ALTERMATT	ROOSTER TAIL HIGHWAY
329	MARK T & THOMAS ALTERMATT	ROOSTER TAIL HIGHWAY
330	HELEN A LILLIS	ASPETUCK RIDGE ROAD

**RIGHT-OF-WAY DESCRIPTION**

*Right-of-Way Land Use & Resource Areas*

- Maintained ROW
- Natural Diversity Database Area (entire mapsheet ROW)

*Water Resources*

- Wetlands – W20, W21 W22
- Wetland Cover Types – PSS, POW, PEM, PFO
- Watercourses – Ladner Pond, S15 (unnamed perennial)

*Wetland and Watercourse Crossings*

- Wetland W22 – construction mats for work pad
- Watercourse S15 (perennial) – construction mats for work pad

*Right-of-Way Vegetation*

- Scrub-shrub
- Forest

*Access*

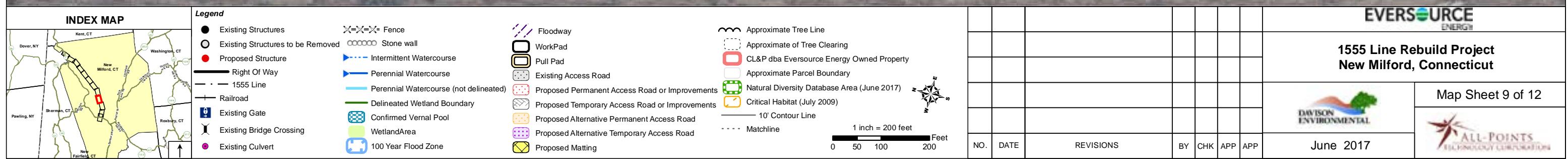
- Structures 2618 to 2613: existing access from Rooster Tail Hollow

*Road Crossings*

- None

*Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing*

- 125 feet / 0 feet



**MAPSHEET 10 of 12**  
**1555 Line Rebuild Project**  
**Existing Structures 2612 to 2607**  
**Town of New Milford, Connecticut**

**AREA DESCRIPTION**

*Existing Land Use & Resource Areas*

- West Aspetuck River
- Undeveloped, forest
- Natural Diversity Database Area

**RIGHT-OF-WAY DESCRIPTION**

*Right-of-Way Land Use & Resource Areas*

- Maintained ROW
- West Aspetuck River
- Natural Diversity Database Area (entire mapsheet ROW)

*Water Resources*

- Wetlands – W22, W23, W24, W25
- Wetland Cover Types – PSS, PFO, PEM
- Watercourses – S16 (West Aspetuck River)
- 100-year floodplain of West Aspetuck River

*Wetland and Watercourse Crossings*

- Wetland W22 – construction mats for work pad
- Wetland W23 – construction mats for work pad and alternate access road
- Wetland W24 – construction mats for work pad
- Wetland W25 – construction mats for access road

*Right-of-Way Vegetation*

- Scrub-shrub
- Forest

*Access*

- Structures 2612 to 2610: existing access from Rooster Tail Hollow
- Structures 2609 to 2607: existing off-ROW access from Aspetuck Ridge Road

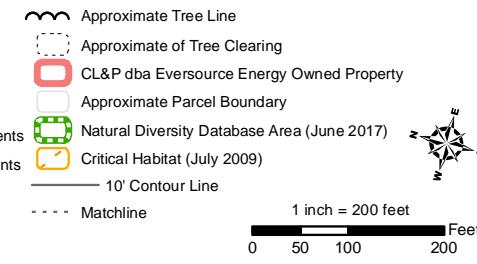
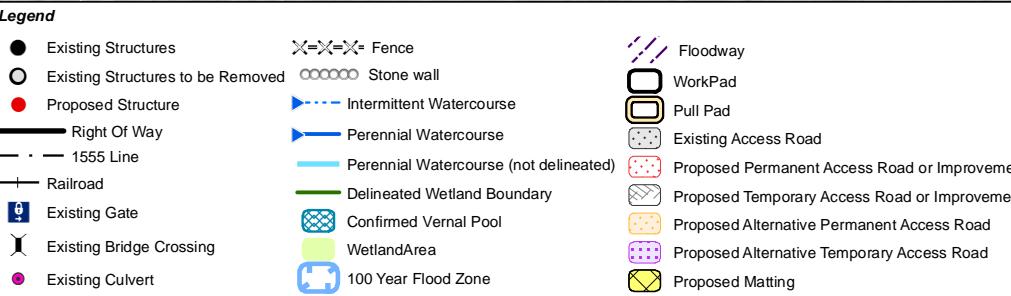
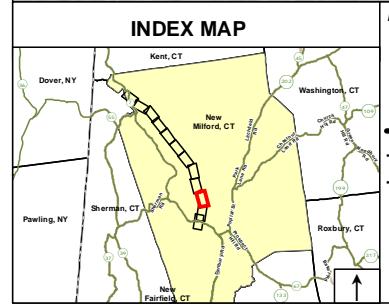
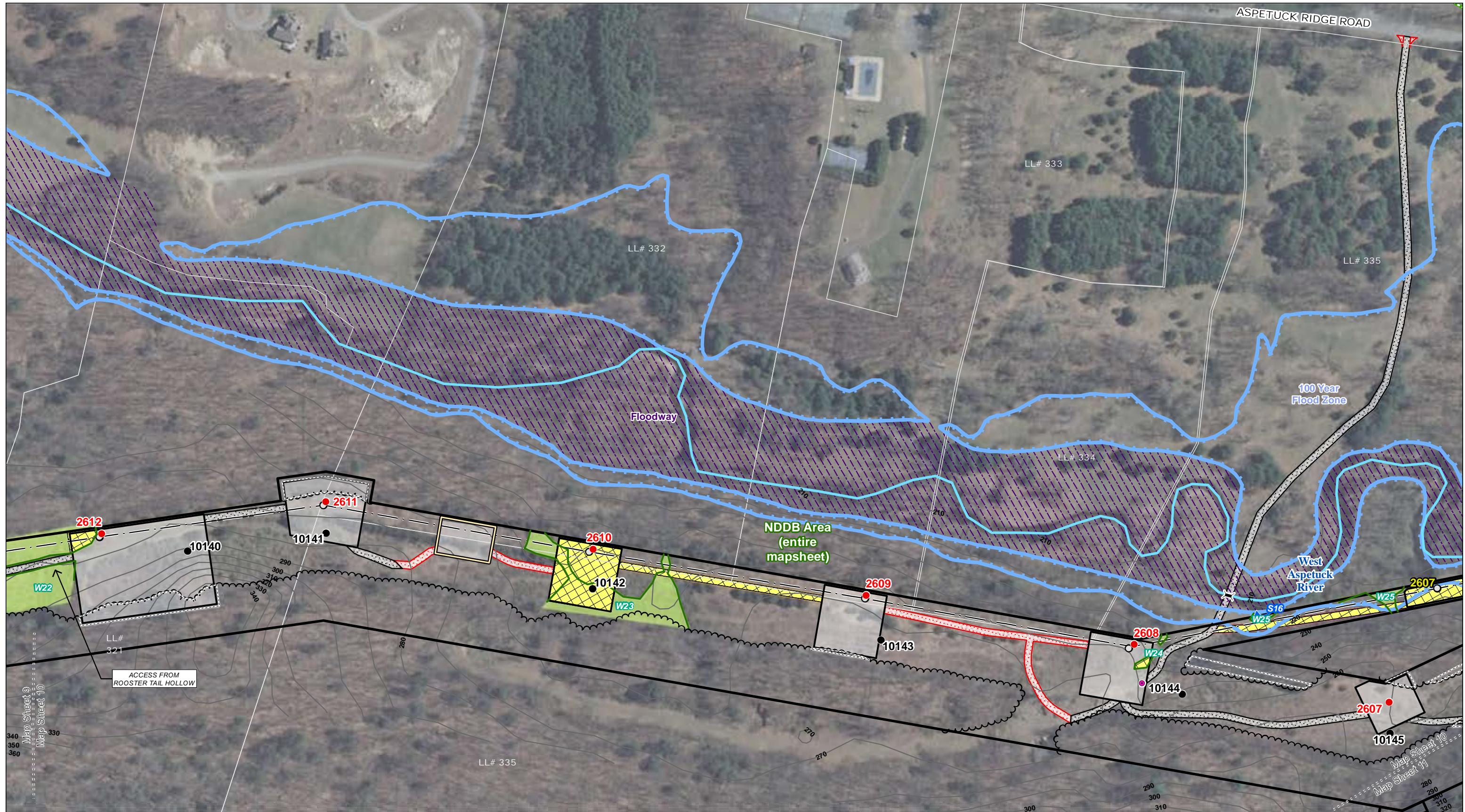
*Road Crossings*

- None

*Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing*

- 125 feet / 0 feet

ABUTTERS TO PROJECT RIGHT-OF-WAY		
Line List	Owner Name (Now or Formerly)	Site Address
321	JOSEPH F KOPROSKI L/U MICHAEL A & JOSEPH J KOPROSKI	105 LONG MOUNTAIN ROAD
332	ASPETUCK FARMS LLC	ASPETUCK RIDGE ROAD
333	ASPETUCK FARMS LLC	ASPETUCK RIDGE ROAD
334	ASPETUCK FARMS LLC	ASPETUCK RIDGE ROAD
335	ASPETUCK FARMS LLC	2 TIMOTHY LANE



0

50

100

150

200

Feet

EVERSOURCE  
ENERGY

1555 Line Rebuild Project  
New Milford, Connecticut



Map Sheet 10 of 12



June 2017

**MAPSHEET 11 of 12**  
**1555 Line Rebuild Project**  
**Existing Structures 2607 to 2101**  
**Town of New Milford, Connecticut**

**AREA DESCRIPTION**

*Existing Land Use & Resource Areas*

- West Aspetuck River
- Housatonic River
- Residential
- Railroad
- Undeveloped, forest
- Natural Diversity Database Area

**RIGHT-OF-WAY DESCRIPTION**

*Right-of-Way Land Use & Resource Areas*

- Maintained ROW
- West Aspetuck River
- Housatonic River
- Natural Diversity Database Area (entire mapsheet ROW)

*Water Resources*

- Wetlands – W25, W26 (Housatonic River)
- Wetland Cover Types – POW, PEM
- Watercourses – S17 (Housatonic River)
- 100-year floodplain of West Aspetuck River
- 100-year floodplain of Housatonic River

*Wetland and Watercourse Crossings*

- None

*Right-of-Way Vegetation*

- Scrub-shrub
- Forest

*Access*

- Structures 2607 to 2601: existing off-ROW access from Aspetuck Ridge Road or Scoville Street

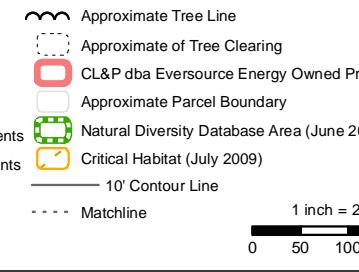
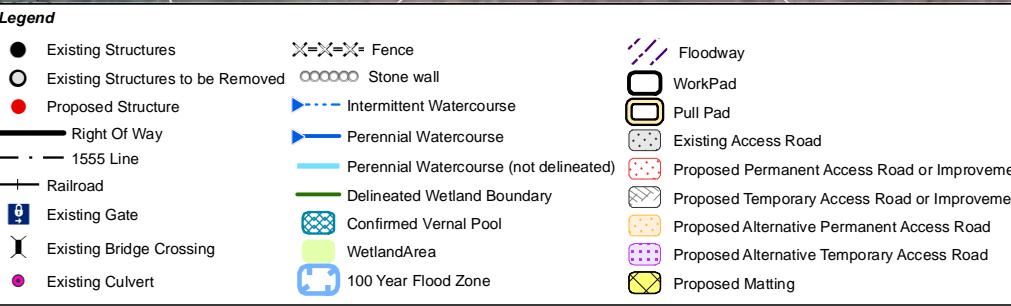
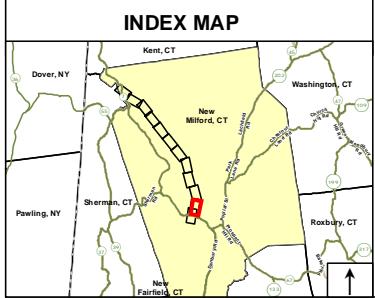
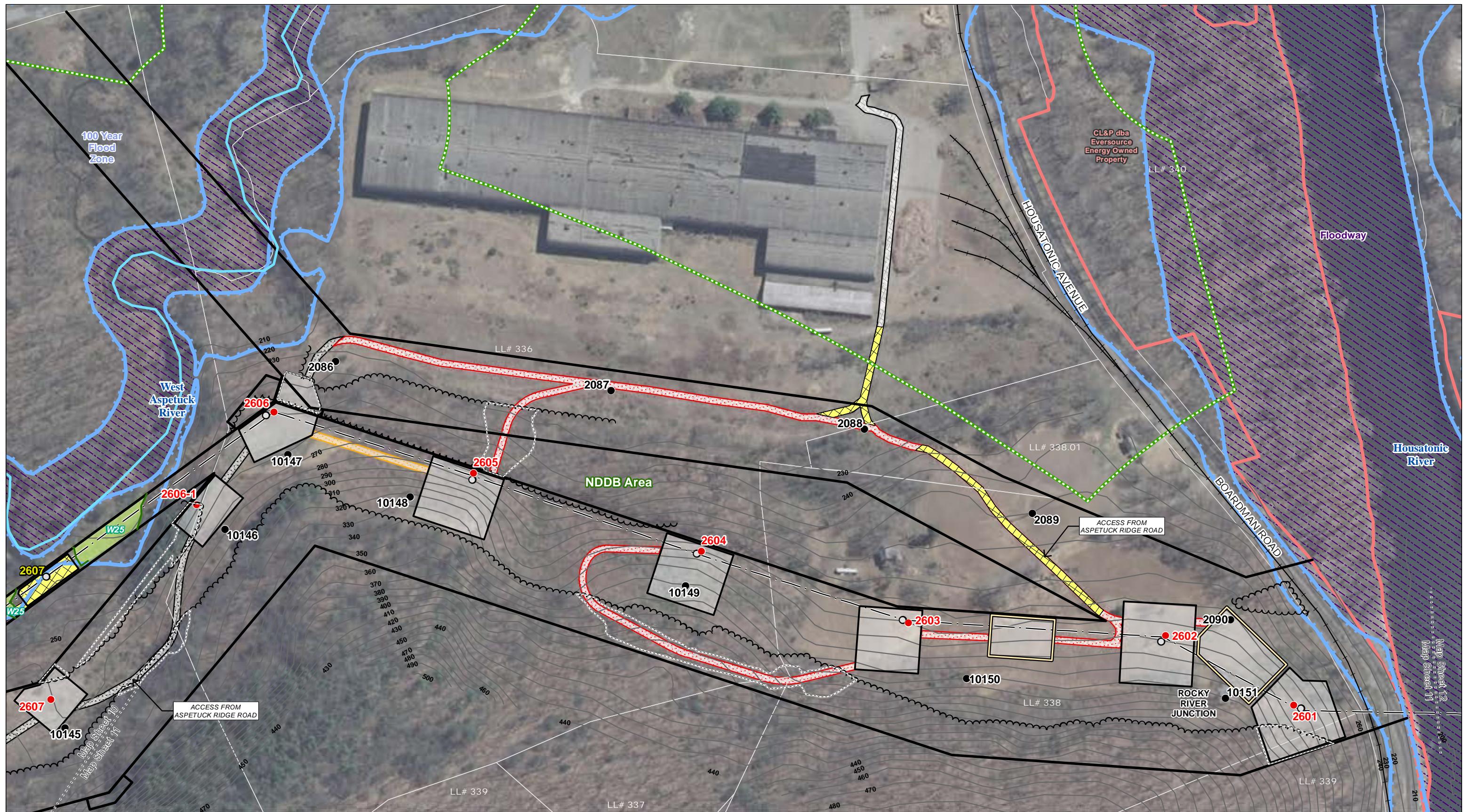
*Road Crossings*

- Boardman Road

*Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing*

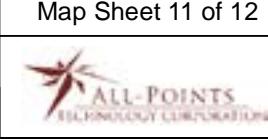
- 125 feet / 0 feet

ABUTTERS TO PROJECT RIGHT-OF-WAY		
Line List	Owner Name (Now or Formerly)	Site Address
335	ASPETUCK FARMS LLC	2 TIMOTHY LANE
336	TOWN OF NEW MILFORD	12 SCOVILL STREET
337	TOWN OF NEW MILFORD	SCOVILL STREET
338	SPRING POST REALTY CORPORATION	2 SOSTAK ROAD
338.01	SPRING POST REALTY CORPORATION	190 HOUSATONIC AVENUE
339	NEW MILFORD FARMS 150 LLC	BOARDMAN ROAD
340	THE CONNECTICUT LIGHT & POWER COMPANY (EVERSOURCE)	HOUSATONIC AVENUE



0 50 100 200  
1 inch = 200 feet  
Feet

**EVERSOURCE**  
ENERGY  
1555 Line Rebuild Project  
New Milford, Connecticut



Map Sheet 11 of 12

June 2017

**MAPSHEET 12 of 12****1555 Line Rebuild Project****Existing Structures 2603 to Rocky River Substation****Town of New Milford, Connecticut****AREA DESCRIPTION***Existing Land Use & Resource Areas*

- Housatonic River
- Residential
- Railroad
- Undeveloped, forest
- Natural Diversity Database Area

**RIGHT-OF-WAY DESCRIPTION***Right-of-Way Land Use & Resource Areas*

- Rocky River Substation (Eversource owned property)
- Maintained ROW
- Housatonic River
- Natural Diversity Database Area (entire mapsheet ROW)

*Water Resources*

- Wetlands – W26 (Housatonic River)
- Wetland Cover Types – POW, PEM, PSS
- Watercourses – S17 (Housatonic River)
- 100-year floodplain of Housatonic River

*Wetland and Watercourse Crossings*

- None

*Right-of-Way Vegetation*

- Scrub-shrub
- Forest

*Access*

- Structures 2606 to 2605: existing off-ROW access from Scoville Road
- Structures 2604 to 2601A: existing off-ROW access from Housatonic Ave
- Rocky River Substation: from Kent Road (U.S. Route 7)

*Road Crossings*

- Boardman Road

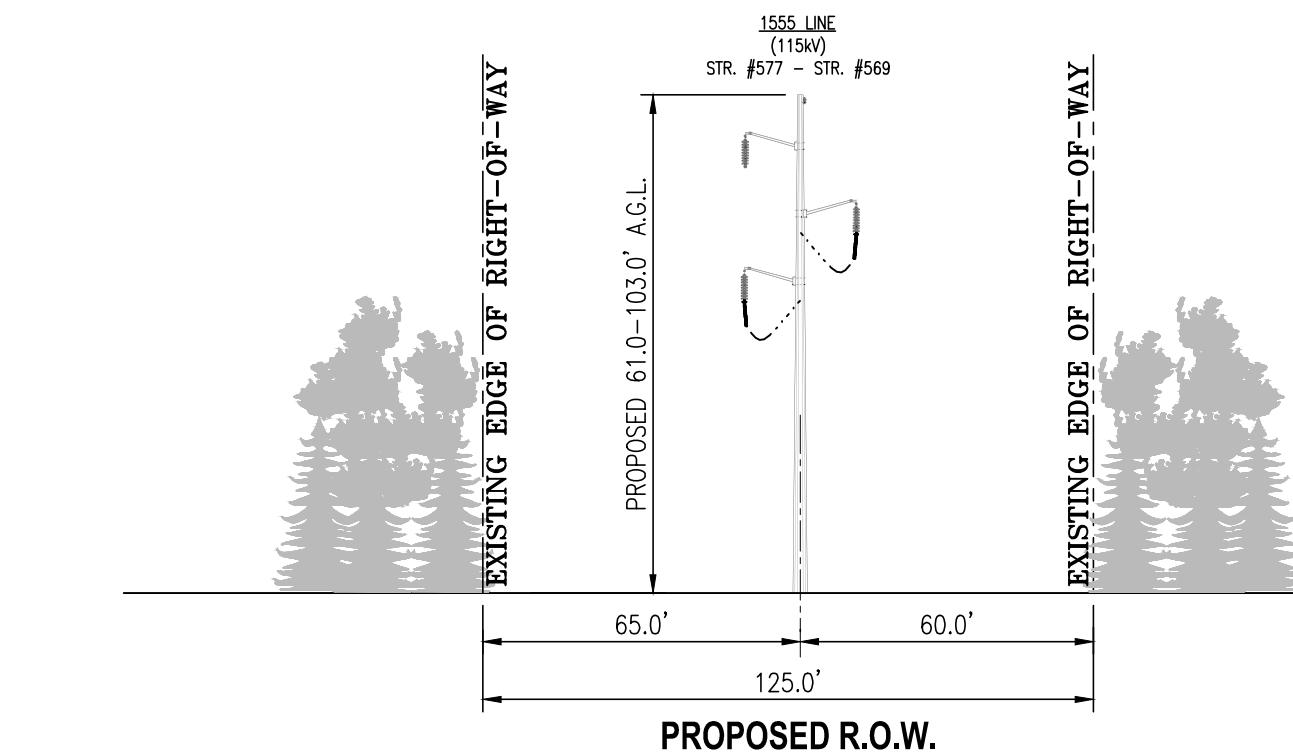
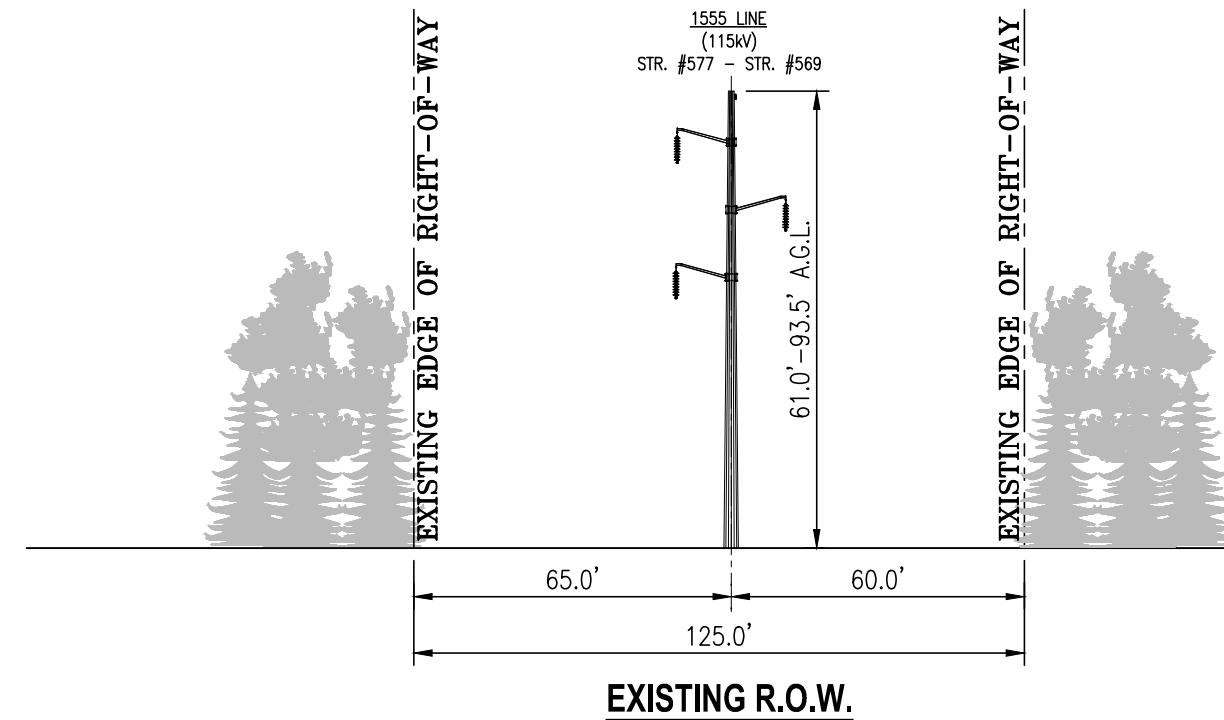
*Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing*

- 125 feet / 0 feet

ABUTTERS TO PROJECT RIGHT-OF-WAY		
Line List	Owner Name (Now or Formerly)	Site Address
338	SPRING POST REALTY CORPORATION	2 SOSTAK ROAD
339	NEW MILFORD FARMS 150 LLC	BOARDMAN ROAD
340	THE CONNECTICUT LIGHT & POWER COMPANY (EVERSOURCE)	HOUSATONIC AVENUE
341	FIRSTLIGHT HYDRO GENERATING COMPANY C/O DUFF & PHELPS LLC	200 KENT ROAD
342	THE CONNECTICUT LIGHT & POWER COMPANY (EVERSOURCE)	KENT ROAD

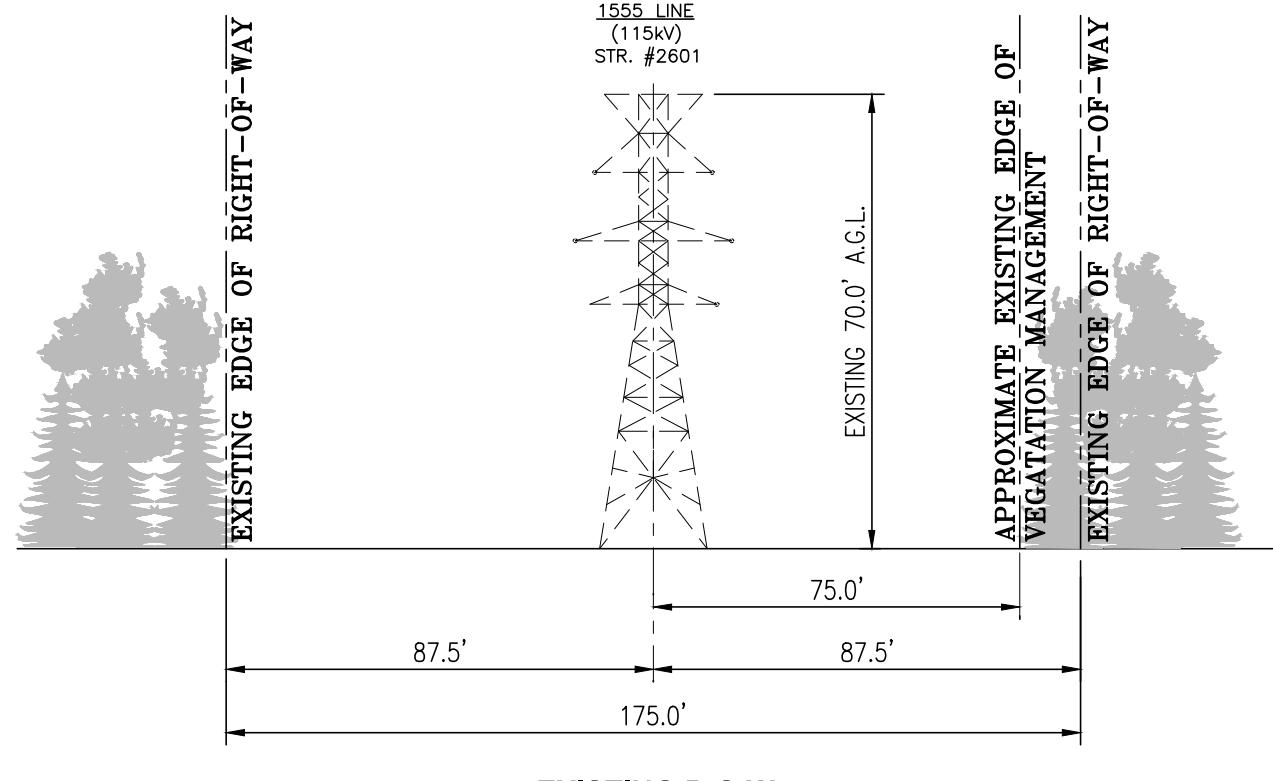


## ATTACHMENT B

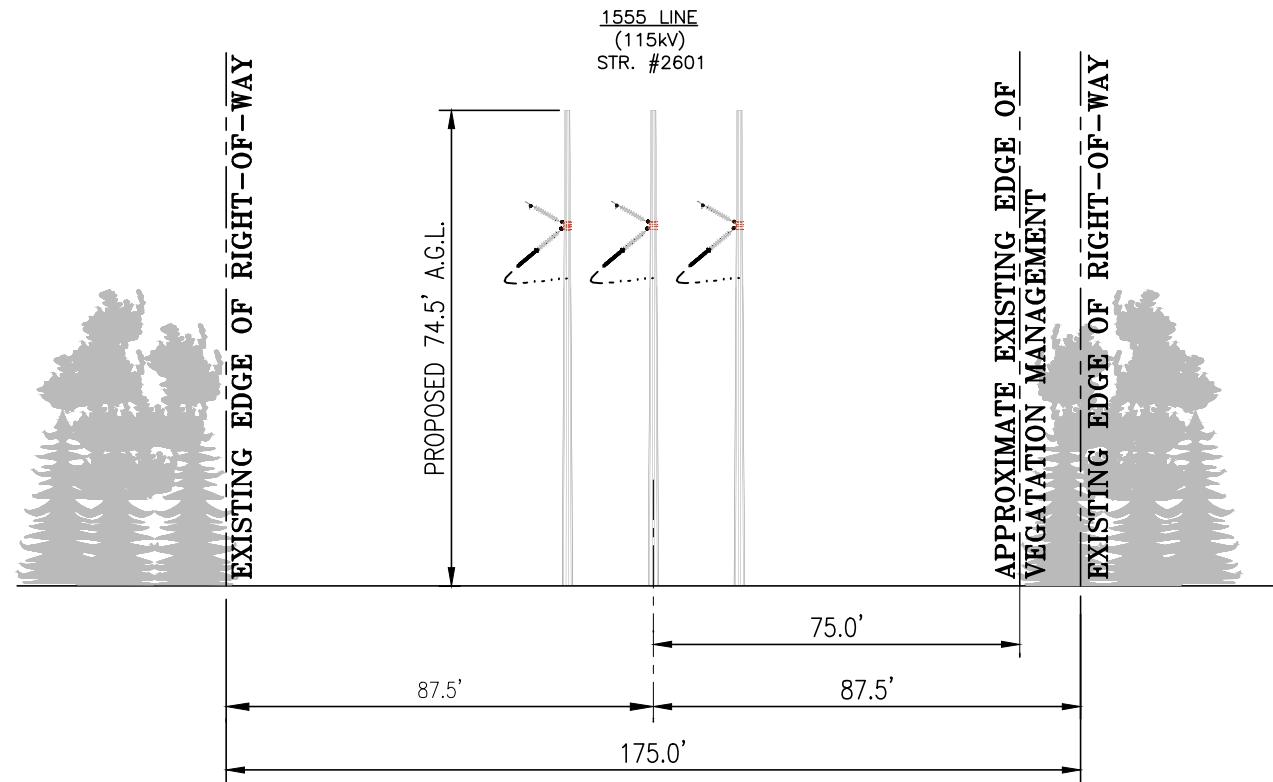


NOTE:  
LINE ARRESTERS TO BE  
ADDED AS REQUIRED

<b>EVERSOURCE</b> ENERGY				
BULLS BRIDGE SUBSTATION TO ROCKY RIVER SUBSTATION 115-KV TRANSMISSION LINE RIGHT OF WAY CROSS SECTION NEW MILFORD, CT				
BY	MFW/RRH	CHKD	APP	MFW
DATE	6/29/17	DATE	DATE	6/29/17
H-SCALE	N.T.S.	SIZE	B	FIELD BOOK & PAGES
V-SCALE	N.T.S.	V.S.		R.E. DWG
R.E. PROJ. NUMBER			DWG NO. 01097-85001 PG 1	

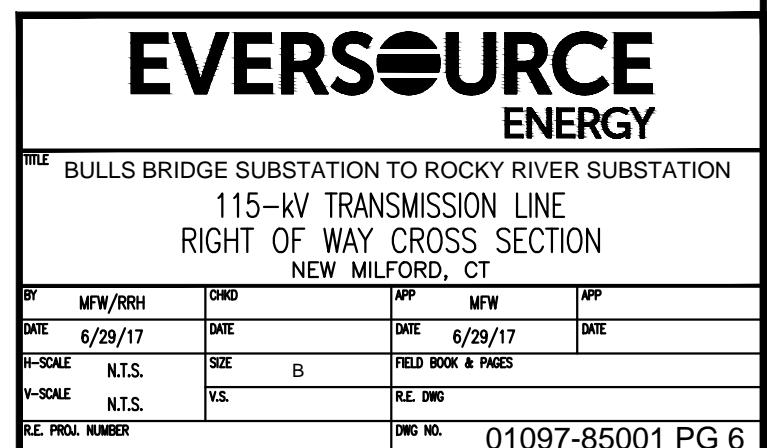


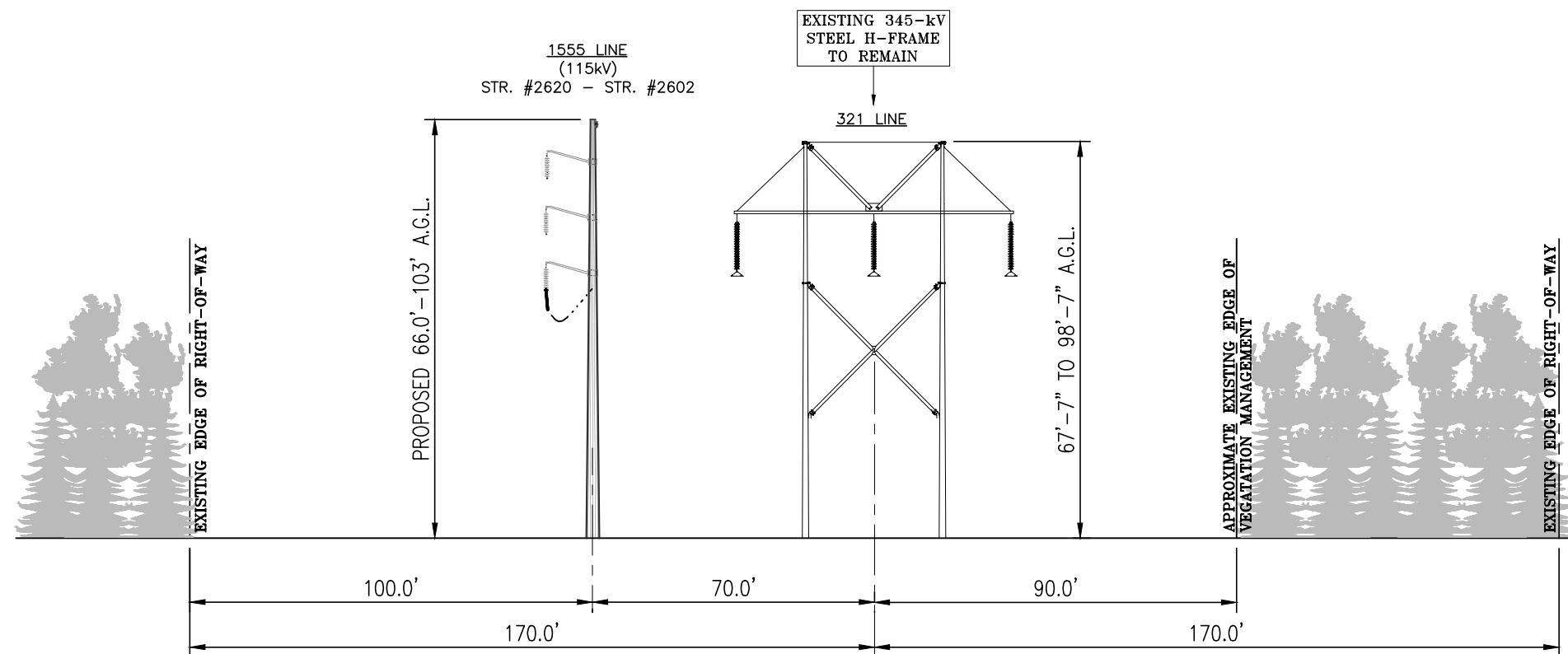
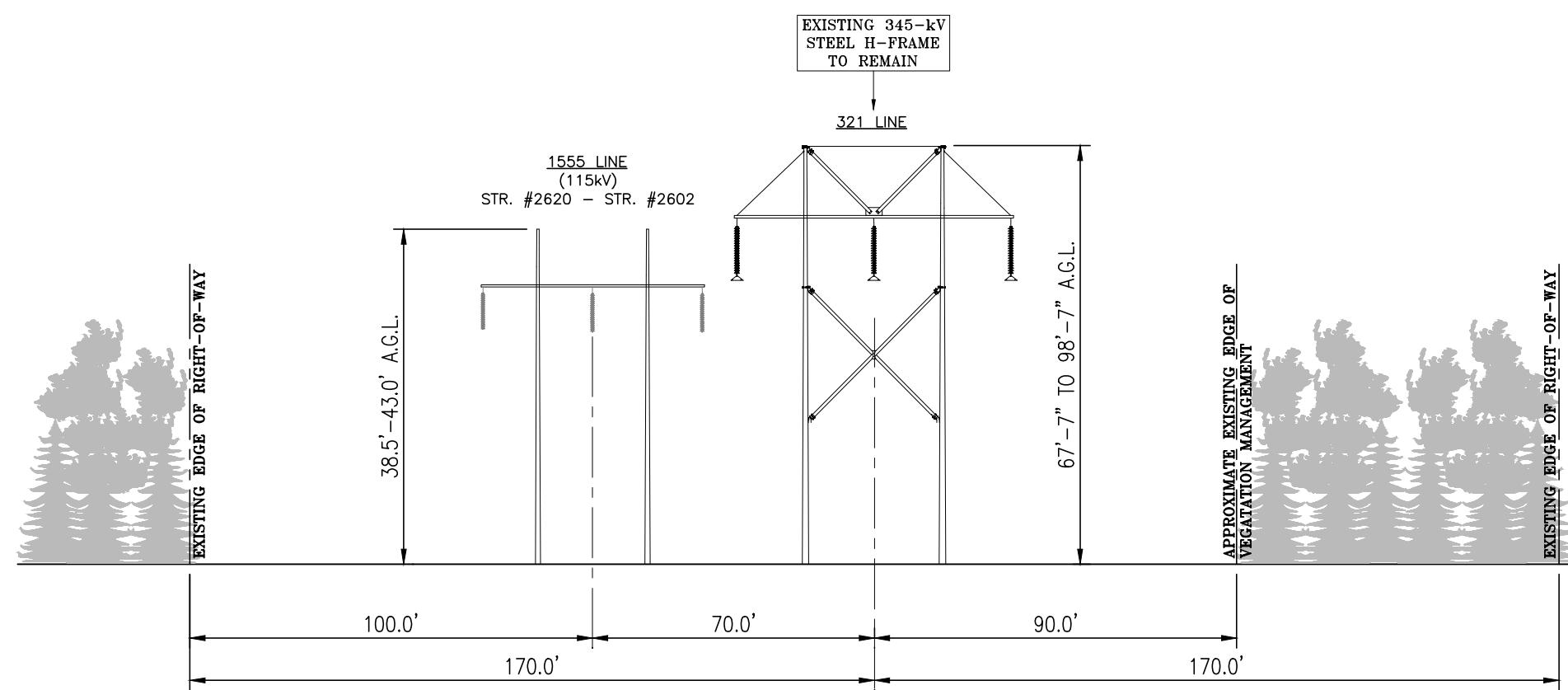
LOOKING FROM BULLS BRIDGE SUBSTATION TO ROCKY RIVER SUBSTATION



LOOKING FROM BULLS BRIDGE SUBSTATION TO ROCKY RIVER SUBSTATION

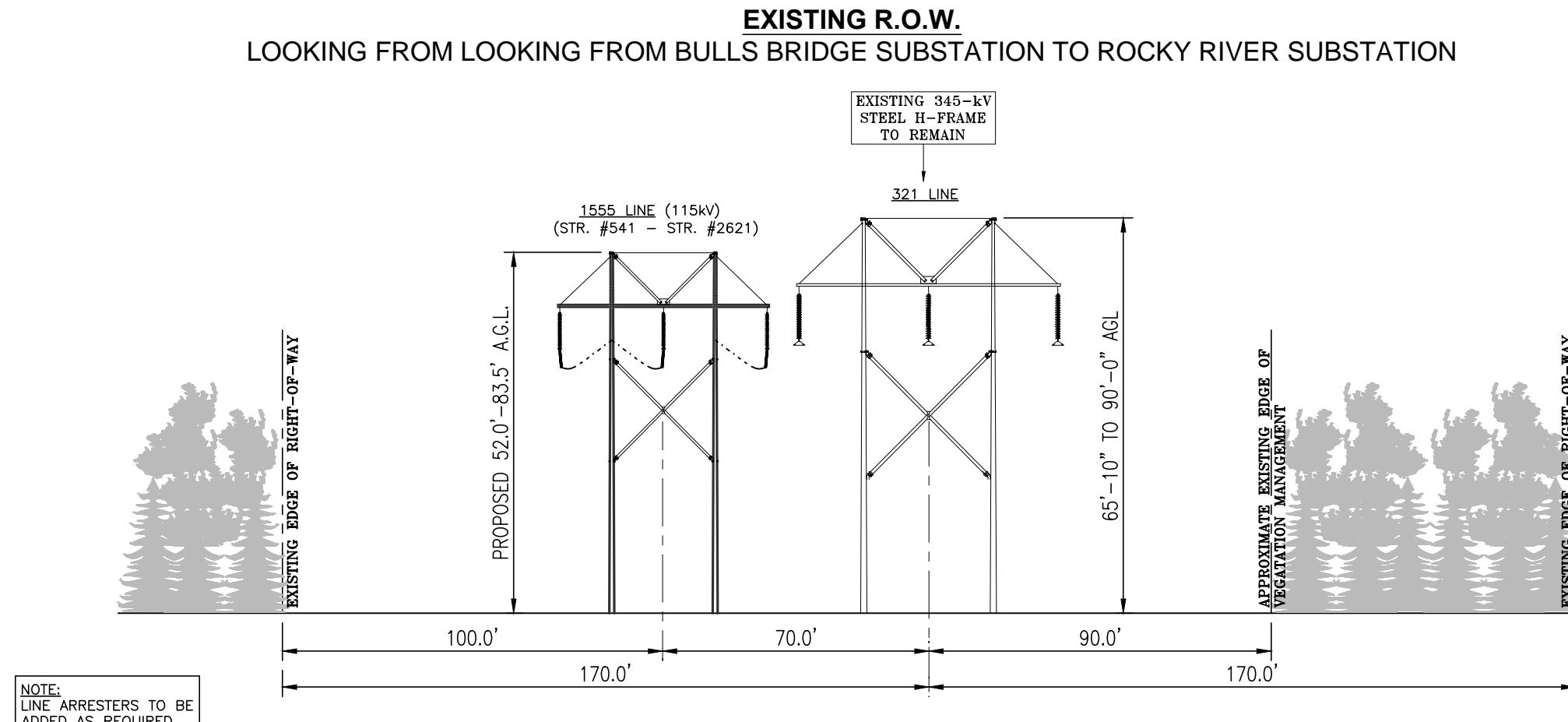
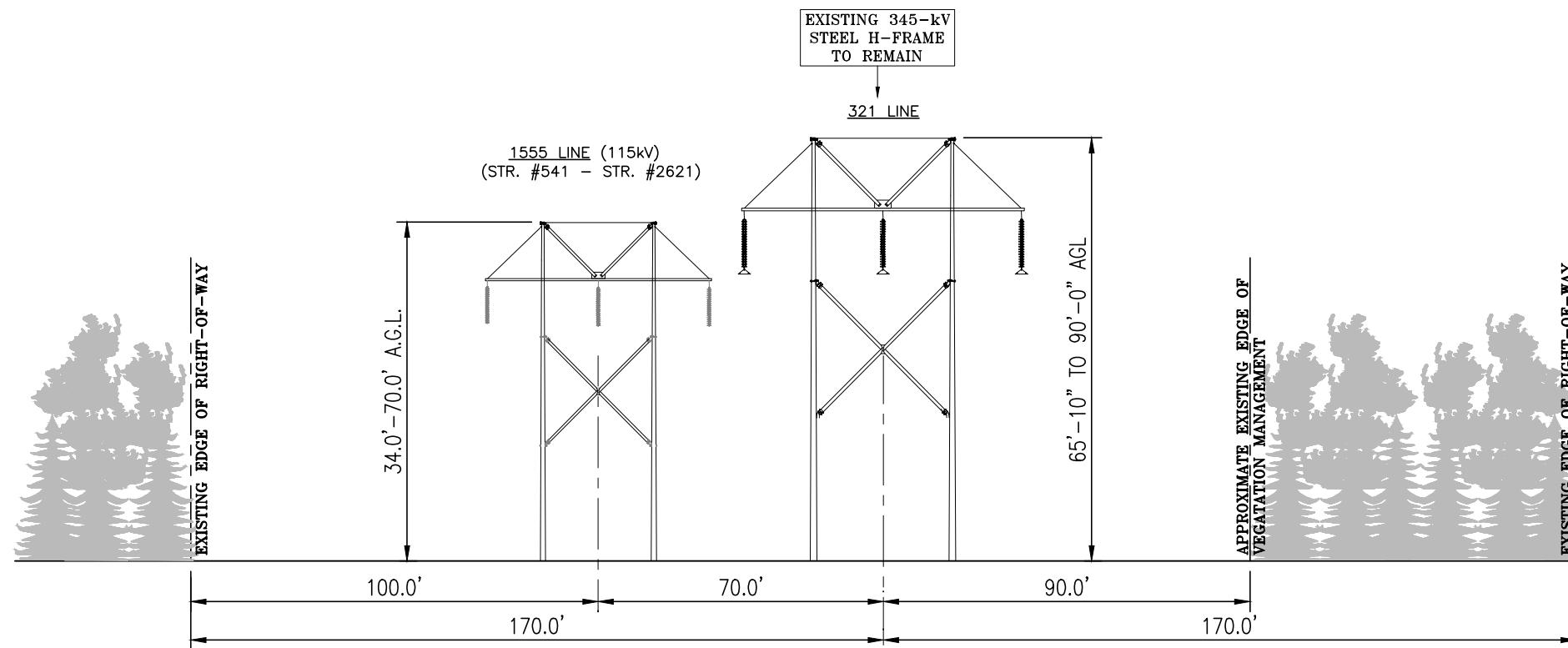
NOTE:  
LINE ARRESTERS TO BE  
ADDED AS REQUIRED



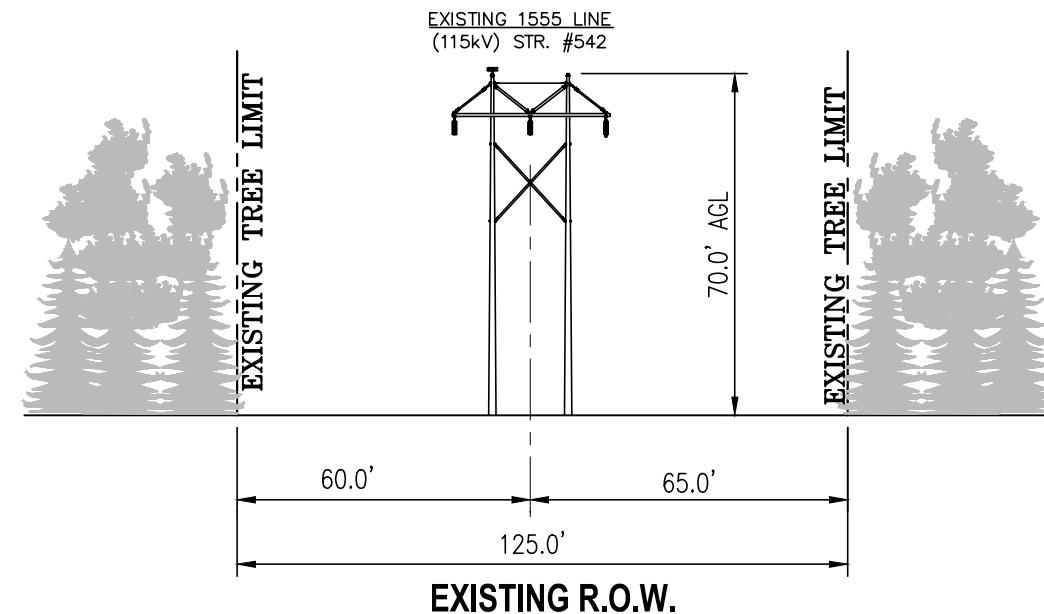


NOTE:  
LINE ARRESTERS TO BE  
ADDED AS REQUIRED

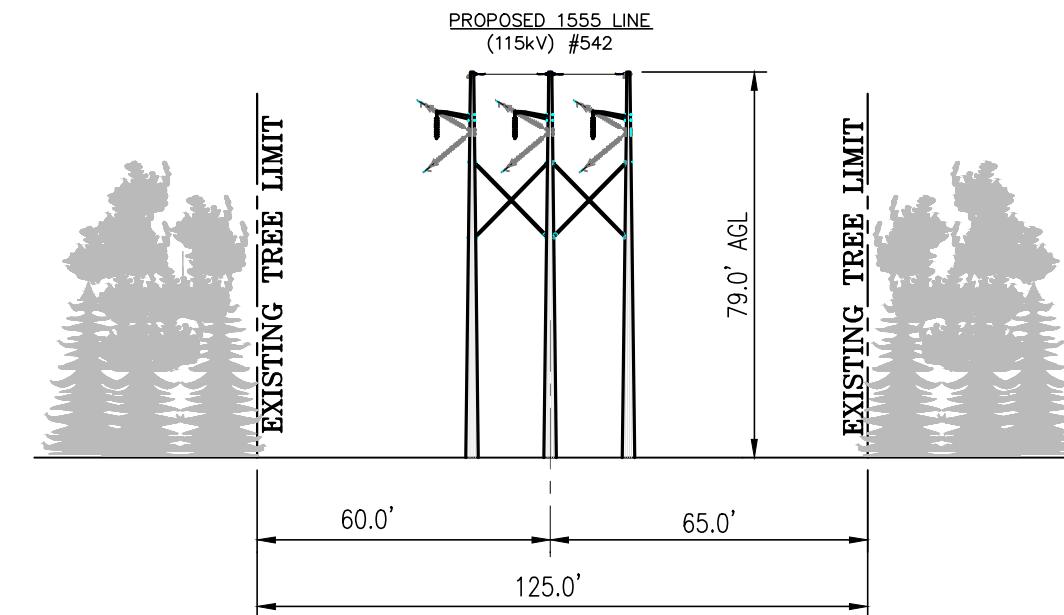
<b>EVERSOURCE</b>			
ENERGY			
BULLS BRIDGE SUBSTATION TO ROCKY RIVER SUBSTATION			
115-kV TRANSMISSION LINE			
RIGHT OF WAY CROSS SECTION			
NEW MILFORD, CT			
BY	MFW/RRH	CHKD	APP
DATE	6/29/17	DATE	DATE
H-SCALE	N.T.S.	SIZE	FIELD BOOK & PAGES
V-SCALE	N.T.S.	V.S.	R.E. DWG
R.E. PROJ. NUMBER		DWG NO.	
		01097-85001 PG 5	



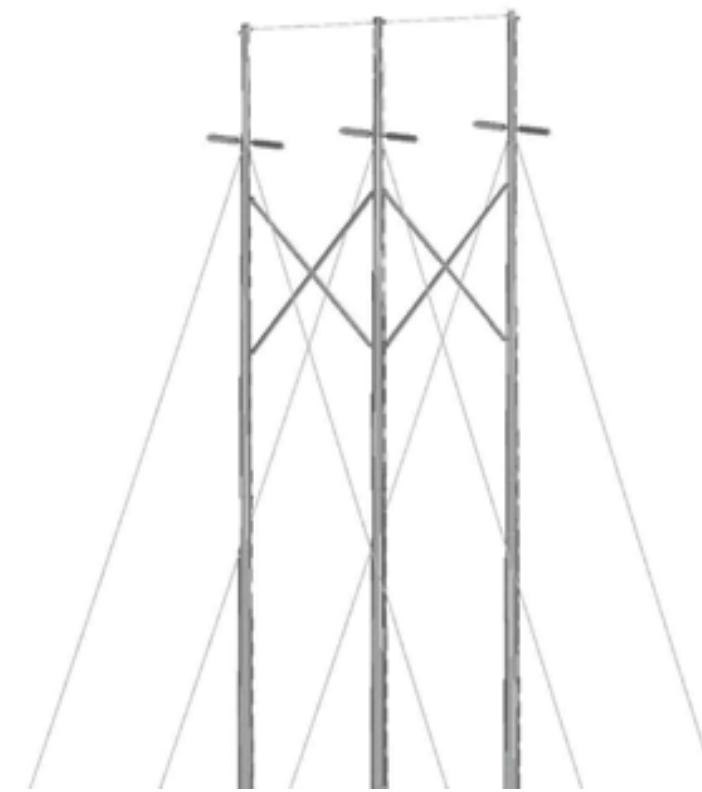
<b>EVERSOURCE</b> ENERGY			
TITLE BULLS BRIDGE SUBSTATION TO ROCKY RIVER SUBSTATION 115-kV TRANSMISSION LINE RIGHT OF WAY CROSS SECTION NEW MILFORD, CT			
BY	MFW/RRH	CHKD	APP
DATE	6/29/17	DATE	DATE
H-SCALE	N.T.S.	SIZE	B
V-SCALE	N.T.S.	V.S.	R.E. DWG
R.E. PROJ. NUMBER		DWG NO.	
		01097-85001 PG 4	



LOOKING FROM BULLS BRIDGE SUBSTATION TO ROCKY RIVER SUBSTATION

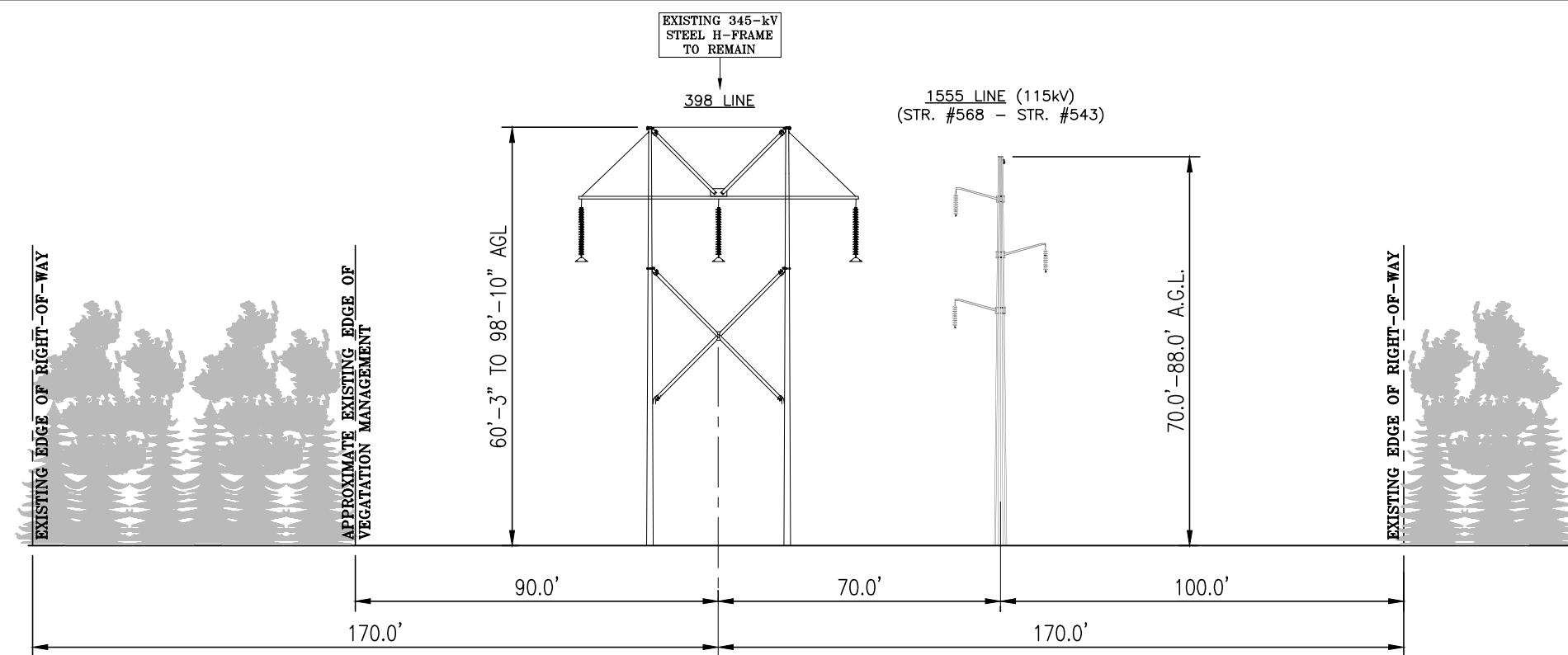


LOOKING FROM BULLS BRIDGE SUBSTATION TO ROCKY RIVER SUBSTATION

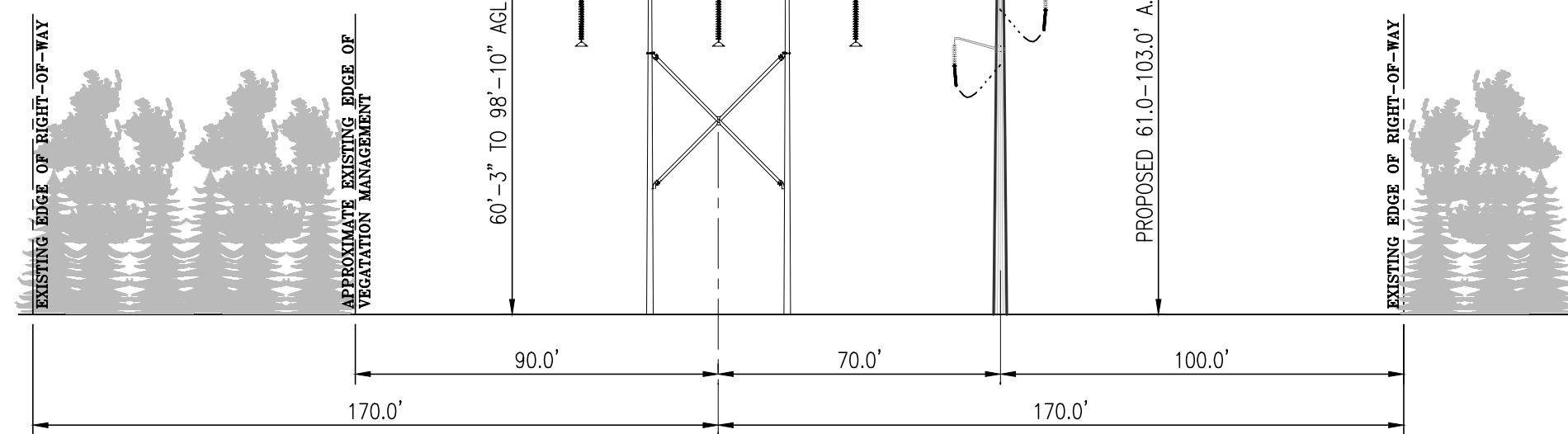


ISOMETRIC VIEW  
STRUCTURE #542

<b>EVERSOURCE</b> ENERGY				
BULLS BRIDGE SUBSTATION TO ROCKY RIVER SUBSTATION 115-KV TRANSMISSION LINE PARTIAL RIGHT OF WAY CROSS SECTION				
BY	RRH	CHKD	MFW	APP
DATE	6/29/17	DATE	6/29/17	DATE
H-SCALE	NTS	SIZE	B	FIELD BOOK & PAGES
V-SCALE	NTS	V.S.		R.E. DWG
R.E. PROJ. NUMBER			DWG NO. 01097-85001 PG 3	



**EXISTING R.O.W.**  
LOOKING FROM BULLS BRIDGE SUBSTATION TO ROCKY RIVER SUBSTATION



**PROPOSED R.O.W.**  
LOOKING FROM BULLS BRIDGE SUBSTATION TO ROCKY RIVER SUBSTATION

NOTE:  
LINE ARRESTERS TO BE  
ADDED AS REQUIRED

<b>EVERSOURCE</b>			
ENERGY			
BULLS BRIDGE SUBSTATION TO ROCKY RIVER SUBSTATION			
115-kV TRANSMISSION LINE			
RIGHT OF WAY CROSS SECTION			
NEW MILFORD, CT			
BY	MFW/RRH	CHKD	APP
DATE	6/29/17	DATE	DATE
H-SCALE	N.T.S.	SIZE	FIELD BOOK & PAGES
V-SCALE	N.T.S.	V.S.	R.E. DWG
R.E. PROJ. NUMBER		DWG NO.	
		01097-85001 PG 2	

## ATTACHMENT C



## WETLANDS AND WATERCOURSES REPORT

September 15, 2016

APT Project No.: CT259230

**Prepared For:** Eversource Energy  
56 Prospect Street  
Hartford, CT 06103  
Attn: Mark Pappalardo

**Eversource Project Name:** 1555 Line Rebuild Project

**Project Location:** New Milford, Connecticut

**Date(s) of Investigations:** August and September 2016

**Field Conditions:** **Weather:** sunny, mid 70s to 80s  
**Soil Moisture:** dry to moist

**Wetland/Watercourse Delineation Methodology\*:**

- Connecticut Inland Wetlands and Watercourses
- Connecticut Tidal Wetlands
- Massachusetts Wetlands
- U.S. Army Corps of Engineers

The wetlands inspection was performed by<sup>†</sup>:

Matthew Gustafson, Registered Soil Scientist

Matthew Davison, Registered Soil Scientist

Enclosures: Table 1: Delineated Wetlands within the 1555 Line Project Area  
Wetland Delineation Field Forms

*This report is provided as a summary of findings from APT's wetland investigation of the referenced Project Area that consists of proposed work areas and areas generally within 200 feet.‡*

\* Wetlands and watercourses were delineated in accordance with applicable local, state and federal statutes, regulations and guidance.

† All established wetlands boundary lines are subject to change until officially adopted by local, state, or federal regulatory agencies.

‡ APT has relied upon the accuracy of information provided by Eversource Energy regarding the proposed Project Area location for identifying wetlands and watercourses within the study area.

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## Attachments

- Table 1: Delineated Wetlands and Watercourses within the 1555 Line Project Area
- Wetland Delineation Field Forms

**Table 1: Delineated Wetlands and Watercourses within the 1555 Line Project Area**

Petition Mapsheet No.	Wetland No. <sup>1</sup>	Dominant NWI Class <sup>2</sup>	Other NWI Classes	Dominant Water Regime	Associated Watercourse <sup>3</sup>	Associated Potential Vernal Pool <sup>4</sup>
1	W1	PFO	PSS	Temporarily Flooded	S1 (Branch of Housatonic River)	---
1	W2	PSS	PEM	Seasonally Saturated-seepage	S2 (Intermittent)	---
1	W3	PEM	---	Seasonally Saturated-seepage	---	---
1	W4	PEM	PSS	Permanently Saturated	---	---
2	W5	PSS	PFO	Seasonally Saturated-seepage	S3 (Intermittent)	---
2	W6	PSS	PEM	Seasonally Saturated-seepage	S4 (Intermittent)	---
2	W7	PEM	PSS	Seasonally Saturated-seepage	S5 (Womenshenu k Brook)	---
3	W8	PSS	PEM	Seasonally Saturated-seepage	S6, S7 (Intermittent)	---
3	W9	PEM	PFO	Seasonally Saturated-seepage	---	---
4	W10	PSS	PEM	Seasonally Saturated-seepage	S8 (Intermittent)	---
4	W11	PEM	PSS	Seasonally Saturated-seepage	---	---
4	W12	PSS	PEM	Seansonally Saturated-perched	---	---
4	W13	PEM	PSS	Seasonally Saturated-seepage	---	---
5	W14	PSS	PEM	Seasonally Saturated-seepage	---	---
5/6	W15	PSS	PEM	Permanently Saturated	S9, S10 (Intermittent, Perennial)	---
7	W16	PFO	PSS	Seasonally Saturated-seepage	S11 (Perennial)	---
7	W17	PFO	---	Seasonally Saturated-seepage	S12 (Intermittent)	---
7	W17-1	PSS	PEM	Seasonally Saturated-seepage	---	---

Petition Mapsheet No.	Wetland No. <sup>1</sup>	Dominant NWI Class <sup>2</sup>	Other NWI Classes	Dominant Water Regime	Associated Watercourse <sup>3</sup>	Associated Potential Vernal Pool <sup>4</sup>
7	W17-2	PFO	---	Seasonally Saturated-seepage	---	---
7	---	---	---	---	S13	---
7	---	---	---	---	S13-1	---
8	W18	PSS	PEM	Seasonally Saturated-seepage	S14 (Intermittent)	PVP1
8	W19	PFO	PSS	Seasonally Saturated-seepage	---	---
8, 9	W20	POW	---	Permanently Flooded	---	---
9	W21	PSS	PEM	Seasonally Saturated-seepage	---	---
9, 10	W22	PSS	PEM	Seasonally Saturated-seepage	S15 (Unnamed Perennial)	---
10	W24	PEM	PSS	Seasonally Saturated-seepage	---	---
10, 11	W25	PEM	PSS	Seasonally Saturated-seepage	S16 (West Aspetuck River)	---
11, 12	W26	RIV	---	Permanently flooded	S17 (Housatonic River)	---

<sup>1</sup>Wetland No. refers to the number generated during the 2016 field surveys to identify wetlands within the 1555 Line Project Area. This Wetland No. is keyed to those depicted on the 100 scale Petition maps (Attached to the Petition).

<sup>2</sup>Wetlands classified according to Cowardin et al 1979; PEM = Palustrine Emergent Wetland; PFO = Palustrine Forested Wetland; PSS = Palustrine Scrub-Shrub Wetland; POW = Palustrine Open Water.

<sup>3</sup>Associated Watercourse refers to the identification number assigned during the 2016 field surveys to identify watercourses within the 1555 Line Project Area.

<sup>4</sup> Potential vernal pools were identified in August and September 2016 using identified physical and hydrologic wetland characteristics.

## Wetland Delineation Field Form

Wetland I.D.:	W1	Stream I.D.:	S1
Flag Location Method:	Site Sketch <input type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input checked="" type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Floodplain bordering the Housatonic River, includes poorly to well-drained alluvial soil types		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: Floodplain is predominantly forested, with scrub-shrub cover in maintained ROW		

#### **WATERCOURSE TYPE:**

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: Housatonic River		
Comments: Floodflow channel (branch of main channel – not permanently flooded)		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
---	---	-----------------------------

#### **DOMINANT PLANTS:**

Eastern Cottonwood ( <i>Populus deltoides</i> )	
Bush Honeysuckles* ( <i>Lonicera spp.</i> )	
Nettle ( <i>Laportea sp.</i> )	
Sensitive Fern ( <i>Onoclea sensibilis</i> )	
Horsetail ( <i>Equisetum sp.</i> )	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W2	Stream I.D.:	S2
Flag Location Method:	Site Sketch <input type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Seepage area contains complex of poorly and moderately well-drained (oxi-aquic) soils. Wetland outlets via scoured intermittent watercourse to the south.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: Unnamed		
Comments: Scoured, generally unvegetated channel		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
---	---	-----------------------------

#### **DOMINANT PLANTS:**

Steeplebush ( <i>Spiraea tomentosa</i> )	
Willow herb ( <i>Epilobium</i> sp.)	
Canada rush ( <i>Juncus Canadensis</i> )	
Sensitive Fern ( <i>Onoclea sensibilis</i> )	
Grass-leaved goldenrod ( <i>Euthamia graminifolia</i> )	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W3	Stream I.D.:	N/A
Flag Location Method:	Site Sketch <input type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Small emergent groundwater discharge wetland drains south over an existing access road		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: Unnamed		
Comments: None		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
---	---	-----------------------------

### **DOMINANT PLANTS:**

Sensitive Fern ( <i>Onoclea sensibilis</i> )	
Joe Pye Weed ( <i>Eupatorium maculatum</i> )	
Grass-leaved goldenrod ( <i>Euthamia graminifolia</i> )	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W4	Stream I.D.:	N/A
Flag Location Method:	Site Sketch <input type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input checked="" type="checkbox"/>	Seasonally Saturated – seepage <input type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Permanently saturated emergent marsh drains south via culvert beneath existing access road. Flows concentrate south of the access road to form an intermittent watercourse (off-ROW).		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

#### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: Unnamed		
Comments: off-ROW		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: No evidence of prolonged seasonal inundation	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
---	---	-----------------------------

#### **DOMINANT PLANTS:**

Broad-Leaf Cattail ( <i>Typha latifolia</i> )	Steeplebush ( <i>Spiraea tomentosa</i> )
Joe Pye Weed ( <i>Eupatorium maculatum</i> )	Speckled Alder ( <i>Alnus rugosa</i> )
Grass-leaved goldenrod ( <i>Euthamia graminifolia</i> ) <input type="checkbox"/>	
Purple Loosestrife* ( <i>Lythrum salicaria</i> )	
Poison Sumac ( <i>Tixicodendron vernix</i> )	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W5	Stream I.D.:	S3
Flag Location Method:	Site Sketch <input type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Forested wetland located north of the ROW drains south through the ROW within a channelized intermittent watercourse. Existing culverted access road crossing provides access across.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: Unnamed		
Comments: Feature has been subject to historic disturbance (channelization)		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
---	---	-----------------------------

### **DOMINANT PLANTS:**

Red Maple ( <i>Acer rubrum</i> )	Jewelweed ( <i>Impatiens capensis</i> )
Skunk Cabbage ( <i>Symplocarpus foetidus</i> )	Willow Herb ( <i>Epilobium</i> sp.)
Speckled Alder ( <i>Alnus rugosa</i> )	
Bush Honeysuckles* ( <i>Lonicera</i> spp.)	
Autumn Olive* ( <i>Elaeagnus umbellata</i> )	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W6	Stream I.D.:	S4
Flag Location Method:	Site Sketch <input type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Intermittent watercourse/narrow bordering wetland drains within narrow channel south through ROW		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

#### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name:		
Comments:		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### **DOMINANT PLANTS:**

Japanese Knotweed* (Polygonum cuspidatum)	
Autumn Olive* (Elaeagnus umbellata)	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W7	Stream I.D.:	S5
Flag Location Method:	Site Sketch <input type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input checked="" type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Womenshenuk Brook flows within deeply incised channel south through the ROW.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input checked="" type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input checked="" type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: Womenshenuk Brook		
Comments:		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### **DOMINANT PLANTS:**

Japanese Knotweed* (Polygonum cuspidatum)	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W8	Stream I.D.:	S6, S7
Flag Location Method:	Site Sketch <input type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input checked="" type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Hillside seepage complex, generally drains in a westerly direction towards Front of the Mountain Road, where flows are then directed via intermittent watercourses down and across the road.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input checked="" type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

#### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: Unnamed		
Comments: Man-made/ altered (S6, S7) IWCs convey seasonal discharges		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
---	---	-----------------------------

#### **DOMINANT PLANTS:**

Bebb Willow ( <i>Salix bebbiana</i> )	Jewelweed ( <i>Impatiens capensis</i> )
Common Reed* ( <i>Phragmites australis</i> )	Steeplebush ( <i>Spiraea tomentosa</i> )
Rough-stemmed Goldenrod ( <i>Solidago rugose</i> )	
Sensitive Fern ( <i>Onoclea sensibilis</i> )	
Arrowleaf Tearthumb ( <i>Polygonum sagittatum</i> )	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W9	Stream I.D.:	N/A
Flag Location Method:	Site Sketch <input type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Seasonally saturated seepage in ravine drains south from ROW		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: Unnamed		
Comments: Man-made features constructed to convey seasonal discharges		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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### **DOMINANT PLANTS:**

Common Reed* (Phragmites australis)	
Green Ash (Fraxinus pennsylvanica)	
Red Maple (Acer rubrum)	
Spicebush (Lindera benzoin)	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W10	Stream I.D.:	Stream: S8
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments:		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

#### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: Watercourse resource consists of a well incised bank and channel with a sandy/large stone bottom of approximately 5 ft. in width. System drains south into a larger hillside seep wetland system. Delineated reaches contain little to no bordering wetlands.		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### **DOMINANT PLANTS:**

Jewelweed ( <i>Impatiens capensis</i> )	Golden Rod ( <i>Solidago</i> sp.)
Multiflora Rose* ( <i>Rosa multiflora</i> )	Japanese Barberry* ( <i>Berberis thunbergii</i> )
Bebb Willow ( <i>Salix bebbiana</i> )	Reed Canarygrass* ( <i>Phalaris arundinacea</i> )

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W11	Stream I.D.:	Stream:
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input checked="" type="checkbox"/>
Comments: Wetland resource consists of a broad wet meadow/hillside seep system that drains south.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input checked="" type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: None		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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### **DOMINANT PLANTS:**

Purple Loosestrife* (Lythrum salicaria)	Golden Rod (Solidago sp.)
Spicebush (Lindera benzoin)	Joe Pye Weed (Eupatorium maculatum)
Sensitive Fern (Onoclea sensibilis)	Soft Rush (Juncus effuses)
Fox Grape (Vitis labrusca)	Reed Canarygrass* (Phalaris arundinacea)
Multiflora Rose* (Rosa multiflora)	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W12	Stream I.D.:	Stream:
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input type="checkbox"/>	Seasonally Saturated - perched <input checked="" type="checkbox"/>
Comments: Wetland resource consists of an impounded wetland system constricted by a stonewall to the southwest.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: None		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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### **DOMINANT PLANTS:**

Sensitive Fern ( <i>Onoclea sensibilis</i> )	Golden Rod ( <i>Solidago</i> sp.)
Purple Loosestrife* ( <i>Lythrum salicaria</i> )	
Multiflora Rose* ( <i>Rosa multiflora</i> )	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W13	Stream I.D.:	Stream:
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>		GPS (sub-meter) located <input checked="" type="checkbox"/>

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Wetland resource consists of a broad wet meadow/hillside seep system that drains south.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments:		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input checked="" type="checkbox"/>
Comments: Portions of the wetland have been historically altered through tire rutting and small areas of cuts and fills. Northern edge consists of a small fill embankment.		

#### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: None		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### **DOMINANT PLANTS:**

Poison Ivy ( <i>Toxicodendron radicans</i> )	Broad-Leaf Cattail ( <i>Typha latifolia</i> )
Green Bulrush ( <i>Scirpus atrovirens</i> )	Purple Loosestrife* ( <i>Lythrum salicaria</i> )
Sensitive Fern ( <i>Onoclea sensibilis</i> )	Golden Rod ( <i>Solidago</i> sp.)
Tearthumbs ( <i>Polygonum</i> spp.)	Multiflora Rose* ( <i>Rosa multiflora</i> )
Dogbane ( <i>Apocynum cannabinum</i> )	Reed Canarygrass* ( <i>Phalaris arundinacea</i> )

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W14	Stream I.D.:	Stream:
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Wetland resource consists of a stony hillside seep system that drains southwest eventually draining under an existing dirt access road.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: None		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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### **DOMINANT PLANTS:**

Sensitive Fern ( <i>Onoclea sensibilis</i> )	Winterberry ( <i>Ilex verticillata</i> )
Spicebush ( <i>Lindera benzoin</i> )	Purple Loosestrife* ( <i>Lythrum salicaria</i> )
Northern Arrow-wood ( <i>Viburnum recognitum</i> )	Golden Rod ( <i>Solidago</i> sp.)
Joe Pye Weed ( <i>Eupatorium maculatum</i> )	Multiflora Rose* ( <i>Rosa multiflora</i> )
Sphagnum moss ( <i>Sphagnum</i> spp.)	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W15	Stream I.D.:	S9, S10
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>	GPS (sub-meter) located	<input checked="" type="checkbox"/>

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input checked="" type="checkbox"/>	Seasonally Saturated – seepage <input type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Broad bordering wetland system to one intermittent watercourse (S9) and one perennial watercourse (S10). Drainage is west towards Housatonic River (tributary to)		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input checked="" type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input checked="" type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: One intermittent watercourse (S9) and one unnamed perennial watercourse (S10) drain from northeast to southwest crossing the existing gravel access road (drains over road base).		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### **DOMINANT PLANTS:**

Multiflora Rose* (Rosa multiflora)	Winterberry (Ilex verticillata)
Bebb Willow (Salix bebbiana)	Sensitive Fern (Onoclea sensibilis)
Cinnamon Fern (Osmunda cinnamomea)	Speckled Alder (Alnus rugosa)
Tearthumbs (Polygonum spp.)	
Spicebush (Lindera benzoin)	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W16	Stream I.D.:	S11
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>	GPS (sub-meter) located	<input checked="" type="checkbox"/>

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input checked="" type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Consists of narrow bordering wetland/floodplain, expands to the northeast within forested area off right-of-way.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

#### **WATERCOURSE TYPE:**

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: Small perennial stream that at the time of inspection was mostly dry with small pools. The stream consists of well incised, steeply sloping banks.		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### **DOMINANT PLANTS:**

Multiflora Rose* (Rosa multiflora)	Red Maple (Acer rubrum)
Jewelweed (Impatiens capensis)	
Spicebush (Lindera benzoin)	
Speckled Alder (Alnus rugosa)	
Yellow Birch (Betula alleghaniensis)	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W17	Stream I.D.:	Stream: S12
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>	GPS (sub-meter) located	<input checked="" type="checkbox"/>

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Wetland resource consists of a small hillside seep system with IWC that drains west into a rip-rap armored drainage swale that outlets into Wetland 15.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments:		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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### **DOMINANT PLANTS:**

Multiflora Rose* (Rosa multiflora)	Red Maple (Acer rubrum)
Sensitive Fern (Onoclea sensibilis)	Yellow Birch (Betula alleghaniensis)
Spicebush (Lindera benzoin)	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W17-1	Stream I.D.:	Stream:
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>		GPS (sub-meter) located <input checked="" type="checkbox"/>

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Wetland resource consists of a small narrow hillside seep that was created as a result of cutting (excavation) and interception of groundwater.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments:		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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### **DOMINANT PLANTS:**

Multiflora Rose* (Rosa multiflora)	
Rubus sp.	
Winterberry (Ilex verticillata)	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W17-2	Stream I.D.:	Stream:
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>		GPS (sub-meter) located <input checked="" type="checkbox"/>

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Wetland resource consists of the upper end of a forested wetland located beyond the maintained ROW but proximate to project activities.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

#### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments:		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### **DOMINANT PLANTS:**

Red Maple (Acer rubrum)	
Spicebush (Lindera benzoin)	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	N/A	Stream I.D.:	Stream: S13
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>	GPS (sub-meter) located	<input checked="" type="checkbox"/>

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: No bordering vegetated wetland areas.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: Delineated feature originates as stormwater runoff from a stormwater outfall (unregulated). As it drains through ROW and intercepts groundwater, flows become intermittent and meet the CT definition for an IWC. Stream consists of a sandy/gravel bottom 3 foot wide.		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### **DOMINANT PLANTS:**

Multiflora Rose* (Rosa multiflora)	Spicebush (Lindera benzoin)
Sensitive Fern (Onoclea sensibilis)	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	N/A	Stream I.D.:	Stream: S13-1
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>	GPS (sub-meter) located	<input checked="" type="checkbox"/>

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: No bordering vegetated wetland areas.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: Delineated feature drains from Structure 10126 pad, forms in forested area beyond maintained ROW. Narrow, meandering channel is just beginning to form where feature is delineated.		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### **DOMINANT PLANTS:**

unvegetated	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W18	Stream I.D.:	Stream: S14
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>	GPS (sub-meter) located	<input checked="" type="checkbox"/>

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Wetland consists of a large hillside seep system with interior intermittent stream system fed by a natural spring. A historically dug pond is located directly adjacent to the existing gravel access road and drains out to the south and west. Wetland drains under Rooster Tail Hollow via a 24" corrugated plastic pipe and continues southwest as a broad wetland seep system.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input checked="" type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: None		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input type="checkbox"/> Potential <input checked="" type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: Historically dug pond feed by an intermittent watercourse/natural spring maintains year-round inundation that potentially supports vernal pool breeding habitat.	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### **DOMINANT PLANTS:**

Broad-Leaf Cattail ( <i>Typha latifolia</i> )	Bebb Willow ( <i>Salix bebbiana</i> )
Multiflora Rose* ( <i>Rosa multiflora</i> )	Speckled Alder ( <i>Alnus rugosa</i> )
Spicebush ( <i>Lindera benzoin</i> )	Japanese Barberry* ( <i>Berberis thunbergii</i> )
Sensitive Fern ( <i>Onoclea sensibilis</i> )	Fox Grape ( <i>Vitis labrusca</i> )

Joe Pye Weed ( <i>Eupatorium maculatum</i> )	Jewelweed ( <i>Impatiens capensis</i> )
Golden Rod ( <i>Solidago</i> sp.)	Purple Loosestrife* ( <i>Lythrum salicaria</i> )

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W19	Stream I.D.:	Stream:
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Forested wetland is hydraulically connected to W18 via 24" CPP beneath Rooster Tail Hollow		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: None		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: N/A	

### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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### **DOMINANT PLANTS:**

Red Maple ( <i>Acer rubrum</i> )	
Green Ash ( <i>Fraxinus pennsylvanica</i> )	
Black Gum ( <i>Nyssa sylvatica</i> )	
Spicebush ( <i>Lindera benzoin</i> )	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	Wetland W20	Stream I.D.:	N/A
Flag Location Method:	Site Sketch <input type="checkbox"/>		GPS (sub-meter) located <input checked="" type="checkbox"/>

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input checked="" type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Ladner Pond, a man-made impoundment (dammed on south side) which drains south to the West Aspetuck River.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input checked="" type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: Ladner Pond		
Comments: Man-made pond		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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### **DOMINANT PLANTS:**

N/A – open water feature to armored banks

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W21	Stream I.D.:	N/A
Flag Location Method:	Site Sketch <input type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Low-gradient depressional wetland – borders watercourse (located off-ROW)		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: None		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### **DOMINANT PLANTS:**

Bebb Willow ( <i>Salix bebbiana</i> )	
Rough-stemmed Goldenrod ( <i>Solidago rugosa</i> )	
Sensitive Fern ( <i>Onoclea sensibilis</i> )	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W22	Stream I.D.:	S15
Flag Location Method:	Site Sketch <input type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input checked="" type="checkbox"/>
Permanently Saturated <input checked="" type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Upper fringe of off-ROW forested wetland – hydrology affected by ROW access road which impedes inputs from upgradient wetland. Also includes impounded portion of perennial watercourse.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: Unnamed		
Comments: Not depicted as blue line on USGS or CTECO, however field review indicates perennial. Outlets from man-made upstream impoundment (Ladner Pond). Watercourse is dammed near str 2613.		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### **DOMINANT PLANTS:**

Bebb Willow ( <i>Salix bebbiana</i> )	Multiflora Rose* ( <i>Rosa multiflora</i> )
Common Reed* ( <i>Phragmites australis</i> )	Grass-leaved Goldenrod ( <i>Euthamia graminifolia</i> )
Rough-stemmed Goldenrod ( <i>Solidago rugosa</i> )	
Sensitive Fern ( <i>Onoclea sensibilis</i> )	
Broad-Leaf Cattail ( <i>Typha latifolia</i> )	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W23	Stream I.D.:	N/A
Flag Location Method:	Site Sketch <input type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Seasonally saturated wetland drains east through ROW towards West Aspetuck River		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: Unnamed		
Comments: None		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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### **DOMINANT PLANTS:**

Bush Honeysuckles* (Lonicera spp.)	Multiflora Rose* (Rosa multiflora)
Winterberry (Ilex verticillata)	
Sensitive Fern (Onoclea sensibilis)	
Tussock Sedge (Carex stricta)	
Bebb Willow (Salix bebbiana)	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W24	Stream I.D.:	N/A
Flag Location Method:	Site Sketch <input type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Historically disturbed wetland depression discharges via culvert beneath historic access towards West Aspetuck River		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input checked="" type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

#### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: None		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### **DOMINANT PLANTS:**

Japanese Knotweed* (Polygonum cuspidatum)	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W25	Stream I.D.:	S16
Flag Location Method:	Site Sketch <input type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input checked="" type="checkbox"/>
Permanently Saturated <input checked="" type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Bordering wetlands associated with West Aspetuck River includes seepage areas which discharge east towards river		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

#### **WATERCOURSE TYPE:**

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: West Aspetuck River		
Comments: adjacent to ROW		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### **DOMINANT PLANTS:**

Sensitive Fern ( <i>Onoclea sensibilis</i> )	
Jewelweed ( <i>Impatiens capensis</i> )	
Rough-stemmed Goldenrod ( <i>Solidago rugose</i> )	
Stinging Nettle ( <i>Urtica dioica</i> )	

\* denotes Connecticut Invasive Species Council invasive plant species

## Wetland Delineation Field Form

Wetland I.D.:	W26	Stream I.D.:	S17
Flag Location Method:	Site Sketch <input type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>	

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input checked="" type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input checked="" type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Housatonic River		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input checked="" type="checkbox"/>	Palustrine <input type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

#### **CLASS:**

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### **WATERCOURSE TYPE:**

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: Housatonic River		
Comments: Housatonic River - delineation to the rear of Rocky River Substation		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

#### **SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### **DOMINANT PLANTS:**

Japanese Knotweed* (Polygonum cuspidatum)	
Armored banks/retaining wall rear of Rocky River SS	

\* denotes Connecticut Invasive Species Council invasive plant species



## ATTACHMENT D





Biodiversity Studies • Wetland Delineation & Assessment • Habitat Management • GIS Mapping • Permitting • Forestry

## Technical Memorandum

To: Mark Pappalardo, Eversource Environmental Affairs

From: Matthew Davison, Davison Environmental

Cc: Dean Gustafson, All Points Technology  
Eric Davison, Davison Environmental

Date: May 31, 2017

Re: 1555 Line Vernal Pool Survey

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### INTRODUCTION

The following memorandum details vernal pool surveys conducted by Davison Environmental and All-Points Technology in support of The Connecticut Light and Power Company doing business as Eversource Energy's ("Eversource") petition to the Connecticut Siting Council for the rebuild of the 1555 transmission line within an existing right-of-way ("ROW") in New Milford, Connecticut (the "Project").

### VERNAL POOL DEFINITION

Several vernal pool definitions have been developed by both regulatory authorities and conservation organizations. The Connecticut Department of Energy and Environmental Protection (CT DEEP) generally describes vernal pools on its website, but cautions that the data provided is informational in nature and should not supplant regulations of municipal inland wetlands agencies. CT DEEP describes vernal pools as "*small bodies of standing fresh water found throughout the spring*" that are "*usually temporary*" and "*result from various combinations of snowmelt, precipitation and high water tables associated with the spring season*".

Calhoun and Klemens (2002) *Best development practices: Conserving pool-breeding amphibians in residential and commercial developments in the northeastern United States* (BDP Manual) provides the following operational definition of vernal pools:

*Vernal pools are seasonal bodies of water that attain maximum depths in the spring or fall, and lack permanent surface water connections with other wetlands or water bodies. Pools fill with snowmelt or runoff in the spring, although some may be fed primarily by groundwater sources. The duration of surface flooding, known as hydroperiod, varies depending upon the pool and the year; vernal pool hydroperiods range along a continuum from less than 30 days to more than one year. Pools are generally small in size (<2 acres), with the extent of vegetation varying widely. They lack established fish populations, usually as a result of periodic drying, and support communities dominated by animals adapted to living in temporary, fishless pools. In the region, they provide essential breeding habitat for one or more wildlife species including Ambystomid salamanders (*Ambystoma* spp., called "mole salamanders" because they live in burrows), wood frogs (*Rana sylvatica*), and fairy shrimp (*Eubranchipus* spp.).*

Vernal pool physical characteristics can vary widely while still providing habitat for indicator species. “Classic” vernal pools are natural depressions in a wooded upland with no permanent hydrologic connection to other wetland systems. Anthropogenic depressions such as quarry holes, old farm ponds and borrow pits can also provide similar habitat. Often, vernal pools are depressions or impoundments embedded within larger wetland systems. These vernal pool habitats are commonly referred to as “cryptic” vernal pools.

Several species of amphibians depend on vernal pools for reproduction and development. These species are referred to as indicator<sup>1</sup> vernal pool species, and their presence in a temporary wetland during the breeding season helps to identify that area as a vernal pool. Indicator species present in Connecticut include the following:

- Blue-spotted salamander (*Ambystoma laterale*);
- Wood frog (*Rana sylvatica*);
- Spotted salamander (*Ambystoma maculatum*);
- Jefferson salamander (*Ambystoma jeffersonianum*);
- Eastern spadefoot toad (*Scaphiopus holbrookii*);
- Marbled salamander (*Ambystoma opacum*); and
- Fairy shrimp (*Branchiopoda anostraca*).

Facultative vernal pool species are fauna that utilize but do not necessarily require vernal pools for reproductive success. Examples of facultative species include spotted turtles (*Clemmys guttata*) and four-toed salamander (*Hemidactylum scutatum*). These species may breed or feed in vernal pools, but are also capable of carrying out all phases of their lifecycle in other types of wetlands or water bodies. Evidence of breeding by facultative species alone is not considered indicative of the presence of a vernal pool.

## **EXISTING WETLANDS ALONG THE PROJECT ROW**

Project wetlands are predominantly characterized by wetlands with a “saturated” hydrology. Mitsch and Gosselink (2007)<sup>2</sup> defines a saturated hydrology as a wetland with a substrate that is saturated for extended periods during the growing season, but standing water is rarely present. Wetlands with a saturated hydrology are not capable of supporting breeding by vernal pool indicator species, as they lack prolonged standing water. In order for successful breeding by vernal pool amphibians to occur, a wetland must have standing water from approximately March through June for most indicator species<sup>3</sup>. Such wetlands, referred to as seasonally flooded wetlands, provide optimal habitat for vernal pool indicator species. Additionally, while seasonally flooded conditions are optimal, permanently (or semi-permanently) flooded wetlands

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<sup>1</sup> Calhoun and Klemens (2002) argue that “indicator” species is a better word than the commonly used “obligate” species, as they will occasionally breed in roadside ditches and small ponds that are not vernal pools.

<sup>2</sup> Mitsch, W.J. and Gosselink, J.G. 2007. Wetlands, fourth edition. John Wiley and Sons, Inc.

<sup>3</sup> The indicator species marbled salamander (*Ambystoma opacum*) breeds in late-summer and fall, with larval development throughout the winter and spring.

can also provide suitable breeding habitat, particularly if they occur in a forested landscape and contain shallow water with emergent and/or submergent vegetation.

## **VERNAL POOL SURVEY**

Potential vernal pool surveys were conducted within the Project area by Davison Environmental and All-Points Technology in June and July of 2015 (as a part of another Eversource project which overlapped portions of the Project area) and again in August and September of 2016 as a part of the Project.

Wetlands considered to be potential vernal pools were identified based on the presence (primarily) of indicators of a seasonally flooded hydrology along with other physical and vegetative characteristics. Wetlands within the Project area that contain prolonged standing water (i.e., seasonally flooded or permanently flooded hydrology) were limited, and include only Wetlands 18 and 20. Wetland 20 is Ladner Pond, an 18-acre pond west of White Swan Drive. Ladner Pond is deep (>5ft maximum), and due to its size and depth it likely contains fish. The banks are predominately well-defined and steeply sloping. It contains no shallow wooded “backwater” areas with suitable hydrology and vegetation to support indicator species.

Only Wetland 18 was considered a potential vernal pool based on its hydrologic characteristics. Wetland 18 is located on the north side of Rooster Tail Hollow. It contains an historically dug pond (presumably for farming purposes) that was identified as a potential vernal pool (see Photo 1). The pond is approximately 1,000 square feet in size, is permanently flooded (based on the presence of standing water in summer), and has a defined outlet which drains to the south-southeast. The pond is fed by a spring located to the northwest. The pond's presumed depth is greater than two feet. The shoreline is dominated by a dense growth of multiflora rose (*Rosa multiflora*).

Wetland 18 was surveyed for vernal pool indicator species on May 9, 2017 under partly sunny skies and temperatures in the low to mid 50s. Vernal pool indicator species observed include wood frog (*Lithobates sylvaticus*) tadpoles and four (4) spotted salamander (*Ambystoma maculatum*) egg masses. The limits of the vernal pool (VP 18-1) are depicted on Map Sheet 8 of the Project mapping, attached separately (see Photo 2). The pool is characterized by submergent vegetation and a stony bottom under a thick layer of muck. Other species observed in this pool include larval green frog (*Rana clamitans*) and spring peeper (*Pseudacris crucifer*).

In addition to the above-referenced observations, incidental observations made of amphibians and reptiles while conducting field work within Project wetlands included pickerel frog (*Lithobates palustris*), eastern box turtle (*Terrapene c. carolina*) and green frog. Eastern box turtle is a State-listed special concern species, and as such a Special Animal Survey Form was submitted to the Connecticut Department of Energy and Environmental Protection in November 2015.

## **RECOMMENDED BEST MANAGEMENT PRACTICES**

The following measures are recommended to avoid or minimize impacts on the above-referenced vernal pool during construction:

- A. During construction, access through the vernal pool will be avoided.
- B. No new access roads shall be constructed or gravel fill deposited within the vernal pool envelope (0-100 feet).

- C. Except in areas where the work pad must be installed, existing scrub-shrub vegetation within 25 feet of the vernal pool will be maintained, consistent with ROW vegetation management requirements. If low growing (scrub-shrub) vegetation must be removed adjacent to the vernal pool, the cut vegetation (slash) will be left in place to serve as recruitment for leaf litter and coarse woody debris.
- D. If necessary, erosion and sedimentation controls will be installed and maintained along the adjacent existing access road and around the adjacent work pads as necessary to protect water quality and to limit the potential for soil deposition into the vernal pool. Erosion control measures should be designed in a manner that allows unencumbered amphibian access to the vernal pool. Such measures may include, but not be limited to; syncopated silt fencing and/or straw wattles, and aligning erosion and sedimentation controls to avoid bifurcating vernal pool habitat.
- E. Plastic netting, which may be found in a variety of erosion control products (e.g., erosion control blankets, straw wattles, and reinforced silt fence), will not be used. Erosion and sedimentation control devices will be promptly removed upon final revegetation and stabilization of the ROW.

Sincerely,  
Davison Environmental, LLC



Matthew Davison  
*Professional Soil Scientist*  
*Professional Wetland Scientist*

Attachment:

Photographs of Vernal Pool 18-1



Photo 1: View of Wetland 18 / Vernal Pool 18-1 (August 2016) as seen during initial potential vernal pool surveys in the summer of 2016. This resource area is a historic farm pond within the maintained ROW.



Photo 2: View of Wetland 18 / Vernal Pool 18-1, as seen during the vernal pool survey conducted on May 9, 2017.



## ATTACHMENT E





## **INTEGRATED HISTORIC PRESERVATION PLANNING**

March 1, 2016

Matthew Davison  
Senior Environmental Scientist  
Tighe & Bond  
213 Court Street, Suite 1100  
Middletown, Connecticut 06457

**RE: Preliminary Archeological Assessment of the Cricket Valley Interconnection Project (Line 398/1555), New Milford, Connecticut**

Mr. Davison:

Heritage Consultants, LLC, is pleased to have this opportunity to provide Tighe & Bond, in support of Eversource Energy, with the following preliminary archeological assessment of the Cricket Valley Interconnection Project. This project includes portions of Line 398/1555 where it extends from the east bank of the Housatonic River in New Milford, Connecticut to the Connecticut-New York border (Figure 1). The current project entailed completion of an existing conditions cultural resources summary based on the examination of GIS data obtained from the Connecticut State Historic Preservation Office, as well as historic maps, aerial photographs, and topographic quadrangles maintained by Heritage Consultants, LLC. This investigation is based upon project location information provided to Heritage Consultants, LLC by Tighe & Bond and Eversource Energy. The objectives of this study were: 1) to gather and present data regarding previously identified cultural resources situated within the vicinity of Line 398/1555; 2) to investigate the proposed project corridor in terms of its natural and historical characteristics; and 3) to evaluate the need for completing additional cultural resources investigations. At this time, no field investigation of the Line 398/1555 corridor has been conducted.

Environmental characteristics frequently are used to predict the location of archeological sites. Typically distance to water, slope, and soil types are included as part of these predictive models. Favorable conditions are characterized by gently sloping, well-drained soils in close proximity to fresh water. While sections of the extant corridor are comprised of these favorable conditions and have been characterized as retaining a high potential to produce intact cultural deposits, large portions of it have also been substantially impacted by modern development or contain steep slopes and/or are located at significant distances from fresh water sources. These latter areas were designated as having a low probability for containing archeological resources as they represent areas that have been substantially disturbed, steeply sloping and/or were not amenable to prehistoric or historic period occupations.

A review of previously recorded cultural resources on file with the Connecticut State Historic Preservation Office was completed in February of 2016 (Figures 2; Sheets 1 through 10 and Figure 3; Sheets 1 through 10). Figure 2; Sheets 1 through 10 depicts the distribution of previously identified archaeological sites in the region containing Line 398/1555. As the map sheets show, 31 historic and 5 prehistoric sites have been documented in the project region, indicating that both prehistoric and historic occupations existed nearby. These occupations range from small prehistoric camps to larger historic era

farmsteads. One of these sites (96-30) is recorded partially within the right-of-way corridor in the vicinity of Structure 569. Site 96-30 was documented in 1979 by Dr. Fred Warner. The site was described as an Archaic/Woodland period camp. Artifacts recovered from the ground surface within the site area included a quartz small stemmed projectile point, a quartz knife, and an unspecified amount of quartz stone tool chipping debris. According to the submitted site form, Site 96-30 represented a limited activity occupation that may have been related to hunting activities. The site was not assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]), and no recommendation concerning testing of the site area were made on the submitted site form. Site 96-30 appears to be located on the opposite side of South Kent Road from Structure 569. It will likely not be impacted by the proposed project; however, it does indicate that other prehistoric sites maybe situated in this area.

In addition, the review of previously recorded cultural resources on file with the Connecticut State Historic Preservation Office resulted in the identification of a single National Register of Historic Places property (Merwinsville Hotel) in close proximity to Line 398/1555. The Merwinsville Hotel is a late Greek Revival railroad station-hotel that was built by Sylvanus Merwin, a prominent local resident who purchased the land when he found out that the railroad was scheduled to come through the area. The timber-framed structure has a three-story main block with gable roof and twin two-story end wings with shed roofs. The seven-bay wide main block is rectangular in plan and was originally surrounded by a two-story open porch when it was erected in 1823. Just prior to the Civil War, ca., 1860, the side sections of the porch were removed and replaced by the existing wings, which now extend eastward to the location of the east edge of the original porch. The Merwinsville Hotel may be the oldest surviving railroad station-hotel in the country. It is a fine example of this type of railroad building that was popular before cross country sleeping and dining cars came into general use. The railroad station aspect of the hotel remained in use until 1915, after which the building became a private residence. The Merwinsville Hotel is considered significant for its architectural aspect and its role in transportation. According to current construction plans, Eversource Energy will increase the height of three structures in the vicinity of the hotel. These include: Structure 567, which will increase by 6 ft; Structure 566, which will increase by 19 ft; and Structure 565 which will increase by 24 ft. A review of Figure 3; Sheet 6 shows that the Merwinsville Hotel is situated at a significantly lower elevation than that of the proposed project corridor. In addition, this property is heavily screened by very tall trees and significant slopes. As a result, it is the opinion of Heritage Consultants, LLC that the increase in the heights of Structures 565 through 567 will not introduce any significant visual disturbances into the viewshed of the Merwinsville Hotel property.

A review of historic and topographic maps also revealed that a single historic cemetery is located partially within the project corridor (Figure 2; Sheet 6). This area is known as the Long Mountain Cemetery and it is the resting place for over 100 New Milford residents who passed away during the early to late nineteenth century. The cemetery is not recorded as an archaeological site with the State Historic Preservation Office, nor is it considered a National Register of Historic Places property. It is simply noted here as an area to be aware of during construction.

A review of environmental characteristics, historic maps, modern aerial photographs, and previously recorded cultural resources was used to stratify the extant corridor into areas that possess a low or high probability for containing intact subsurface deposits. The corresponding maps are attached to this review (Figure 4; Sheets 1 through 6). As Figure 4, Sheets 1 through 6 depict, approximately 30 percent of the Line 398/1555 corridor is perceived as possessing a high potential for containing intact archeological deposits. It is the professional opinion of Heritage Consultants, LLC that ground disturbance in these areas should be avoided; if ground disturbance cannot be avoided as part of the project, then matting of the high sensitivity areas is recommended during construction. If this is not feasible, the Phase IB

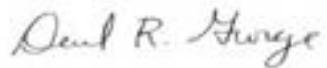
Mr. Davison  
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Cultural Resources Reconnaissance Survey of the high sensitivity areas should be conducted prior to construction. No additional examination of the low sensitivity areas is recommended.

In addition, the increase in heights of Structures 565 through 567 will not impact the viewshed of the Merwinsville Hotel; therefore, no additional architectural recordation is required in this area. Finally, the ground along the portion of Line 398/1555 encompassing the Long Mountain Cemetery, as well as 50 m (164 ft) to all sides of the cemetery should be completely avoided. If work is required in this area, then consultation with the State Historic Preservation Office and the Office of State Archaeology will be required to determine best practices for work to ensure that the cemetery, or any possible burials outside of its walls, are protected in place.

If you have any questions regarding this Technical Memorandum, or if we may be of additional assistance with this or any other projects you may have, please do not hesitate to call us at 860-667-3001 or email us [info@heritage-consultants.com](mailto:info@heritage-consultants.com). We are at your service.

Sincerely,



David R. George, M.A., R.P.A.  
Heritage Consultants, LLC

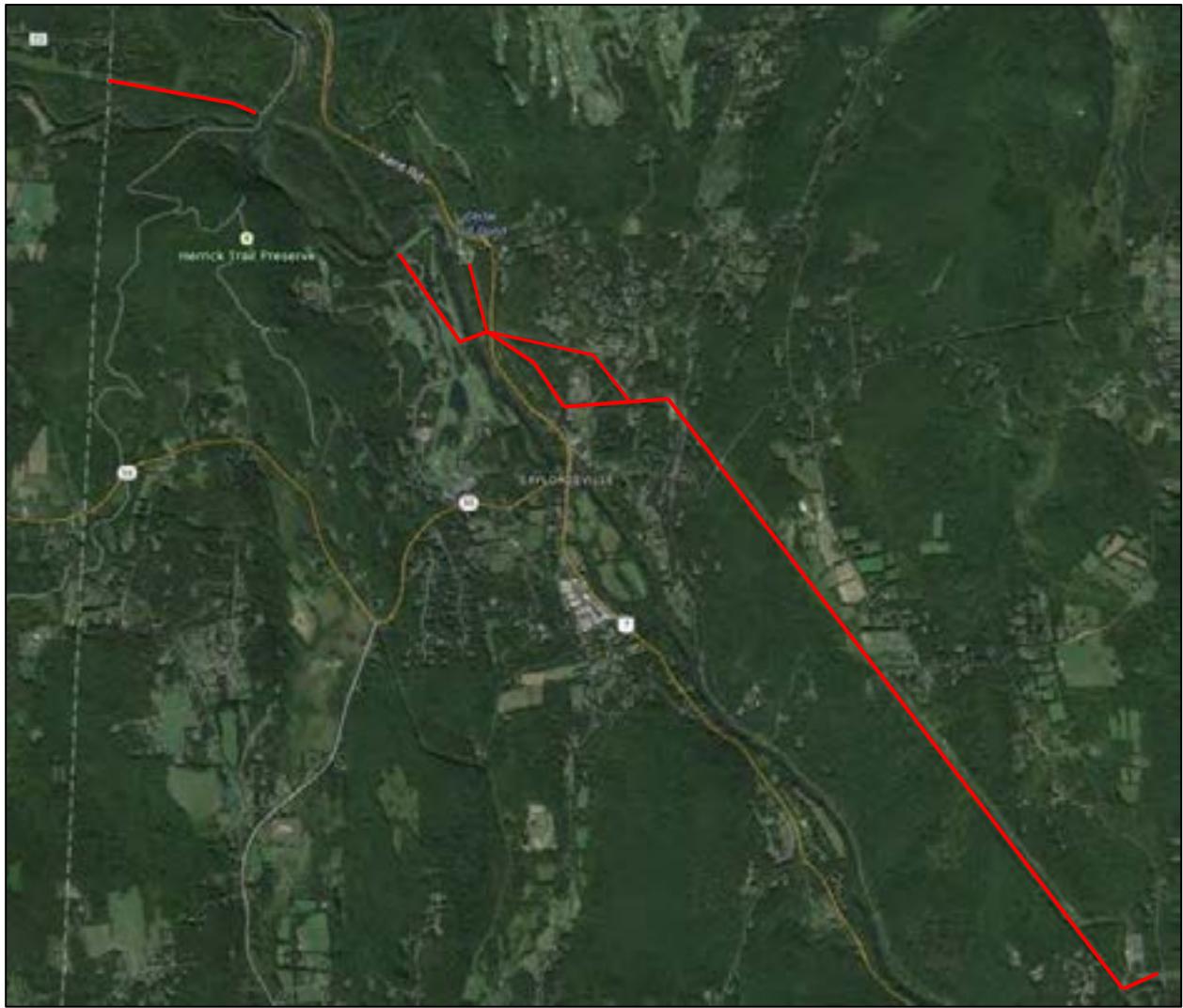


Figure 1. Approximate route of Line 1555-398 from the Long Mountain Substation in New Milford, Connecticut to the Connecticut-New York Border.

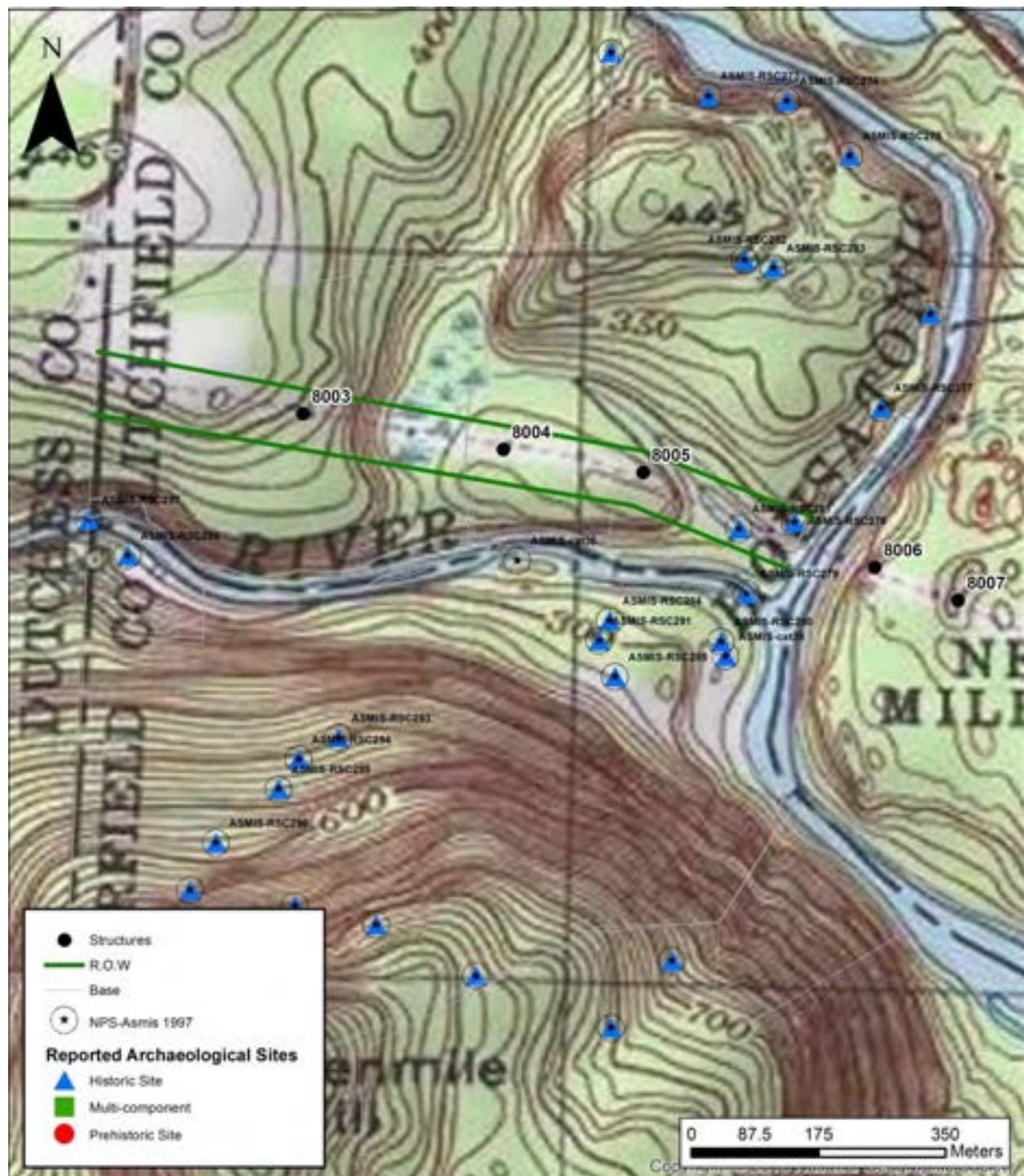


Figure 2; Sheet 1. Distribution of archaeological sites around and within Line 398/1555.

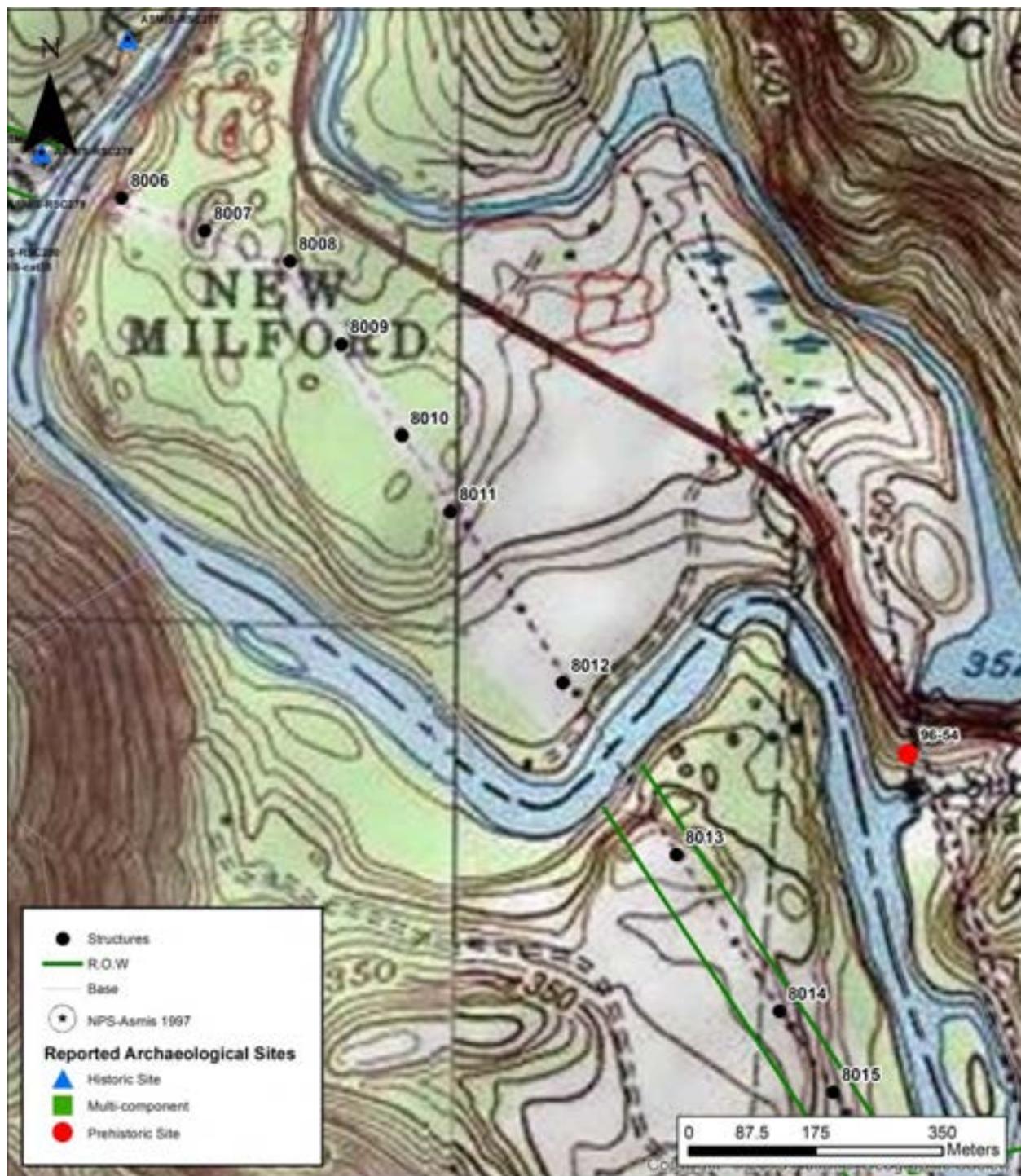


Figure 2; Sheet 2. Distribution of archaeological sites around and within Line 398/1555.

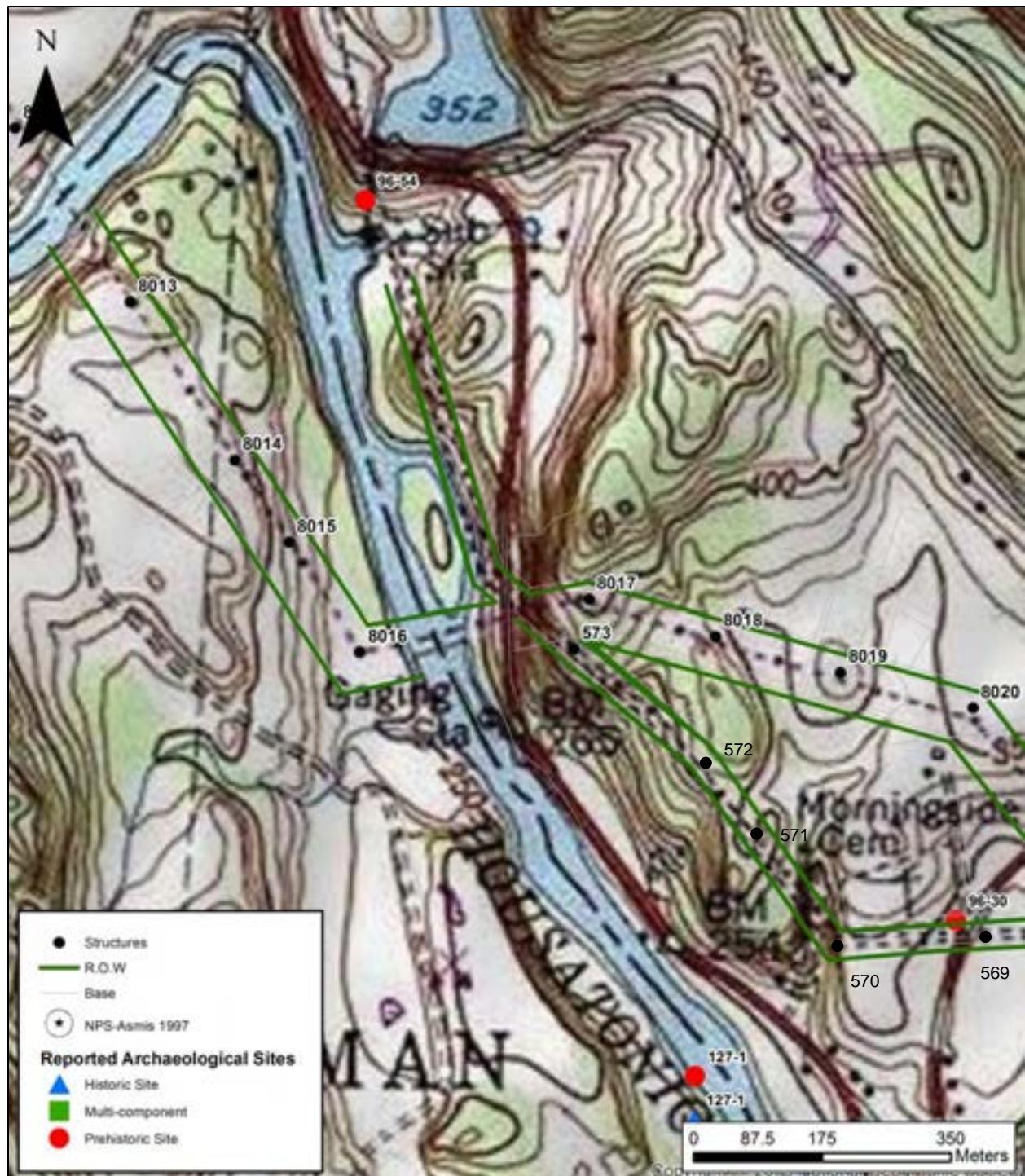


Figure 2; Sheet 3. Distribution of archaeological sites around and within Line 398/1555.



Figure 2; Sheet 4.

Distribution of archaeological sites around and within Line 398/1555.

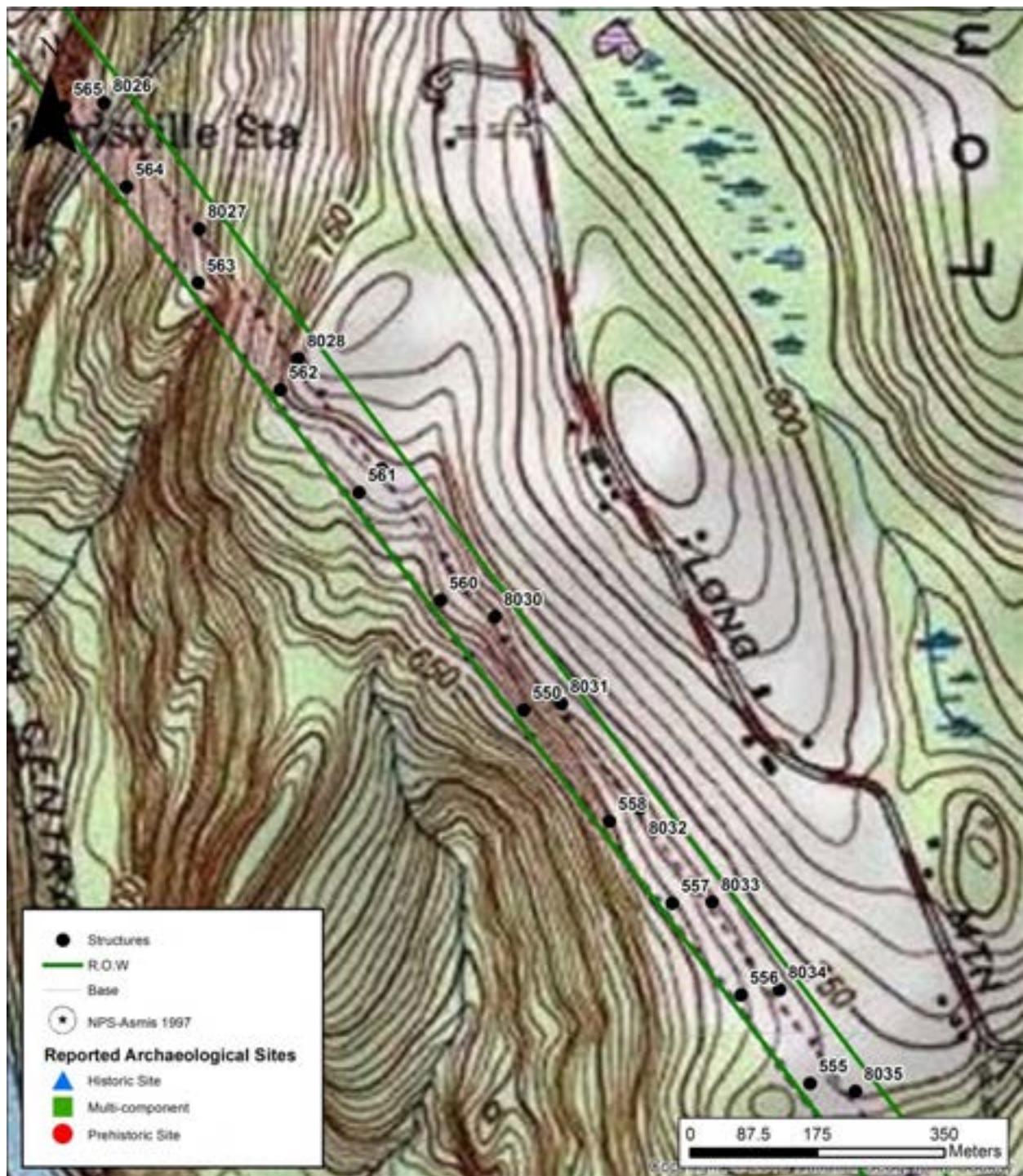


Figure 2; Sheet 5. Distribution of archaeological sites around and within Line 398/1555.

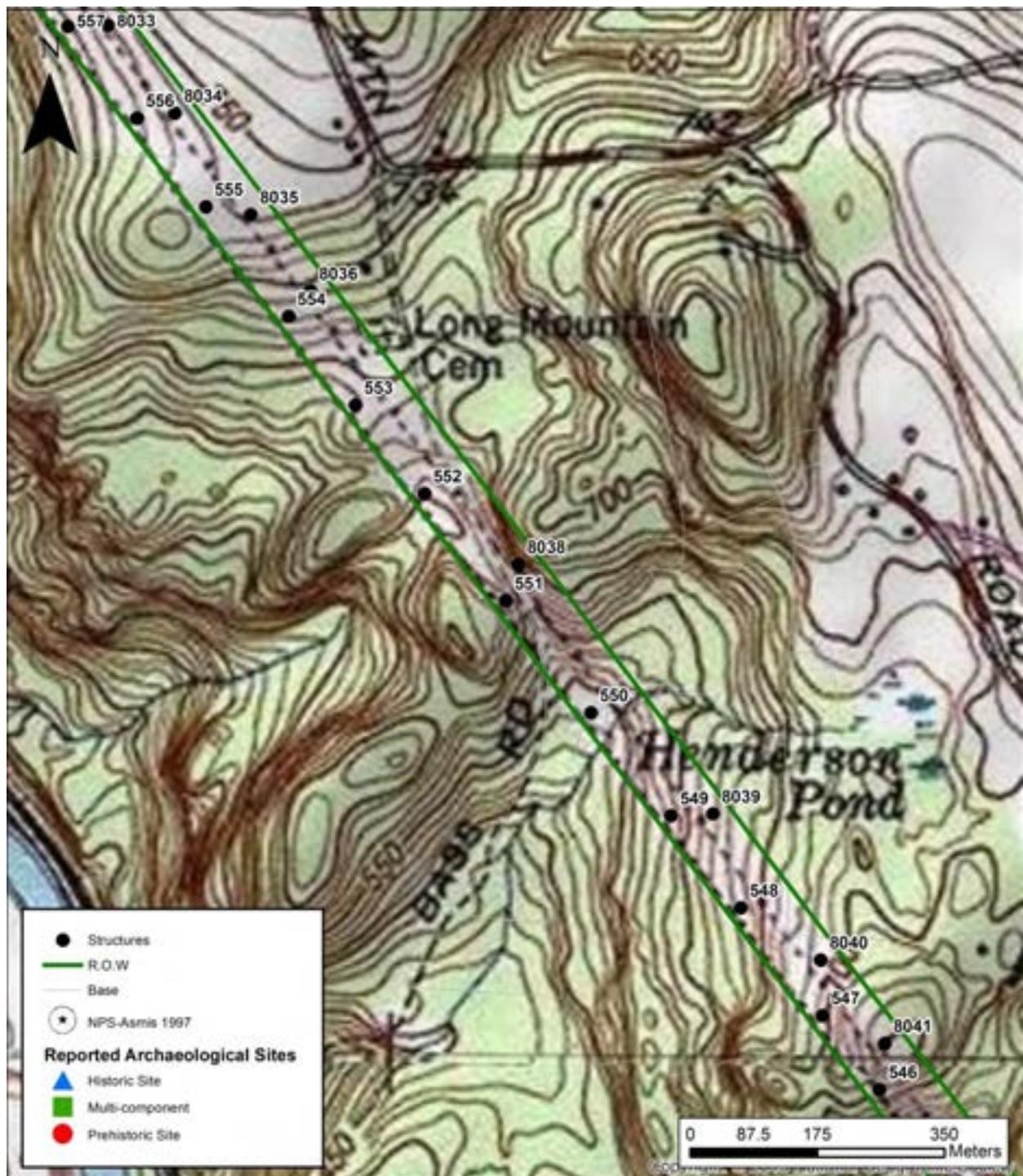


Figure 2; Sheet 6. Distribution of archaeological sites around and within Line 398/1555.

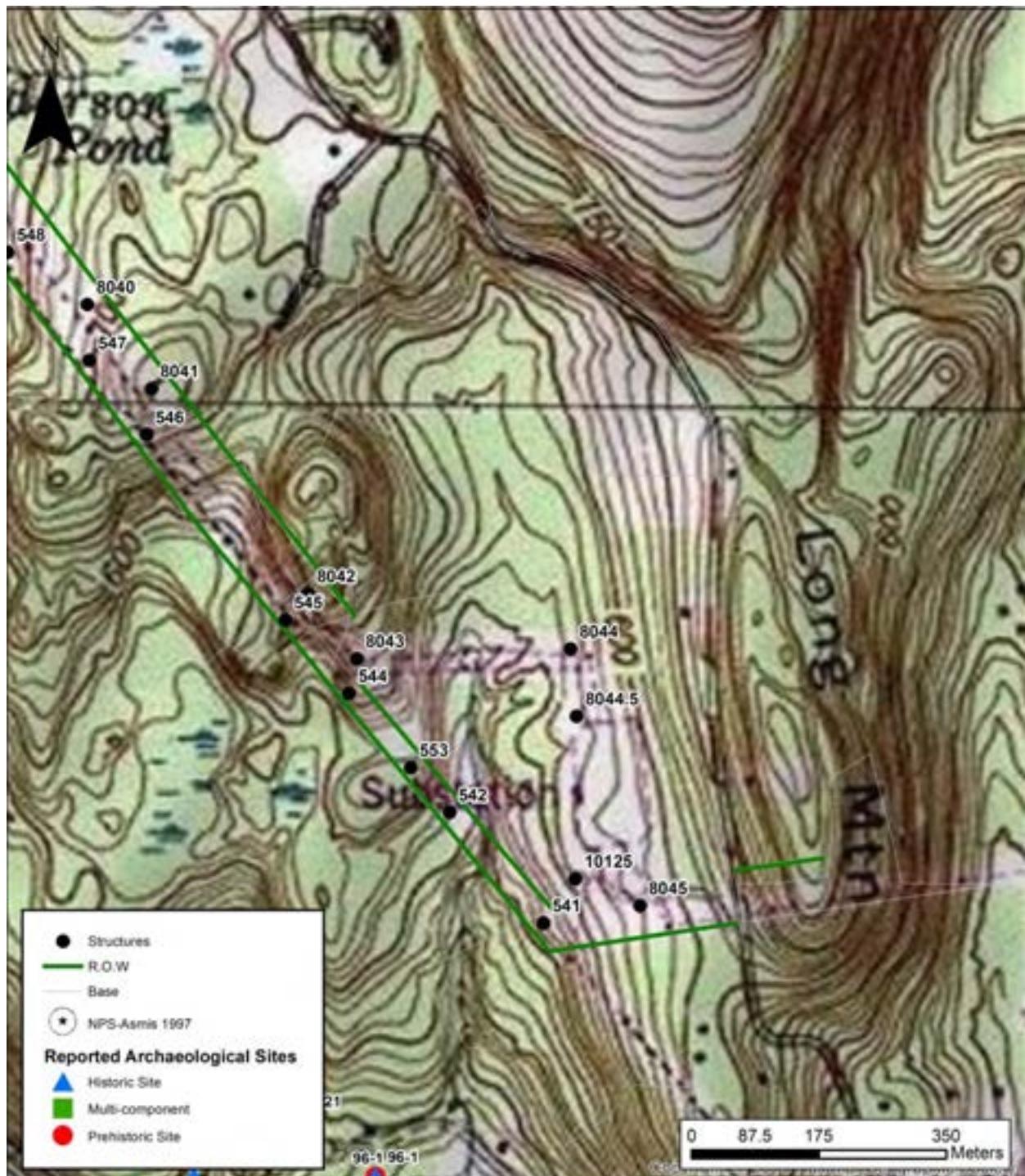


Figure 2; Sheet 7. Distribution of archaeological sites around and within Line 398/1555.



Figure 2; Sheet 8. Distribution of archaeological sites around and within Line 398/1555.



Figure 2; Sheet 9.

Distribution of archaeological sites around and within Line 398/1555.

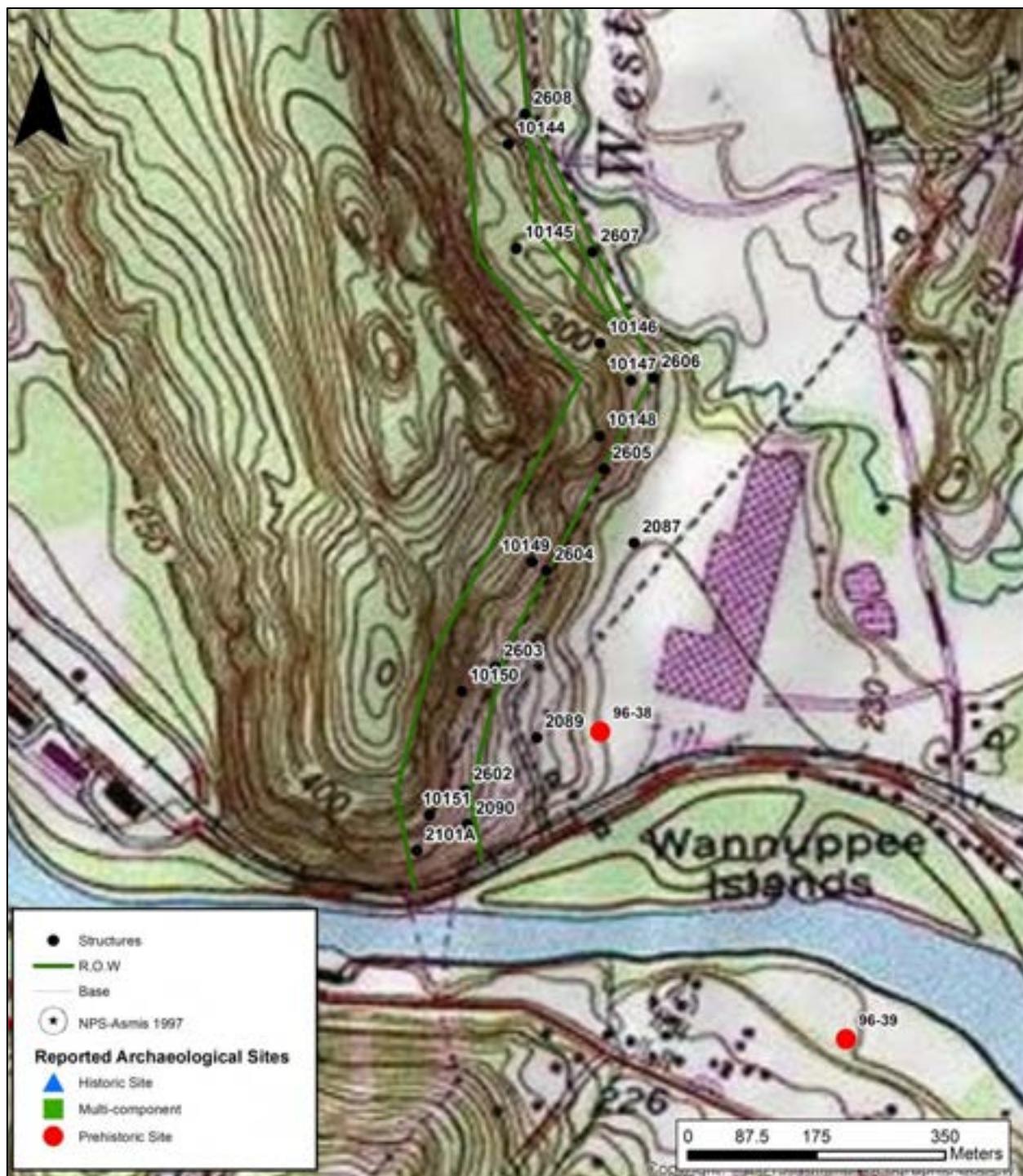


Figure 2; Sheet 10. Distribution of archaeological sites around and within Line 398/1555.

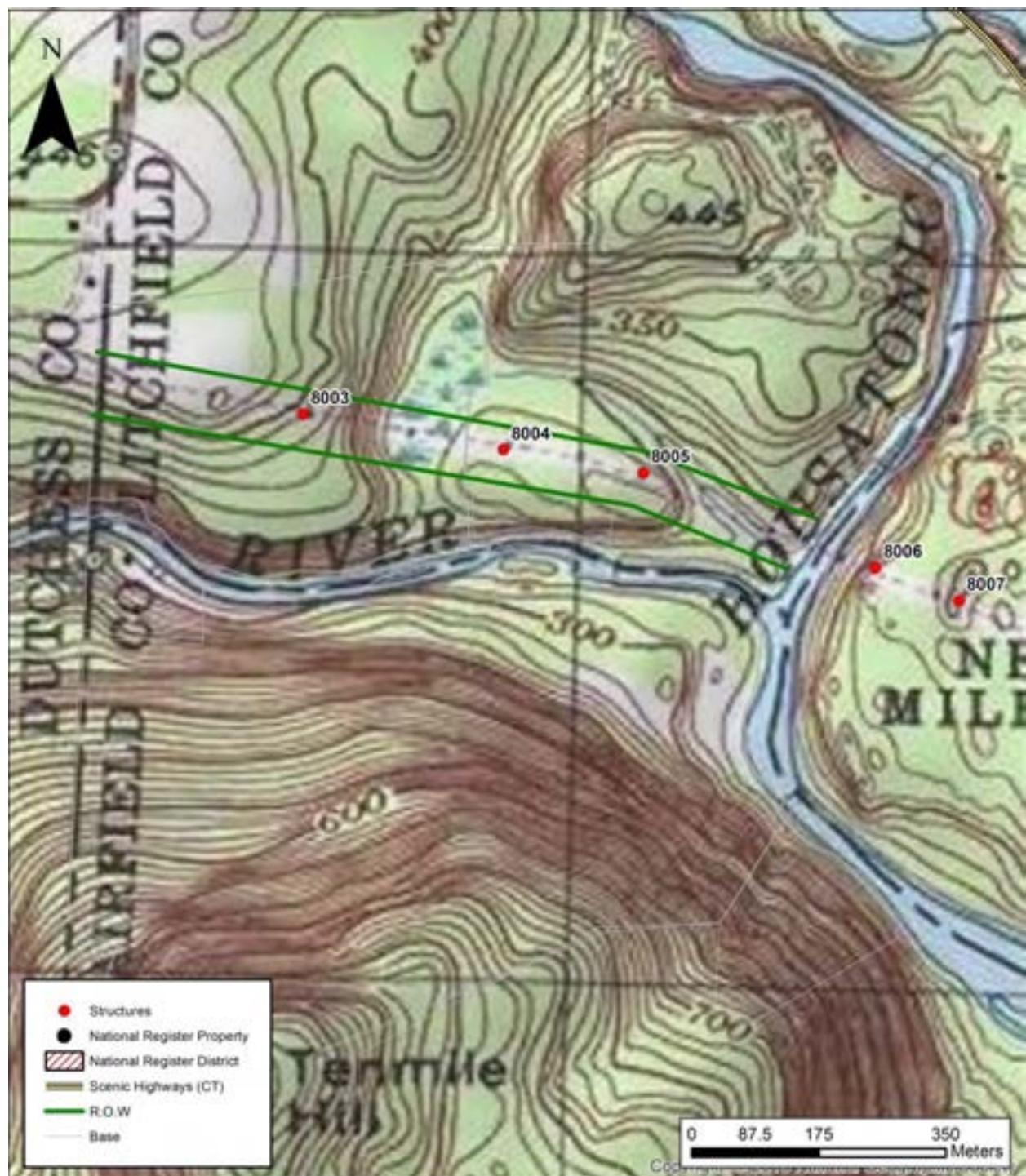


Figure 3; Sheet 1. Distribution of National Register of Historic Places properties around and within Line 398/1555.

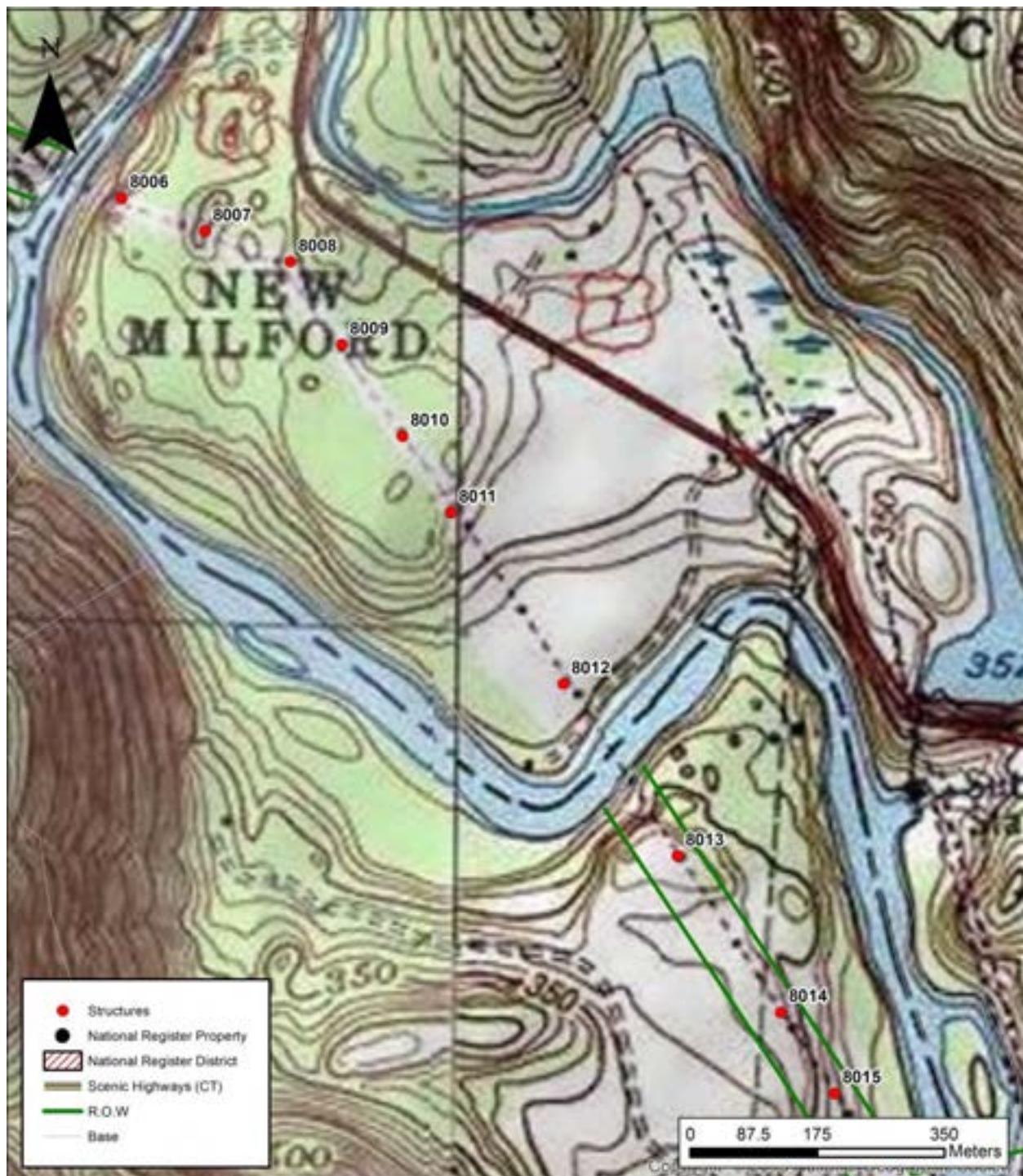


Figure 3; Sheet 2. Distribution of National Register of Historic Places properties around and within Line 398/1555.

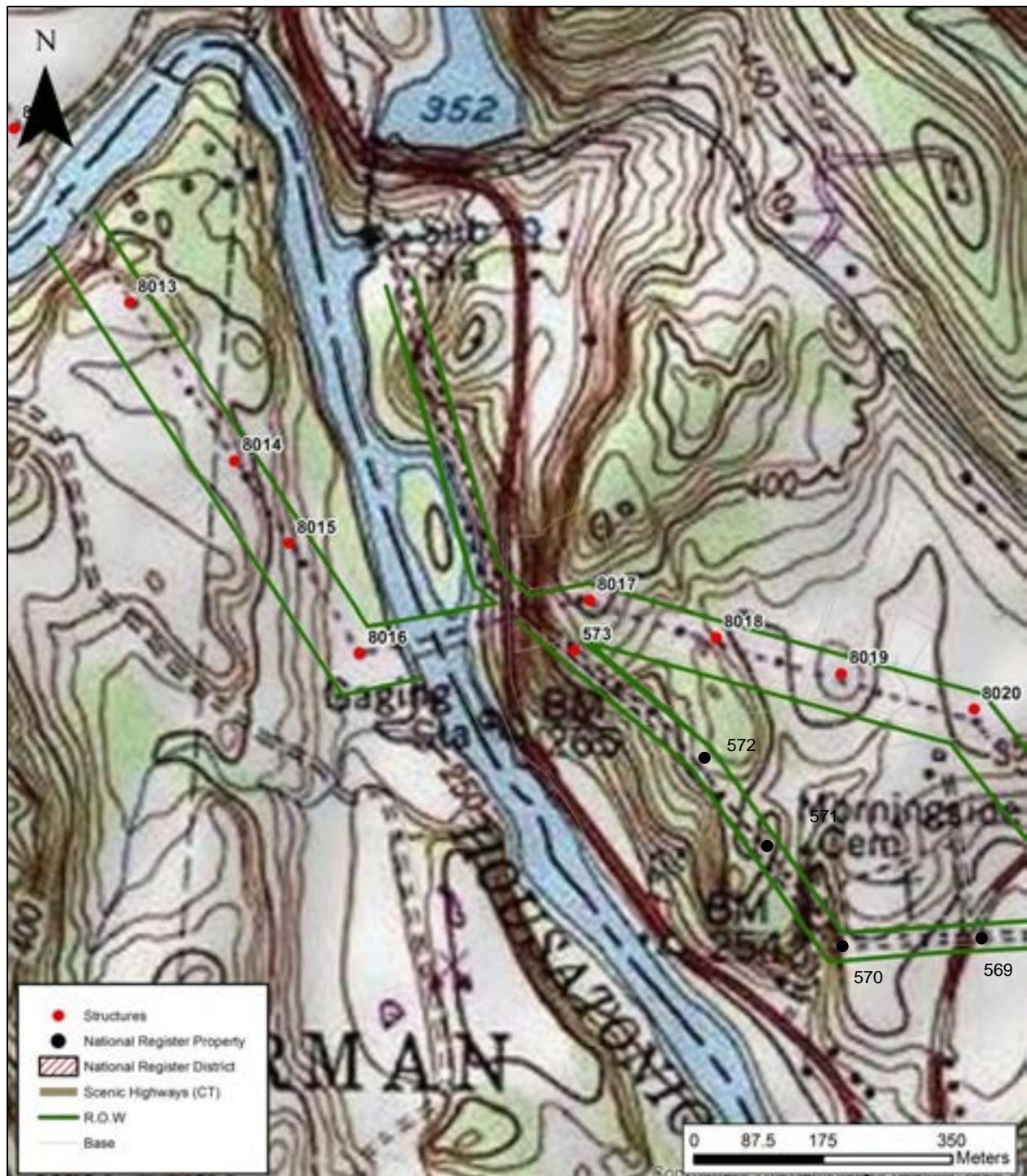


Figure 3; Sheet 3. Distribution of National Register of Historic Places properties around and within Line 398/1555.

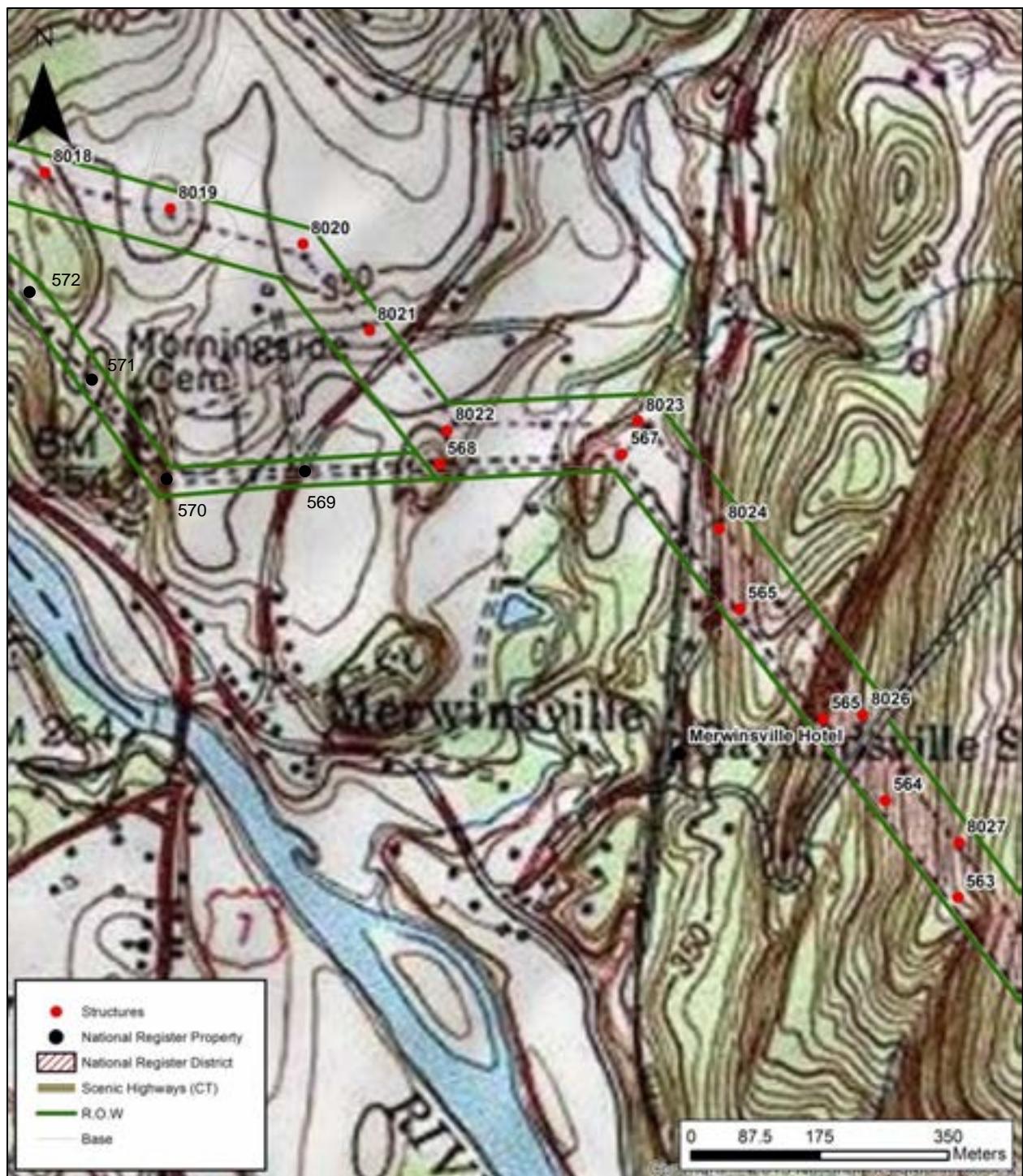


Figure 3; Sheet 4. Distribution of National Register of Historic Places properties around and within Line 398/1555.

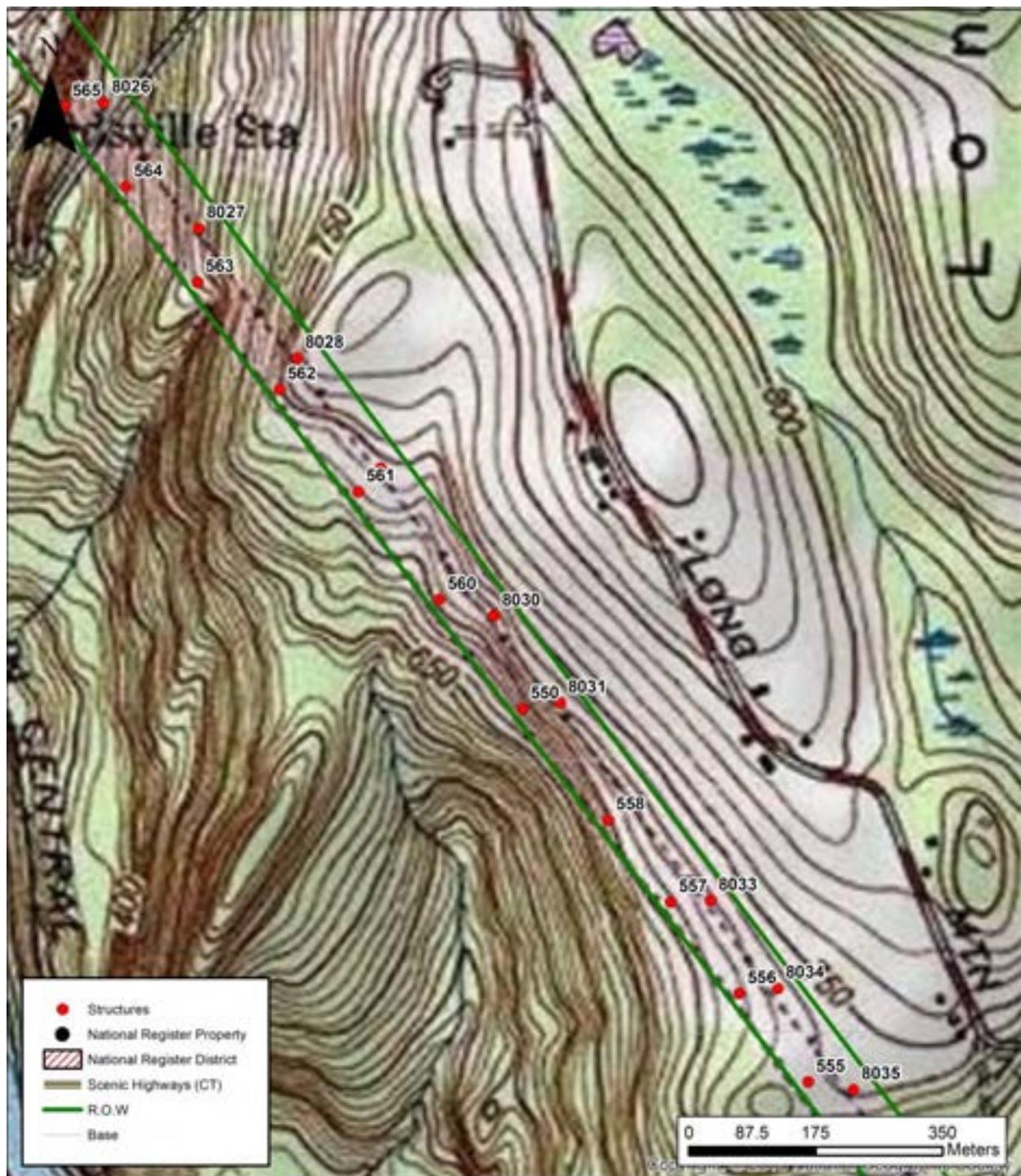


Figure 3; Sheet 5. Distribution of National Register of Historic Places properties around and within Line 398/1555.

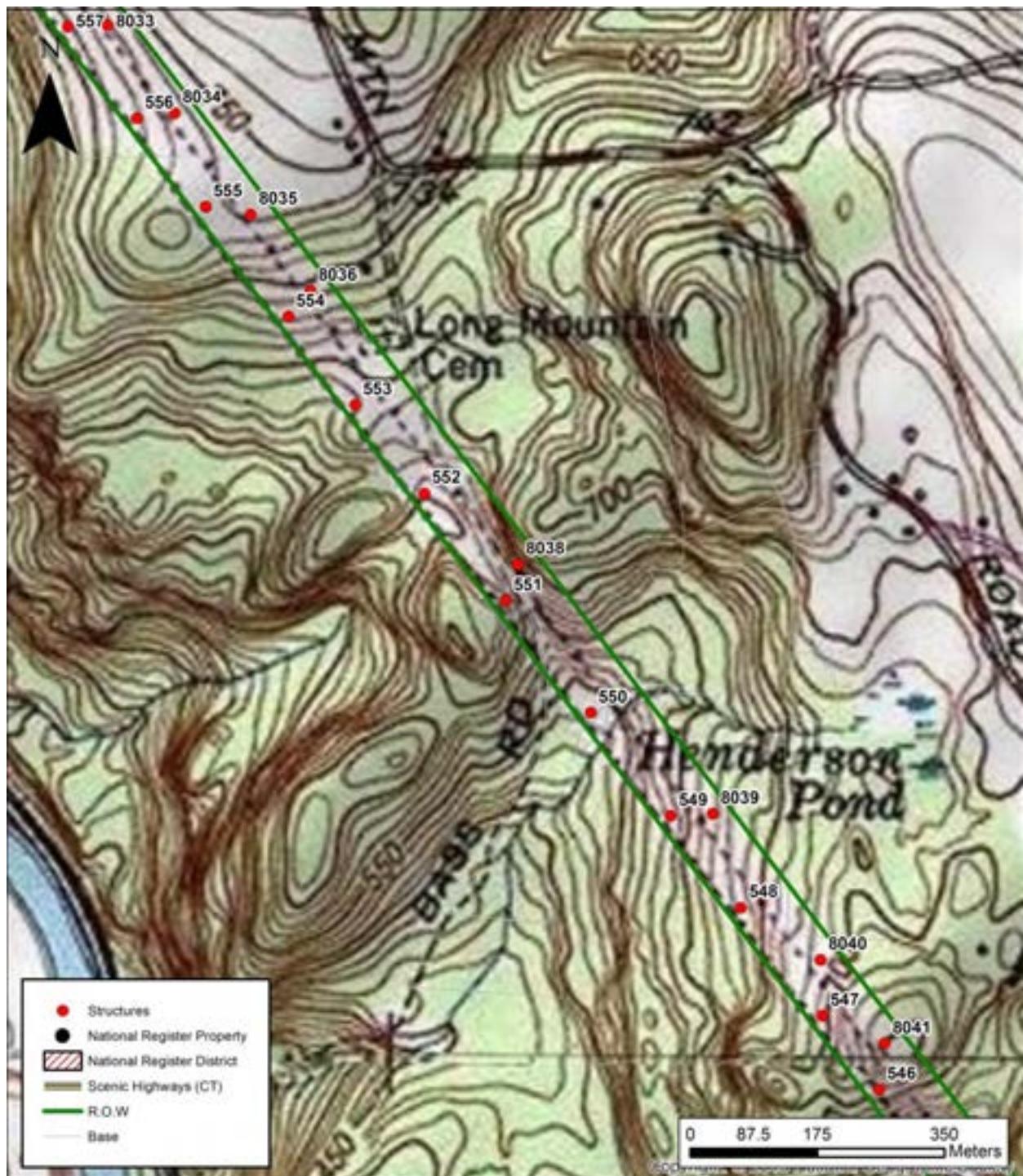


Figure 3; Sheet 6. Distribution of National Register of Historic Places properties around and within Line 398/1555.

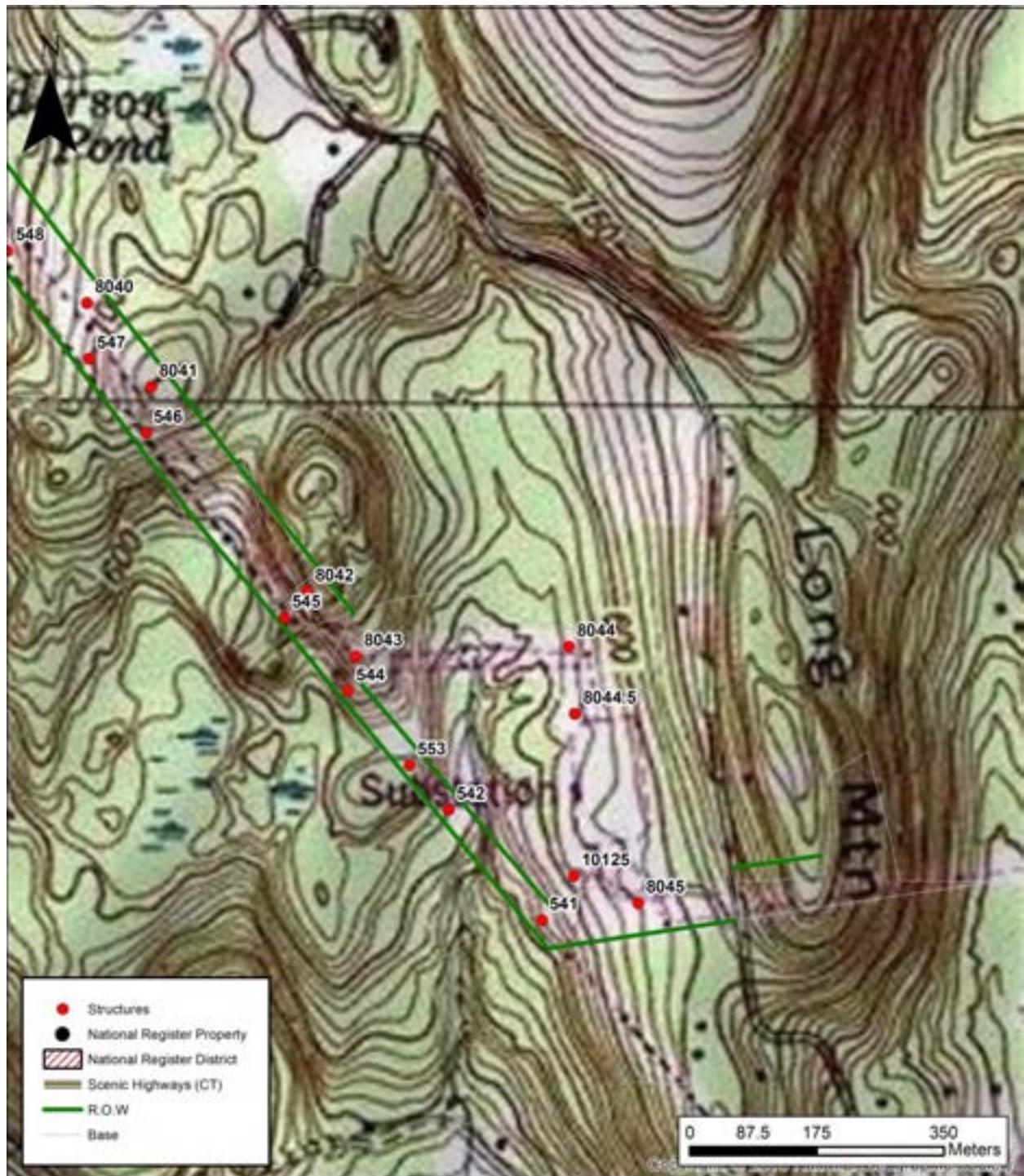


Figure 3; Sheet 7. Distribution of National Register of Historic Places properties around and within Line 398/1555.

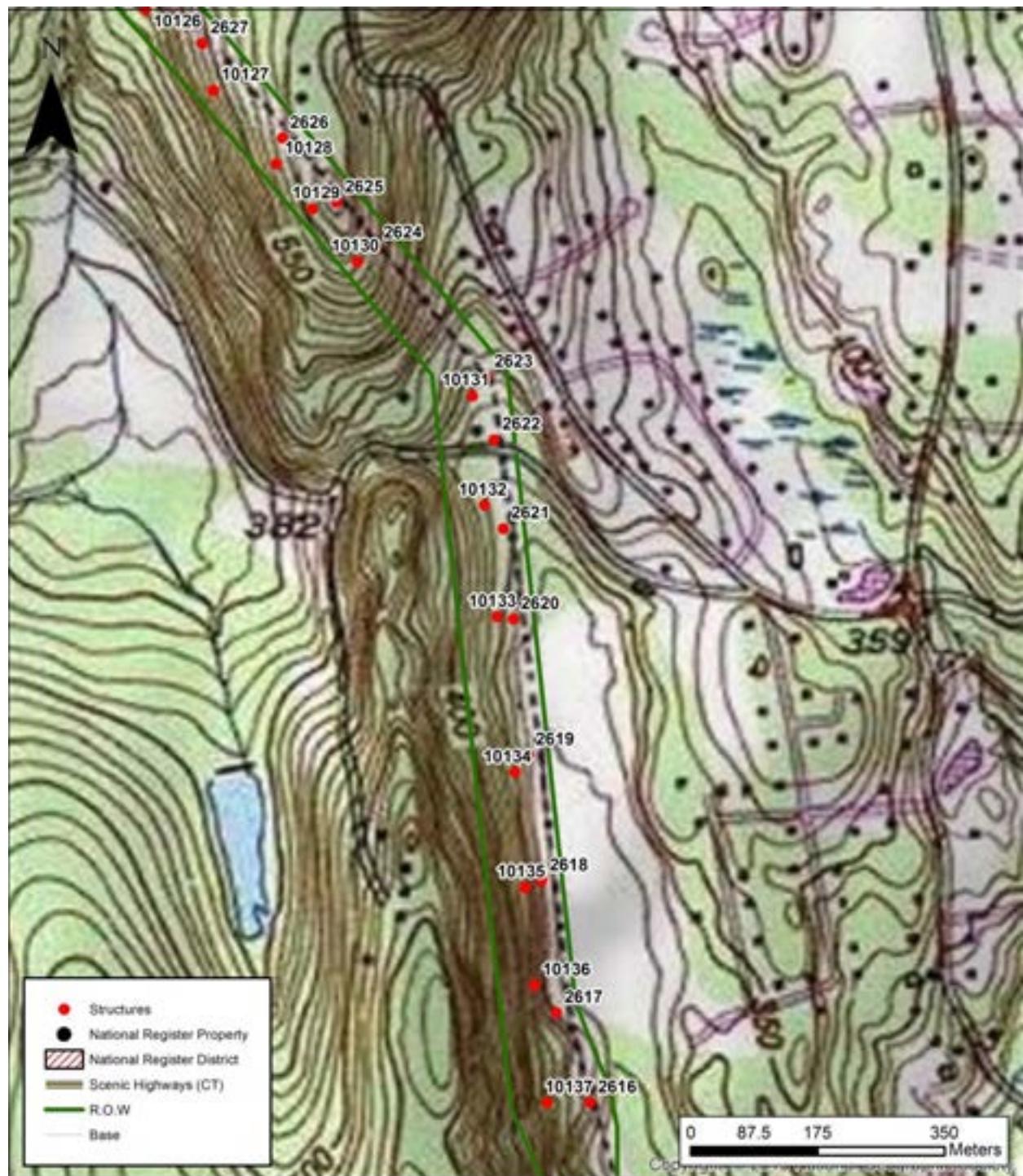


Figure 3; Sheet 8. Distribution of National Register of Historic Places properties around and within Line 398/1555.



Figure 3; Sheet 9. Distribution of National Register of Historic Places properties around and within Line 398/1555.

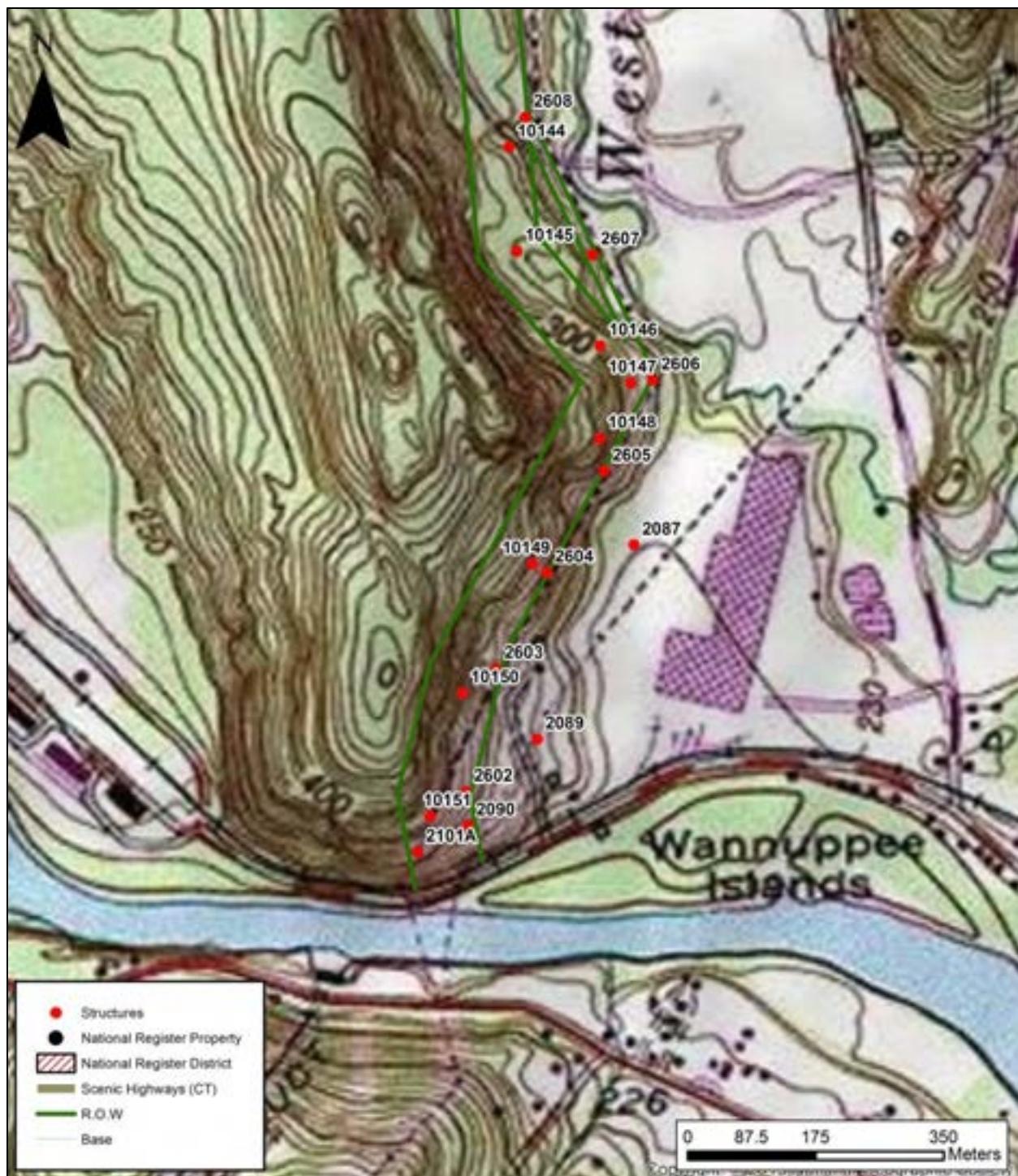


Figure 3; Sheet 10. Distribution of National Register of Historic Places properties around and within Line 398/1555.

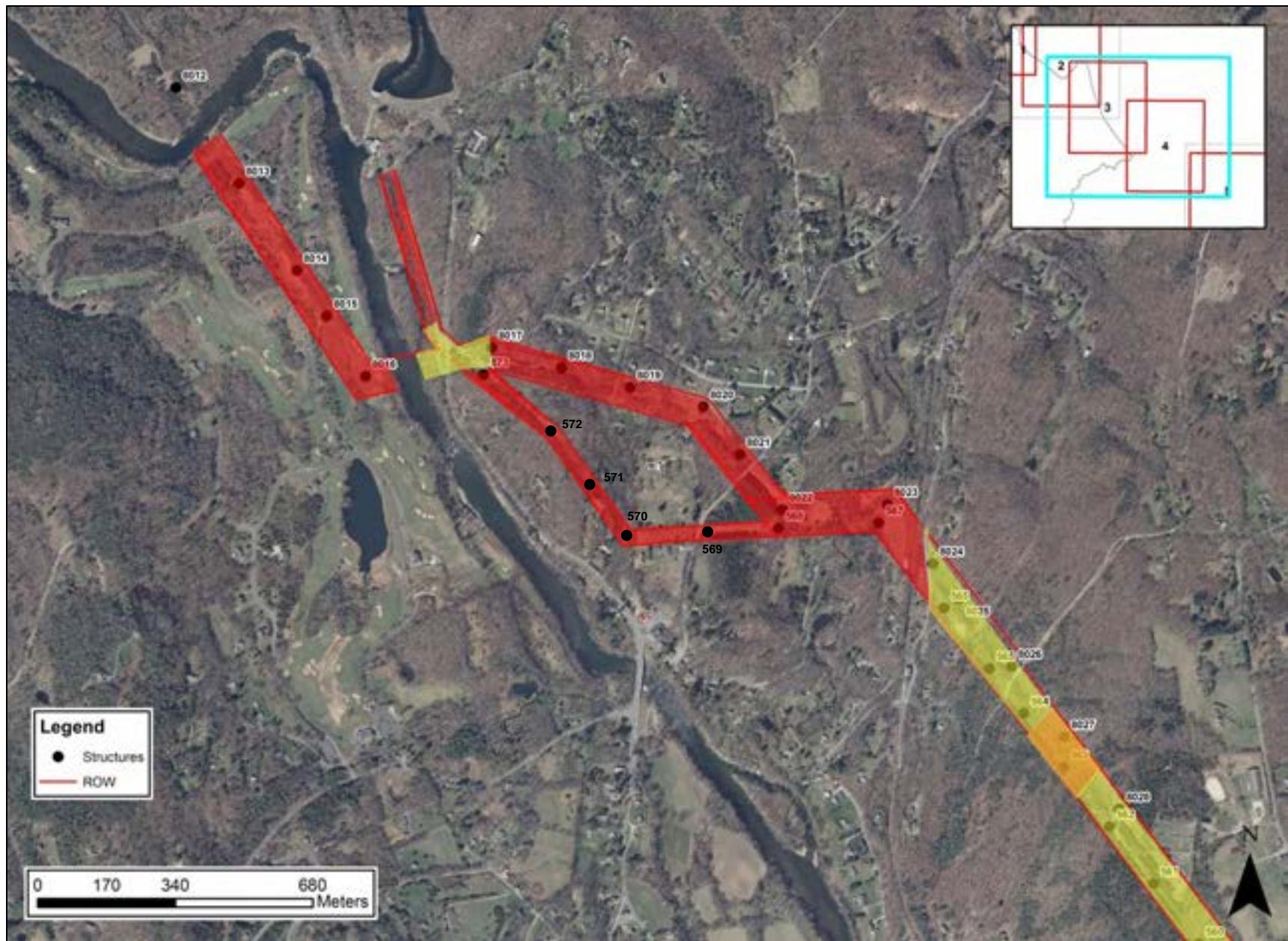


Figure 4; Sheet 1. Distribution of low and high archaeological sensitivities along Line 398 (note red = high sensitivity and yellow = low sensitivity).

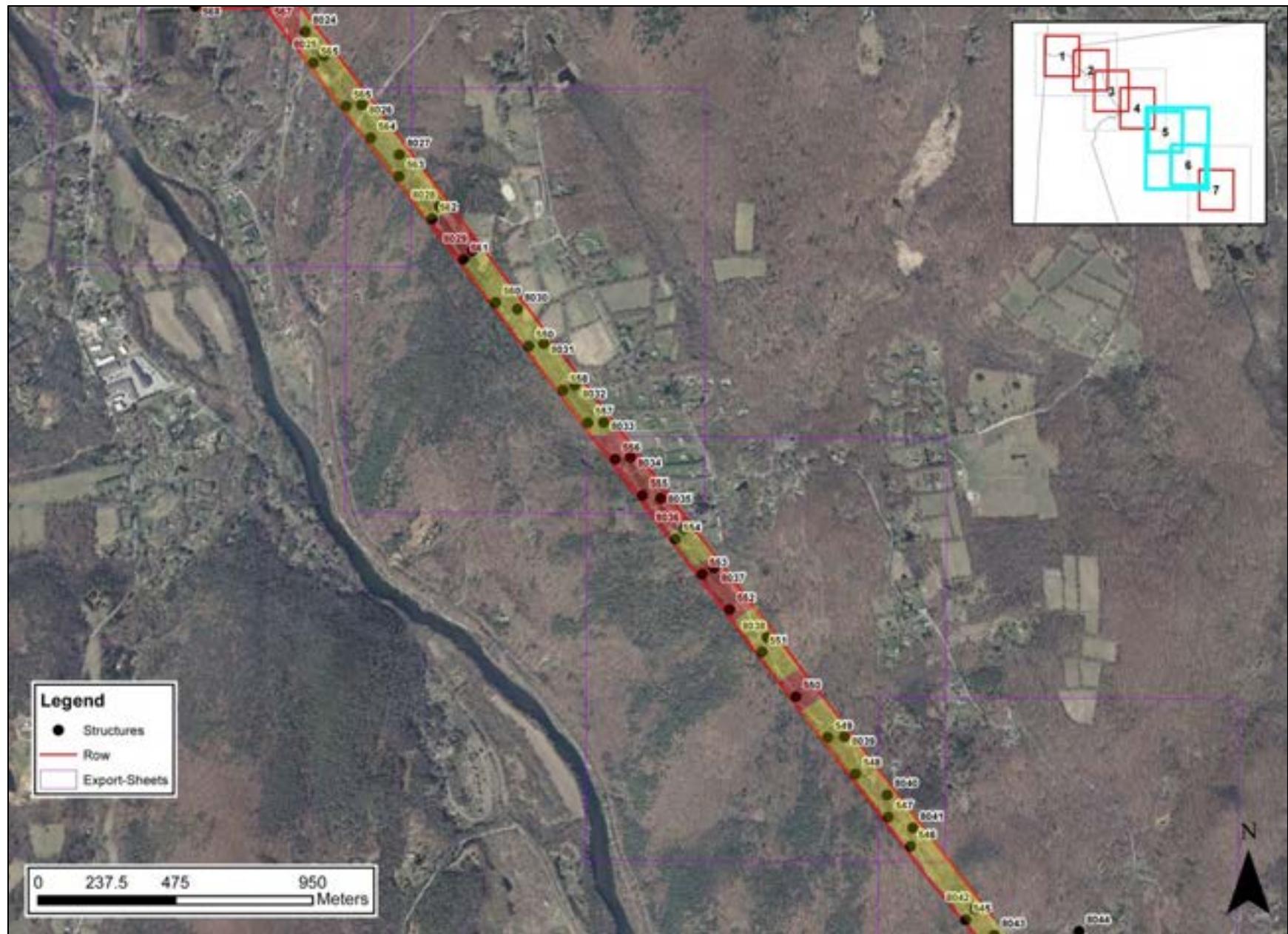
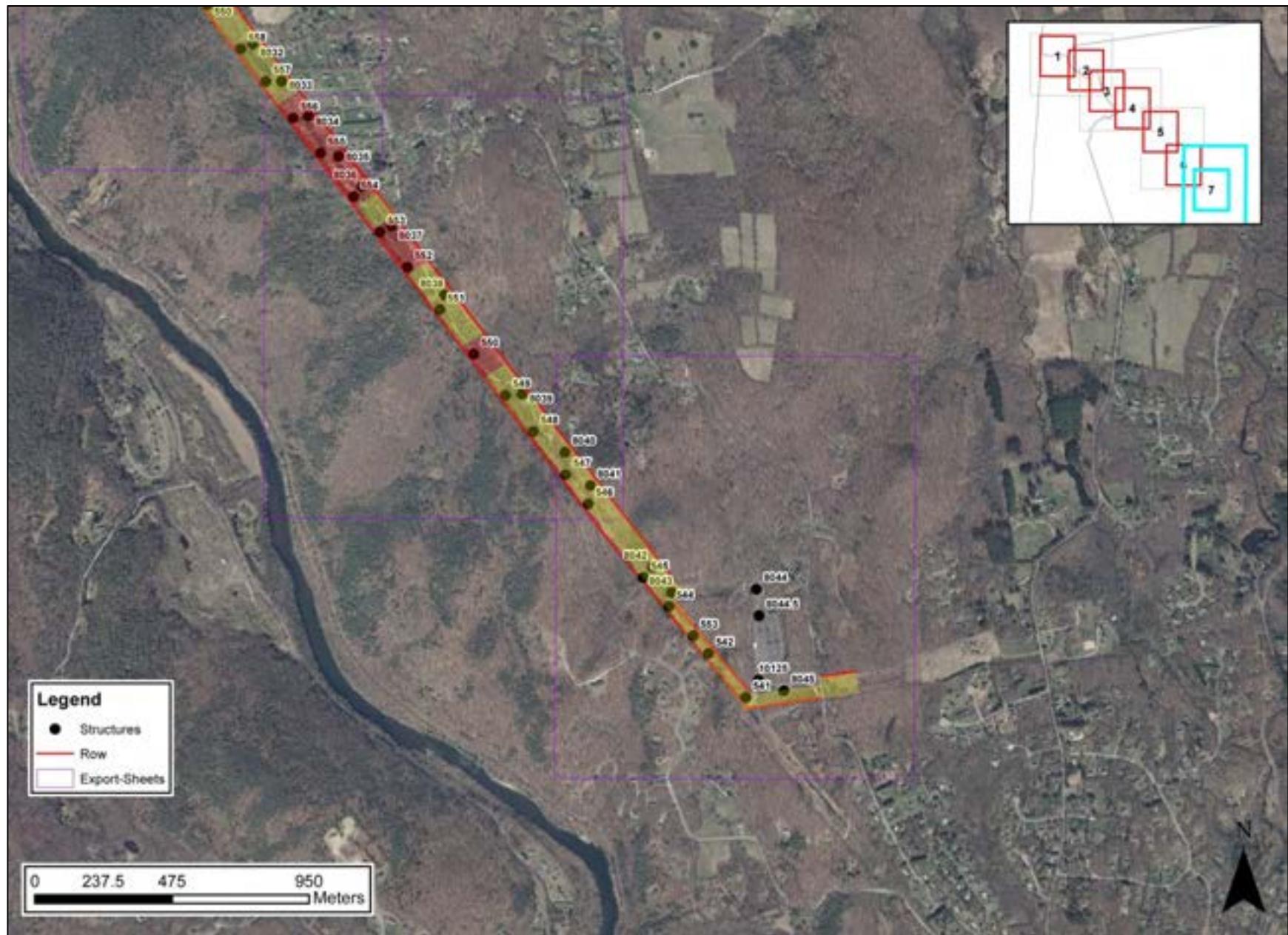


Figure 4; Sheet 2.

Distribution of low and high archaeological sensitivities along Line 398 (note red = high sensitivity and yellow = low sensitivity).



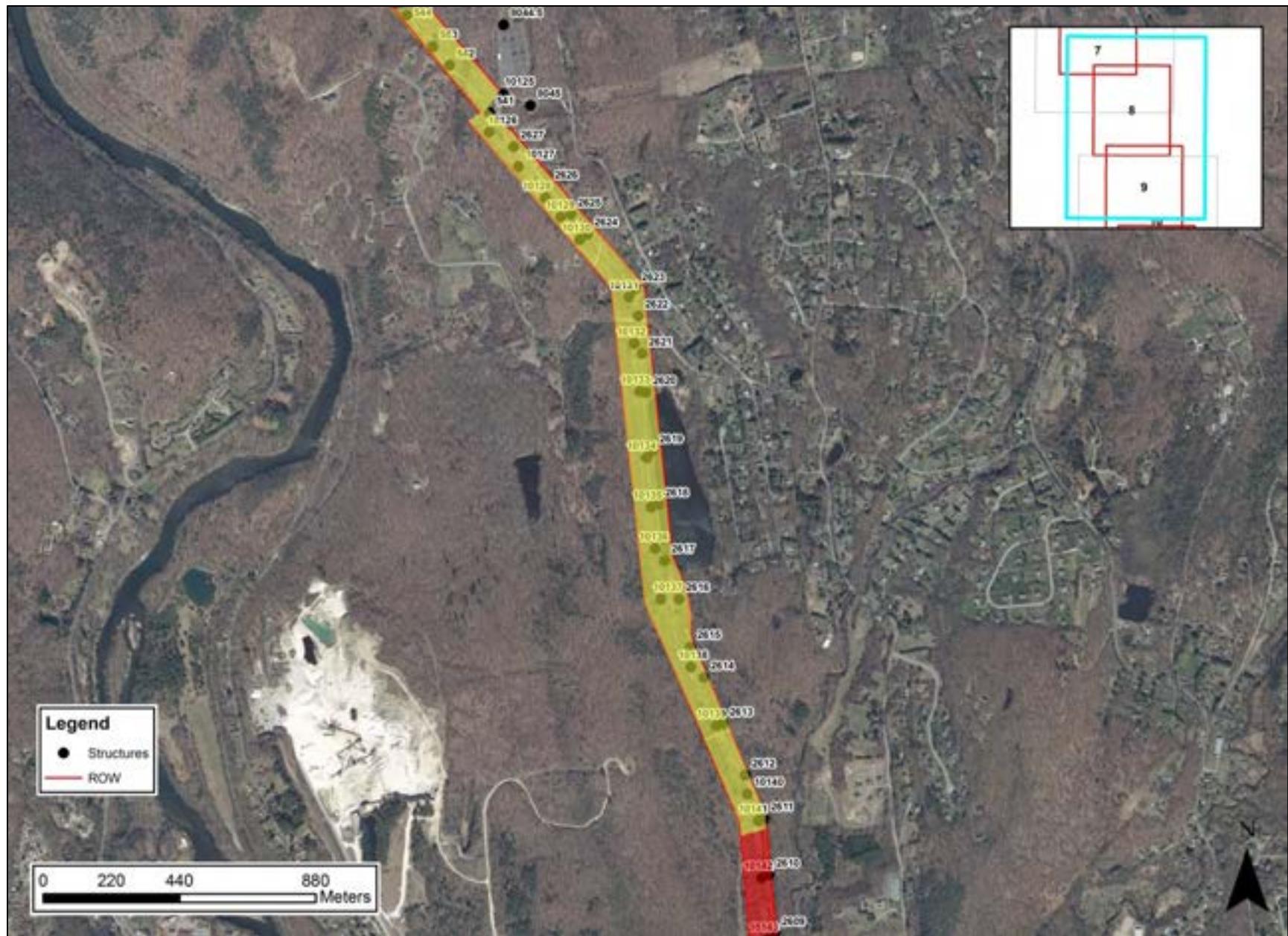


Figure 4; Sheet 4. Distribution of low and high archaeological sensitivities along Line 398 (note red = high sensitivity and yellow = low sensitivity).

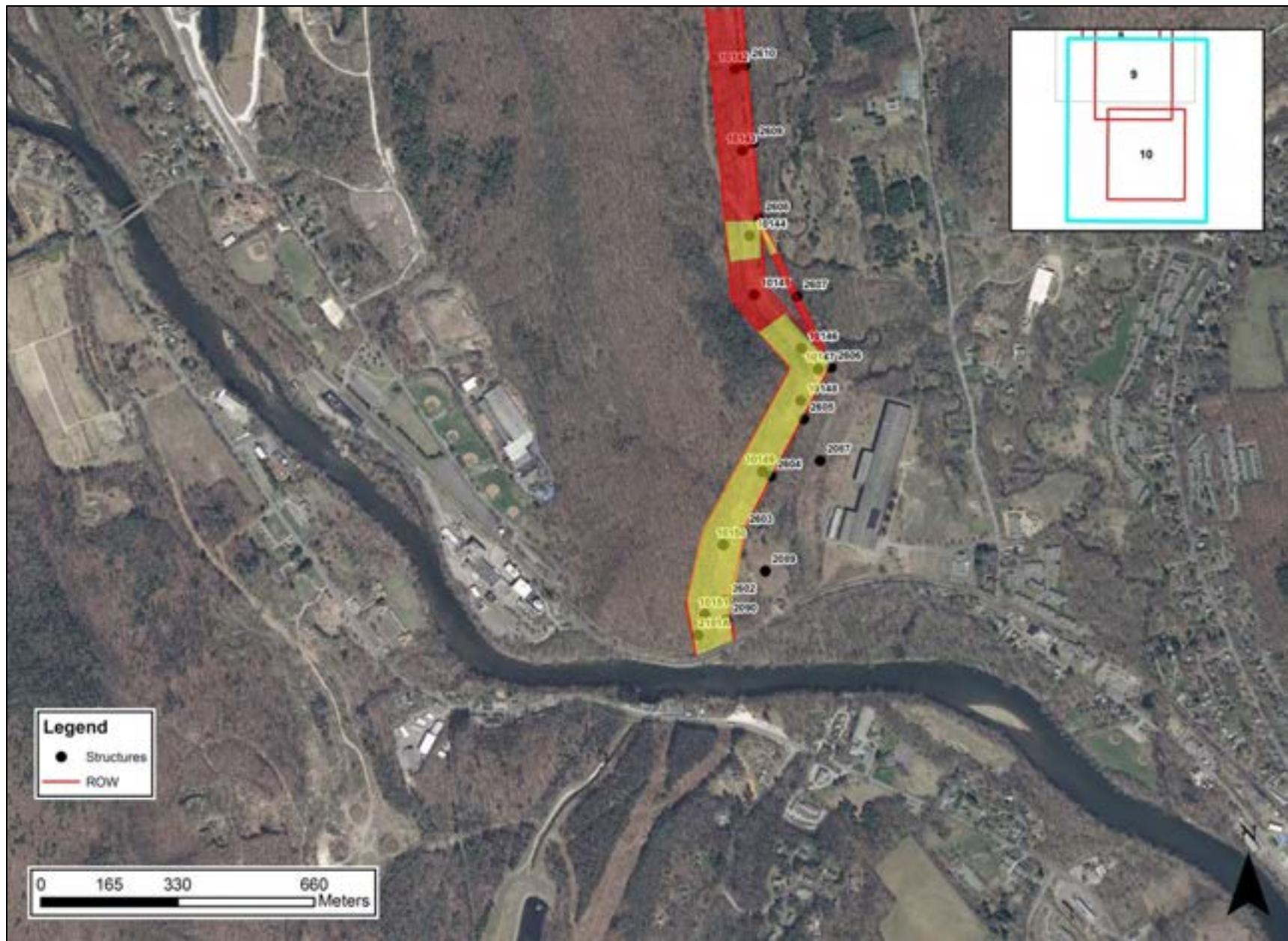


Figure 4; Sheet 5. Distribution of low and high archaeological sensitivities along Line 398 (note red = high sensitivity and yellow = low sensitivity).



## INTEGRATED HISTORIC RESOURCES MANAGEMENT

October 25, 2016

Matthew Davison  
Davison Environmental  
10 Maple Street  
Chester, Connecticut 06412

**RE: End-of-Fieldwork Management Summary for Phase IB Cultural Resources Reconnaissance Survey of the Line 1555 Rebuild Project in New Milford, Connecticut**

Mr. Davison:

This letter summarizes the results of a Phase IB cultural resources reconnaissance survey of project items associated the Line 1555 Rebuild Project in New Milford, Connecticut (Figure 1). These project items will be used for the construction of the Project and they occur along a corridor that will extend from the Bull's Bridge Substation in the north to Boardman Road in the south. The fieldwork for this project was completed during October of 2016 by personnel representing Heritage Consultants, LLC. All work was performed in accordance with the National Historic Preservation Act of 1966, as amended; the National Environmental Policy Act of 1969, as amended; and the *Environmental Review Primer for Connecticut's Archaeological Resources* (Poirier 1987). In addition, Heritage Consultants, LLC facilitated consultation between Eversource Energy, Davison Environmental, and the Wampanoag Tribe of Gay Head (Aquinnah). The remainder of this document presents descriptions of the proposed project area, the methods by which the current Phase IB reconnaissance survey was completed, the results of the investigation, and management recommendations for identified cultural resources.

### **Project Description**

As mentioned above, the proposed project corridor extends from Bull's Bridge Substation in the north to Boardman Road in the south, a distance of approximately 7 km (4.35 mi) (Figure 2; Sheets 1 through 8). The Project will encompass the installation of 65 new electrical transmission structures, seven pull pads, and 23 proposed access roads. Of these project items, 22 structure locations, eight pull pads, and nine proposed access roads fell within areas previously determined by Heritage Consultants, LLC to retain a moderate/high sensitivity to retain possible intact cultural deposits (see Table 1). The new structures will be of the monopole type, and replacement of them will be facilitated by the use of 30 x 30 m (100 x 100 ft) gravel work pads. The proposed pull pads will measure approximately 15 m (49.2 ft) by 30 m (100 ft) in size, while the proposed access roads will measure approximately 3.7 m (12 ft) in width. The proposed access roads and pull pads also will be graveled during construction. The proposed project corridor consists of variable topography, mixed deciduous forest, wetlands, scrub brush, and rock outcroppings. Elevations throughout the project corridor ranged from 250 to 750 ft NGVD.

### **Disturbance Analysis and Field Methodology Determination and Justification**

Prior to initiation of the fieldwork component of the current project, Heritage Consultants, LLC completed a Phase IA cultural resources assessment that included a review of aerial imagery, historic maps, and previously completed cultural resources investigations, as well as, a review of previously identified

archeological sites and National Register of Historic Places properties located within 152 m (500 ft) of the areas containing the proposed project items (Heritage Consultants, 2016). This review revealed that a single archaeological site (96-30) is situated within 152 m (500 ft) of the proposed work pad associated with Structures 568 and 569, as well as the proposed access road leading between these two areas. Other than Site 96-30, no previously identified archaeological sites are situated within or immediately adjacent to the proposed project corridor.

In an effort to ascertain ground conditions, as well as the potential for the proposed project items to contain subsurface cultural deposits, a representative from Heritage Consultants, LLC performed an initial pedestrian survey of the proposed project items in consultation with representatives from Eversource Energy, Davison Environmental, and the Wampanoag Tribe during October of 2016. During the pedestrian survey, the proposed project items were visually reconnoitered for above-ground cultural features, areas of previous disturbance, topographic relief, and locations of nearby freshwater sources. At that time, the veracity Phase IA results as they applied to archaeological potential of the proposed project items was assessed. A high concordance between what was determined to represent moderate/high archaeological areas during the Phase IA investigation and the actual field conditions prevailed.

In sum, the walkover of the project area confirmed the results of the Phase IA investigation completed by Heritage Consultants, LLC and re-affirmed the proposed subsurface testing strategy throughout the 22 structure locations, eight pull pads, and nine proposed access roads situated in the moderate/high probability areas. Survey methodologies employed during the current investigation included shovel testing of the portions of the proposed structure locations, access roads, and pull pads, to determine whether or not cultural resources were present. The details of the field methods and project result are reviewed below.

### **Phase IB Cultural Resources Reconnaissance Survey Methods and Results**

Following the completion of the above-referenced Phase IA research effort, the proposed project items situated within moderate/high sensitivity areas were subjected to a Phase IB cultural resources reconnaissance survey utilizing pedestrian survey, shovel testing, mapping, and photo-documentation. The pedestrian survey portion of this investigation included visual reconnaissance of all project items situated within moderate/high sensitivity areas scheduled for construction related impacts. It also included the excavation of a shovel test at the proposed structure locations, as well as additional shovel tests to adequately examine each proposed project item, including work pads, access roads, and pull pads (see Table 1). Each square shovel test measured 50 x 50 cm (19.7 x 19.7 in) in size and each was excavated to a minimum depth of 50 cmbs (19.7 inbs), until water penetrated the shovel test, or until immovable objects (e.g., large boulders, bedrock) were encountered. Each shovel test was excavated in 10 cm (3.9 in) arbitrary levels within natural strata, and the fill from each level was screened separately. All shovel test fill was screened through 0.64 cm (0.25 in) hardware cloth and examined visually for cultural material. Soil characteristics were recorded using Munsell Soil Color Charts and standard soils nomenclature. Each shovel test was backfilled immediately upon completion of the archeological recordation process.

The Phase IB cultural resources reconnaissance survey of the proposed project items resulted in the excavation of 169 of 206 (82 percent) planned shovel tests. The 37 planned but unexcavated shovel tests fell on slopes, bedrock outcroppings, previously disturbed areas, and/or wetlands. The excavated shovel tests exhibited varying stratigraphic profiles. In general, however, three soils strata were present. These included a dark brown (10YR 3/3 sandy loam) topsoil (i.e., Stratum I) that reached to between 0 and 5 cmbs (0 to 2 inbs) on average. Stratum II was described as a dark yellowish brown (10YR 5/6) sandy loam with minor amounts of pebbles intermixed; the maximum depth of this soil stratum was approximately 40 cmbs (16 inbs). Finally, Stratum III was encountered between 40 and 50 cmbs (16 and 20 inbs) and it was classified as a layer of light olive (2.5YR 5/6) gravelly loam.

Phase IB shovel testing of the proposed project items situated in moderate/high archaeologically sensitive areas resulted in the identification of six cultural resources locus (Table 1). Of these, two loci will receive official State of Connecticut Site Numbers once they are assigned by the Connecticut State Historic Preservation Office (Loci 552-02 and 2609-2610-AR-01). Each of the six identified cultural resources loci are discussed in detail below.

#### Locus 552-01

Locus 552-01, which consisted of a single quartz projectile point recovered from Stratum II at a depth of 10 to 20 cmbs (4 to 8 inbs), was identified during the excavation of a shovel test in the northwest corner of the proposed work pad associated with Structure 552 (Figure 2; Sheet 4). Situated at an approximate elevation of 198 m (650 ft) NGVD, this locus was characterized by a mixture of brush and open spaces (Photo 1). Locus 552-01 was described as round in configuration and it encompassed an area that measured approximately 1 x 1 m (3.3 x 3.3 ft) in size. In addition to the single positive shovel test, a total of 4 of 7 (57 percent) delineation shovel tests were excavated successfully in an array around the original find spot in an effort to identify additional cultural material. The three planned but unexcavated shovel tests fell within areas characterized by boulders of rock outcrops. None of the delineation shovel tests produced additional artifacts or evidence of cultural deposits.

A typical shovel test excavated within Locus 552-01 extended to a depth of 35 cmbs (14 inbs) and it exhibited three strata in profile. Stratum I, a deposit of dark brown (10YR 3/3) sandy loam, extended from the surface to 5 cmbs (0 to 2 inbs). Underlying Stratum I was Stratum II, a deposit of dark yellowish brown (10YR 5/6) sandy loam mixed with pebbles; it continued from 5 to 12 cmbs (2 to 4.8 inbs). Finally, Stratum III reached from 12 to 35 cmbs (4.8 to 14 inbs); it was classified as a layer of dark yellow brown (10YR 4/6) gravelly loam.

As mentioned above, Locus 552-01 is represented by a single quartz projectile point. The morphological characteristics of the artifact indicate that it can be classified as a Lamoka Stemmed projectile point. This projectile point style was in use from ca. 6,000 to 400 B.P. As a result, it can only be attributed to a specific use (i.e., hunting) and not a specific prehistoric time period. Despite delineation testing, no additional artifacts were recovered from the locus area, and no cultural features were identified. Thus, Locus 552-01, lacks evidence of substantial cultural deposits and/or cultural features. It was determined that this non-site cultural resources locus does not possess research potential and/or the qualities of significance as defined by the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). No additional testing of Locus 552-01 is recommended.

#### Locus 552-02

Locus 552-10 which consists of a stone foundation and associated stone lined well, was identified along the edges of an existing access road leading to Structure 552 (Figure 2; Sheet 4). The locus area measures approximately 30 x 30 m (100 x 100 ft) in size, and it was described as round in configuration (Photo 2 and 3). It was identified at an approximate elevation of 198.1 m (650 ft) NGVD; it is situated on the eastern side of the existing power line corridor in an area covered with a mixture of scrub brush and deciduous trees. It is likely that the site area once extended farther to the west; however, it was truncated by construction of the extant power line.

Locus 552-02 was identified during pedestrian survey of an existing gravel access road leading to Structure 552. Because there are no planned construction activities in this area, no shovel testing was conducted throughout the locus area. Visual inspection of the foundation revealed that it measured approximately 7.5 x 7.5 m (24.9 x 24.9 ft) in area and once contained a chimney on the northern side. In addition, this dry laid stone foundation also contained an opening to the basement on the southwestern corner. The well identified within the Locus 552-02 area is situated on the western side of the access road leading to Structure 552-02.

It is round in shape and measures approximately 1 m (3.3 ft) in diameter. The well also is constructed of dry laid stones. A review of historic maps of this area indicated that the course of the existing access road follows that of Bass Road, as it used to extend from east to west through what is now the project corridor. The maps indicate that the house was owned by "J. Brown." An examination of headstones in the nearby Long Mountain Cemetery showed that "Joseph Brown" is buried there and that he died in late 1850s. Thus, it was concluded that the former house and well located within Locus 55-02 likely belonged to Joseph Brown historically.

Archeological data collected from Locus 552-02 indicates that intact historic cultural deposits likely remain within the locus area. Thus, pedestrian survey of Locus 552-02 suggests that this cultural resource may retain research potential and intact cultural features. However, since Eversource Energy currently has no plans to impact the Locus 555-02 area, no additional archaeological testing is recommended at this time. Should construction plans change to include impacts to the Locus 552-02 area, archaeological testing should be undertaken prior to construction.

#### Locus 569-01

Locus 569-01, which consisted of a small assemblage of historic artifacts recovered from Stratum II at a depth of 10 to 20 cmbs (4 to 8 inbs), was identified during the excavation of a shovel test in the northwest corner of the proposed work pad associated with Structure 569 (Figure 2; Sheets 1 and 2). Situated at an approximate elevation of 106.7 m (350 ft) NGVD, this locus was characterized by a mixture of pine trees and open spaces (Photo 4). Locus 569-01 was described as round in configuration and it encompassed an area that measured approximately 1 x 1 m (3.3 x 3.3 ft) in size. In addition to the single positive shovel test, a total of 7 of 8 (100 percent) delineation shovel tests were excavated successfully around the original find spot in an effort to identify additional cultural material. The single planned but unexcavated shovel test fell within an existing disturbed area. None of the delineation shovel tests produced additional artifacts or evidence of cultural deposits.

A typical shovel test excavated within 569-01 extended to a depth of 50 cmbs (19.7 inbs) and it exhibited three strata in profile. Stratum I, a deposit of dark brown (10YR 3/3) sandy loam, extended from the surface to 5 cmbs (0 to 1.9 inbs). Underlying Stratum I was Stratum II, a deposit of dark yellowish brown (10YR 5/4) sandy loam mixed with pebbles; it continued from 5 to 30 cmbs (2 to 12 inbs). Finally, Stratum III reached from 12 to 50 cmbs (4.8 to 19.7 inbs); it was classified as a layer of light yellow brown (2.5YR 4/6) gravelly loam.

As mentioned above, Locus 569-01 is represented by a small assemblage of historic items. All of the artifacts were recovered from Stratum II, and they include 9 clear bottle glass sherds, 7 plain whiteware sherds, 1 whiteware rim sherd, and 3 black transfer printed whiteware sherds. The transfer printed sherds were in their widest use between ca. 1830 and 1860. Despite delineation testing, no additional artifacts were recovered from the locus area, and no cultural features were identified. Thus, Locus 569-01, lacks evidence of substantial cultural deposits and/or cultural features, and it was determined that this non-site cultural resources locus does not possess research potential and/or the qualities of significance as defined by the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). No additional testing of Locus 569-01 is recommended.

#### Locus 2610-01

Locus 2610-01, which consisted of a single quartz secondary thinning flake recovered from Stratum II at a depth of 5 to 15 cmbs (2 to 6 inbs), was identified during Phase IB survey of proposed work pad associated with Structure 2610 (Figure 2; Sheet 6). Situated at an approximate elevation of 76 m (250 ft) NGVD, this locus was characterized by low scrub brush (Photo 5). Locus 2610-01 was described as round in configuration and it encompassed an area that measured approximately 1 x 1 m (3.3 x 3.3 ft) in size. In addition to the

single positive shovel test, a total of 8 of 8 (100 percent) delineation shovel tests were excavated successfully in an array around the original find spot in an effort to identify additional cultural material; however, none of the delineation shovel tests produced additional artifacts or evidence of cultural deposits.

A typical shovel test excavated within Locus 2610-01 extended to a depth of 50 cmbs (119.74 inbs) and it exhibited three strata in profile. Stratum I, a deposit of dark brown (10YR 3/3) sandy loam, extended from the surface to 5 cmbs (0 to 2 inbs). Underlying Stratum I was Stratum II, a deposit of dark yellowish brown (10YR 4/6) sandy loam; it continued from 5 to 40 cmbs (2 to 12.2 inbs). Finally, Stratum III reached from 12 to 35 cmbs (12.2 to 19.7 inbs); it was classified as a layer of light olive brown (2.5Y 5/6) gravelly loam. Stratum III represented the C-Horizon

As mentioned above, Locus 2610-01 is represented by a single quartz secondary thinning flake. This artifact is not temporally diagnostic and therefore cannot be assigned to any specific prehistoric period. Despite delineation testing, no additional artifacts were recovered from the locus area, and not cultural features were identified. Thus, Locus 2610-01, lacks evidence of substantial cultural deposits and/or cultural features, and it was determined that this non-site cultural resources locus does not possess research potential and/or the qualities of significance as defined by the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). No additional testing of Locus 2610-01 is recommended.

#### Locus 2609-2610-AR-01

Locus 2609-2610-AR-01, which consisted of an assemblage of prehistoric artifacts recovered from Stratum I and II at depths ranging from 10 to 30 cmbs (4 to 12 inbs), was identified during the excavation of Shovel Test 9 along the proposed access road between Structures 2609 and 2610 (Figure 2; Sheet 6). Situated at an approximate elevation of 76 m (250 ft) NGVD, this locus was characterized by a mixture of scrub brush and open spaces (Photo 6). Locus 2609-2610-AR-01 was described as round in configuration and it encompassed an area that measured approximately 7.5 x 7.5 m (24.6 x 24.6 ft) in size. In addition to the single positive shovel test, a total of 5 of 6 (83 percent) delineation shovel tests were excavated successfully around the original find spot in an effort to identify additional cultural material. The single planned but unexcavated shovel test fell on a steep slope leading down to a wetland area.

A typical shovel test excavated within 2609-2610-AR-01 extended to a depth of 50 cmbs (19.7 inbs) and it exhibited three strata in profile. Stratum I, a deposit of dark brown (10YR 3/3) sandy loam, extended from the surface to 5 cmbs (0 to 1.9 inbs). Underlying Stratum I was Stratum II, a deposit of dark yellowish brown (10YR 4/6) sandy loam mixed; it continued from 5 to 40 cmbs (2 to 16 inbs). Finally, Stratum III reached from 40 to 50 cmbs (16 to 19.7 inbs); it was classified as a layer of light olive (2.5YR 5/6) gravelly loam. Stratum III represented the C-Horizon.

As mentioned above, Locus 2609-2610-AR-01 is represented by a small assemblage of prehistoric items. The artifacts were recovered from Stratum I and Stratum II, and they include 5 Windsor Cord Marked ceramic sherds, 1 chert secondary thinning flake, and 1 quartz secondary thinning flake. This type of ceramic was produced by Native Americans between ca. 1,500 and 500 years ago. Thus, the items dated from the Middle and Late Woodland periods. Sites from these time periods are underrepresented in the uplands of Connecticut. Traditionally, archaeologists have thought that these sites correspond to fall-winter seasonal camps used by a small (possibly single) family unit, and represent a dispersed settlement pattern during the hunting and winter seasons. Since these sites typically are small in size, they are rarely identified. Site 2609-2610-AR-01 is potentially significant under Criterion D of the National Register of Historic Places (36 CFR 60.4 [a-d]) in that it may provide archaeological data that leads to a better understanding of Middle/Late Woodland period upland adaptations. This site should be subjected to Phase II excavation prior to construction of the proposed access road in order to determine whether or not it is significant applying the National Register of Historic Place criteria for evaluation (36 CFR 60.4 [a-d]).

#### Locus 568-AR-01

Locus 568-AR-01, which consisted of a single quartz secondary thinning flake recovered from Stratum II at a depth of 20 to 30 cmbs (5 to 12 inbs), was identified during Phase IB survey of a proposed access road extending from Structure 568 to South Kent Road (Figure 2; Sheet 2). Situated at an approximate elevation of 103.6 m (340 ft) NGVD, this locus was characterized by an existing dirt road and low scrub brush (Photo 7). Locus 568-AR-01 was described as round in configuration and it encompassed an area that measured approximately 1 x 1 m (3.3 x 3.3 ft) in size. In addition to the single positive shovel test, a total of 8 of 8 (100 percent) delineation shovel tests were excavated successfully in an array around the original find spot in an effort to identify additional cultural material; however, none of the delineation shovel tests produced additional artifacts or evidence of cultural deposits.

A typical shovel test excavated within 568-AR-01 extended to a depth of 50 cmbs (19.7 inbs) and it exhibited three strata in profile. Stratum I, a deposit of dark brown (10YR 3/3) sandy loam, extended from the surface to 5 cmbs (0 to 2 inbs). Underlying Stratum I was Stratum II, a deposit of dark yellowish brown (10YR 4/6) sandy loam; it continued from 5 to 35 cmbs (2 to 14 inbs). Finally, Stratum III reached from 12 to 35 cmbs (12.2 to 19.7 inbs); it was classified as a layer of yellow brown (2.5Y 5/6) gravelly loam.

As mentioned above, Locus 568-AR-01 is represented by a single quartz secondary thinning flake. This artifact is not temporally diagnostic and therefore cannot be assigned to any specific prehistoric period. Despite delineation testing, no additional artifacts were recovered from the locus area, and no cultural features were identified. Thus, Locus 568-AR-01, lacks evidence of substantial cultural deposits and/or cultural features, and it was determined that this non-site cultural resources locus does not possess research potential and/or the qualities of significance as defined by the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). No additional testing of Locus 568-AR-01 is recommended.

#### **Summary and Recommendations**

The Phase IB cultural resources reconnaissance survey of the proposed project corridor in New Milford, Connecticut resulted in the identification of six cultural resources loci (552-01, 552-02, 569-01, 2610-01, 2609-2610-AR-01, and 568-AR-01). Of these six loci, two (552-02 and 2610-AR-01) will be assigned official State of Connecticut site numbers once they are awarded by the Connecticut State Historic Preservation Office. Due to a lack of artifacts and cultural features, Loci 552-01, 569-01, 2610-01, and 568-AR-01 no longer retain any research potential. Thus, these four cultural resources loci are assessed as not significant applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). No additional testing of these areas is recommended prior to construction.

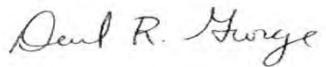
As mentioned above, Locus 552-02, a historic foundation and associated well feature, was identified along an existing access road leading to Structure 552. Eversource Energy currently has no plans to disturb this area. As long as that remains the case, no additional examination of Locus 552-02 is recommended prior to construction. However, should construction plans change to include impacts to this area, additional archaeological investigation of Locus 552-02 is recommended.

Finally, Locus 2609-2610-AR-01 appears to contain intact cultural deposits dating from the Middle to Late Woodland periods, including lithic debitage and Windsor Cord Marked pottery sherds. Sites from these time periods are not often identified in upland areas. Following ethnohistoric sources, southern New England archaeologists have thought that these sites likely correspond to fall-winter seasonal camps used by a small (possibly single) family unit within a dispersed settlement pattern during the fall and winter seasons. Since these sites typically are small in size and they are rarely identified, Site 2609-2610-AR-01 is potentially significant under Criterion D of the National Register of Historic Places (36 CFR 60.4 [a-d]) in that it may provide archaeological data that leads to a better understanding of Middle/Late Woodland period upland adaptations. It is recommended that Locus 2609-2610-AR-01 be subjected to Phase II excavation prior to

construction of the proposed access road in order to determine whether or not it is significant applying the above-referenced criteria for evaluation (36 CFR 60.4 [a-d]).

If you have any questions regarding this End-of-Fieldwork management summary, or if we may be of additional assistance with this or any other projects you may have, please do not hesitate to call us at 860-299-6328 or email me [dgeorge@heritage-consultants.com](mailto:dgeorge@heritage-consultants.com). We are at your service.

Sincerely,



David R. George, M.A., R.P.A.  
Heritage Consultants, LLC

Table 1. Project item identifiers, number of shovel tests, and cultural resources identified during survey.

Structure/Access Rd/Item No.	# of Planned Shovel Tests	# of Completed Shovel Tests	Cultural Resources Loci Identified
550	5	0	None
552	5	0	Locus 552-01 & 552-02
553	5	0	None
555	5	0	None
556	3	2	None
561	5	0	None
562	5	0	None
563	4	2	None
567	No Access	No Access	No Access
568	4	2	None
569	10	0	Locus 569-01
570	3	2	None
571	1	4	None
573	2	3	None
575	5	0	None
576	5	0	None
577	5	0	None
2067	0	5	None
2608	4	2	None
2609	5	0	None
2610	4	1	Locus 2610-01
2611	5	0	None
2607-AR	0	9	None
2608-2609-AR	8	1	None
2609-2610-AR	9	1	Locus 2609-2610-AR-01
2610 Pull Pad	5	0	None
2610-2611-AR	6	0	None
555-AR	4	0	None
561 Pull Pad	5	0	None
567-AR	No Access	No Access	No Access
568 Pull Pad	5	0	None
568-569-AR	8	1	None
568-AR	16	2	Locus 568-AR-01
575-576-AR	3	0	None
Totals	169	37	6 Loci

#### **References Cited**

Heritage Consultants, LLC

2016 *Preliminary Archeological Assessment of the Cricket Valley Interconnection Project (Line 398/1555), New Milford, Connecticut.* Prepared for Tighe & Bond, Middletown, Connecticut.

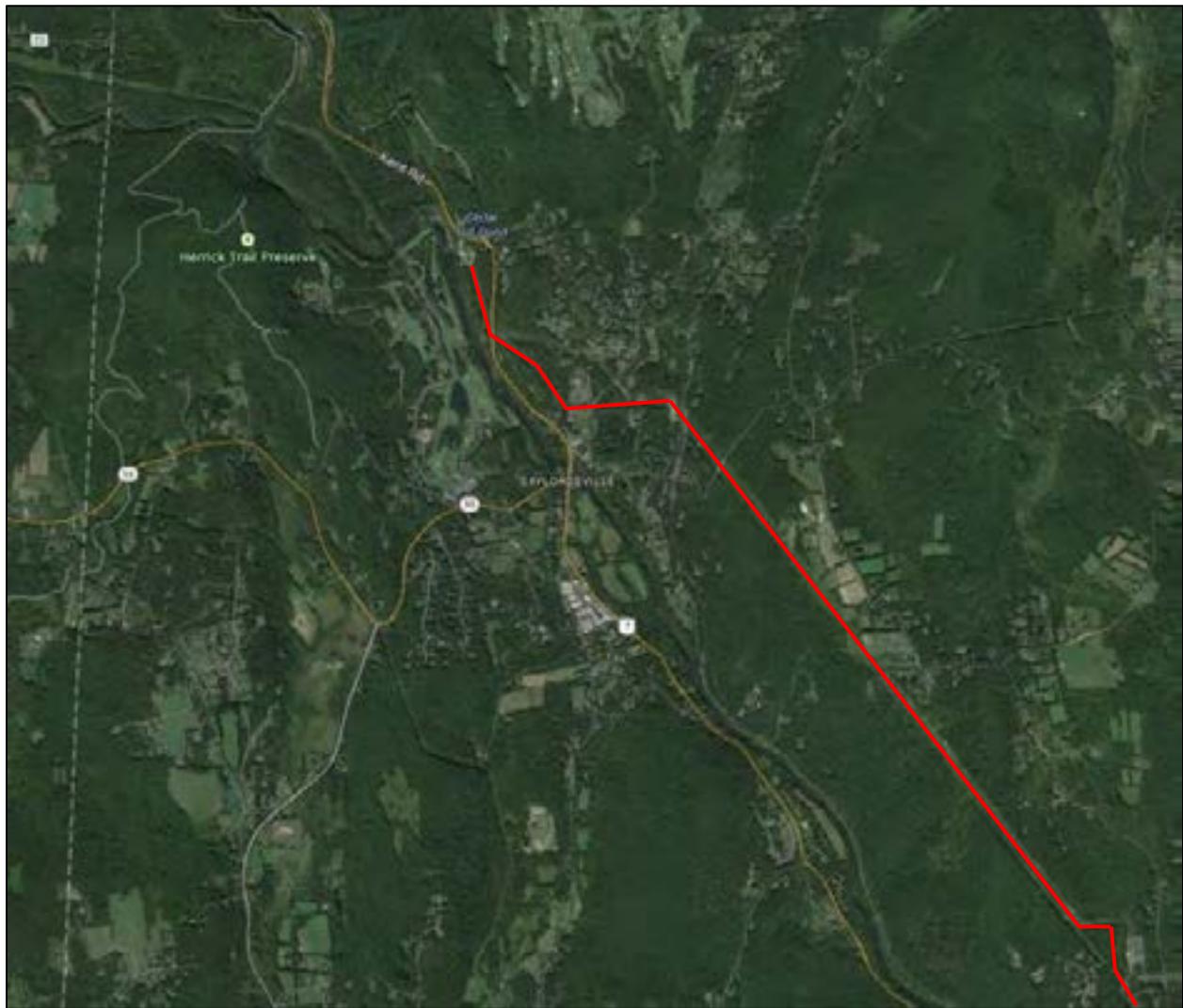


Figure 1. Excerpt from a 2014 aerial depicting the proposed project corridor associated with the Line 1555 Rebuild Project.

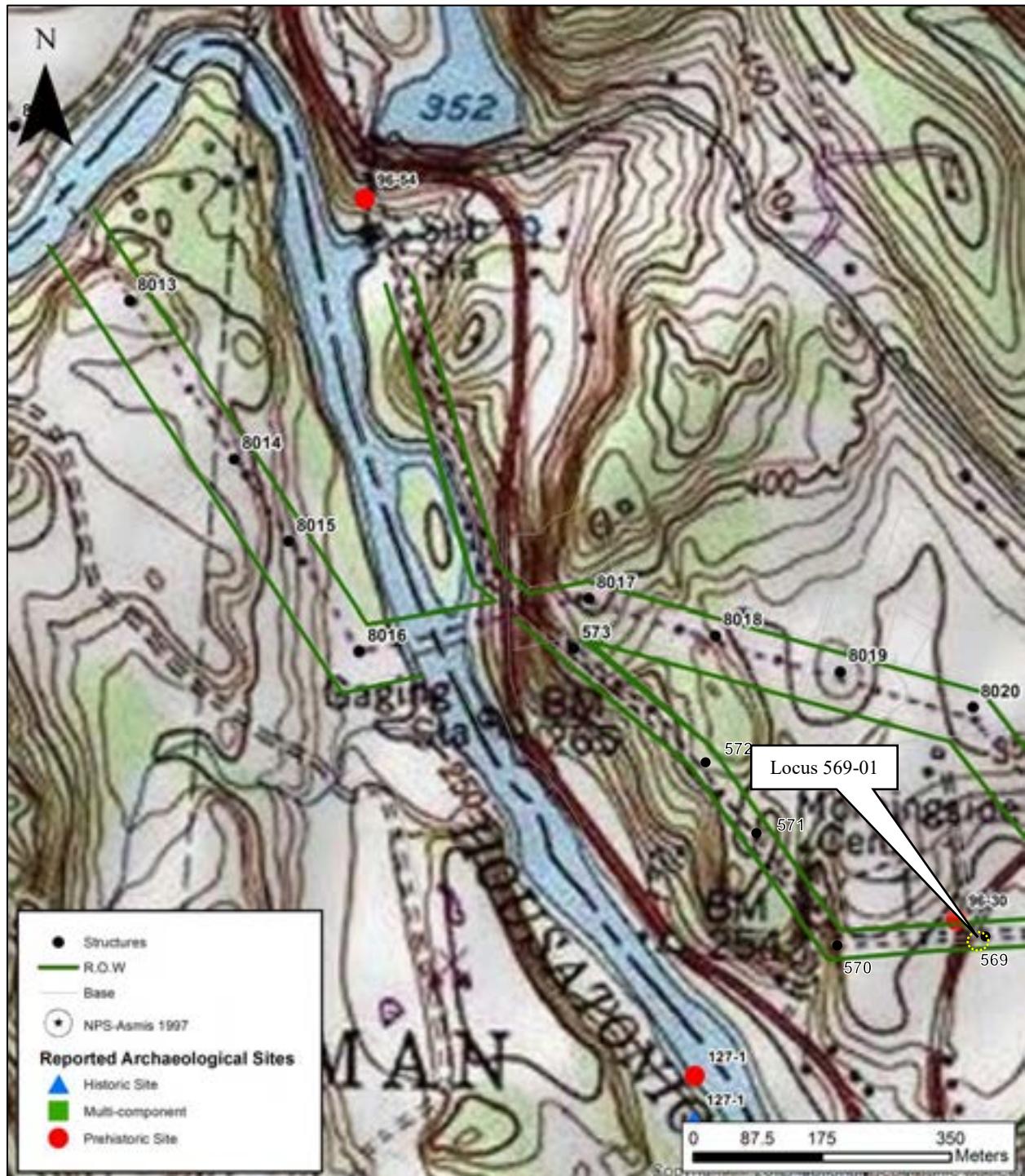


Figure 2; Sheet 1. Excerpt from a 1996 USGS 7.5' series topographic quadrangle depicting the locations of previously identified sites and newly identified cultural resources loci.



Figure 2; Sheet 2. Excerpt from a 1996 USGS 7.5' series topographic quadrangle depicting the locations of previously identified sites and newly identified cultural resources loci.

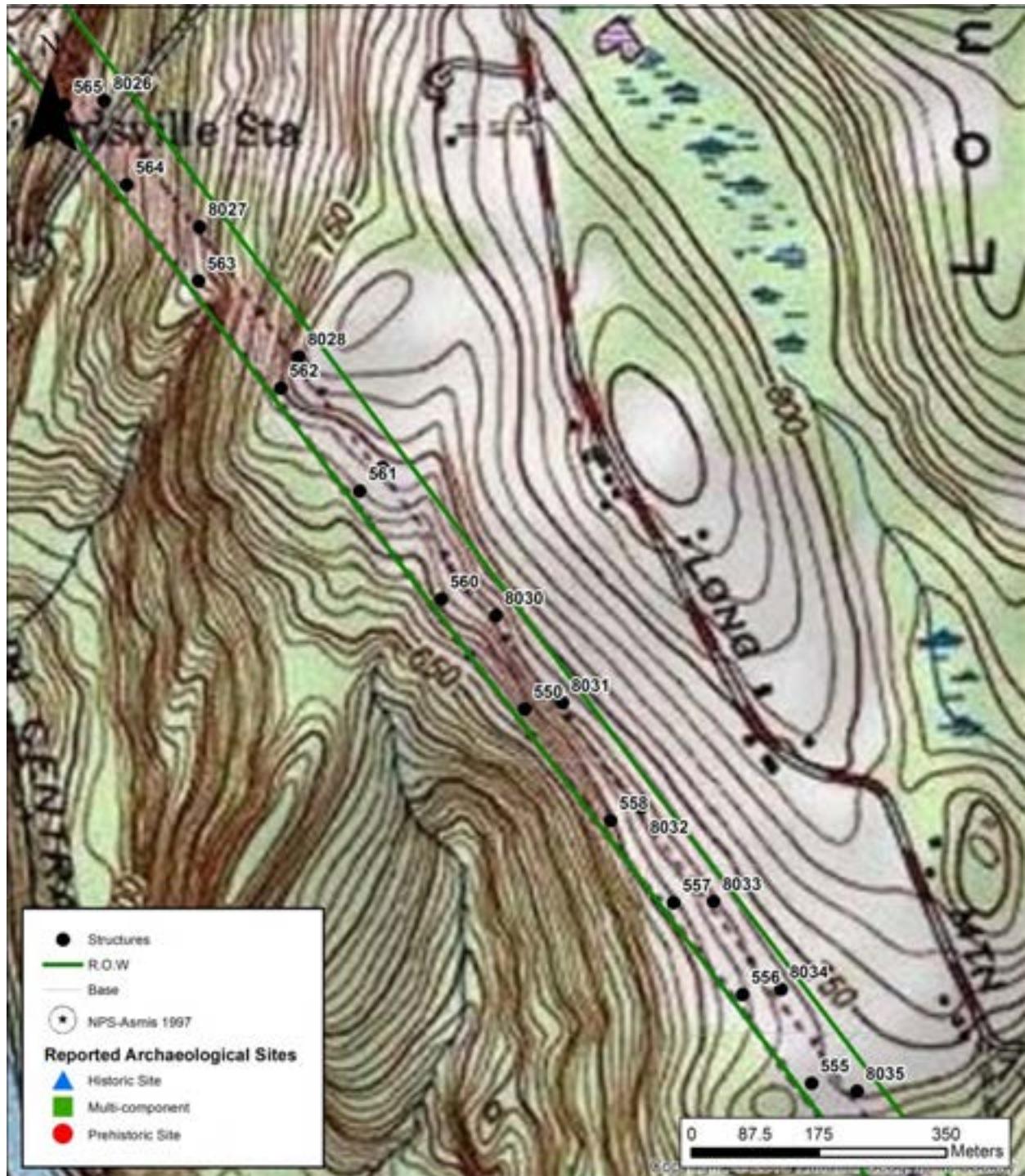


Figure 2; Sheet 3. Excerpt from a 1996 USGS 7.5' series topographic quadrangle depicting the locations of previously identified sites and newly identified cultural resources loci.

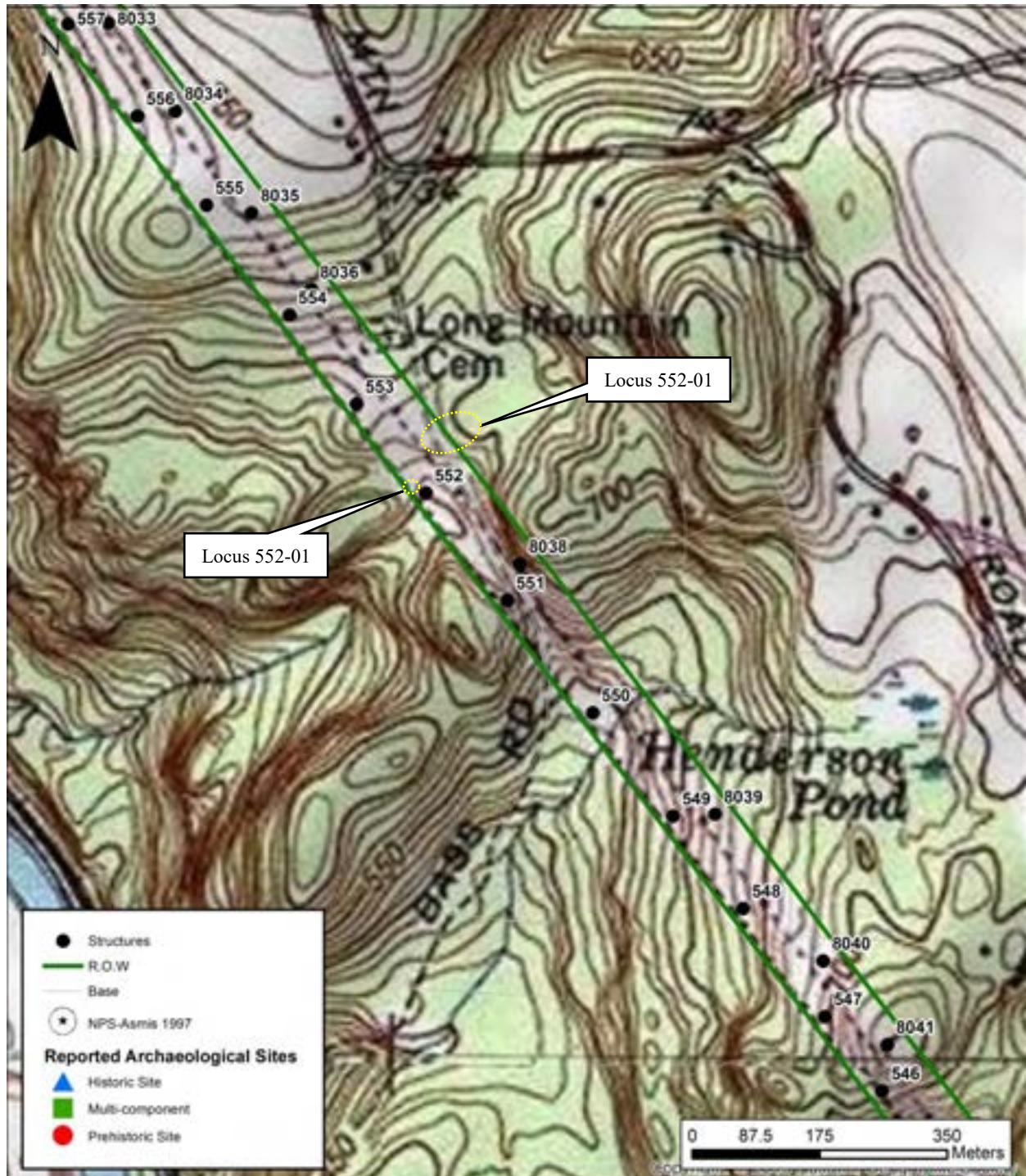


Figure 2; Sheet 4. Excerpt from a 1996 USGS 7.5' series topographic quadrangle depicting the locations of previously identified sites and newly identified cultural resources loci.

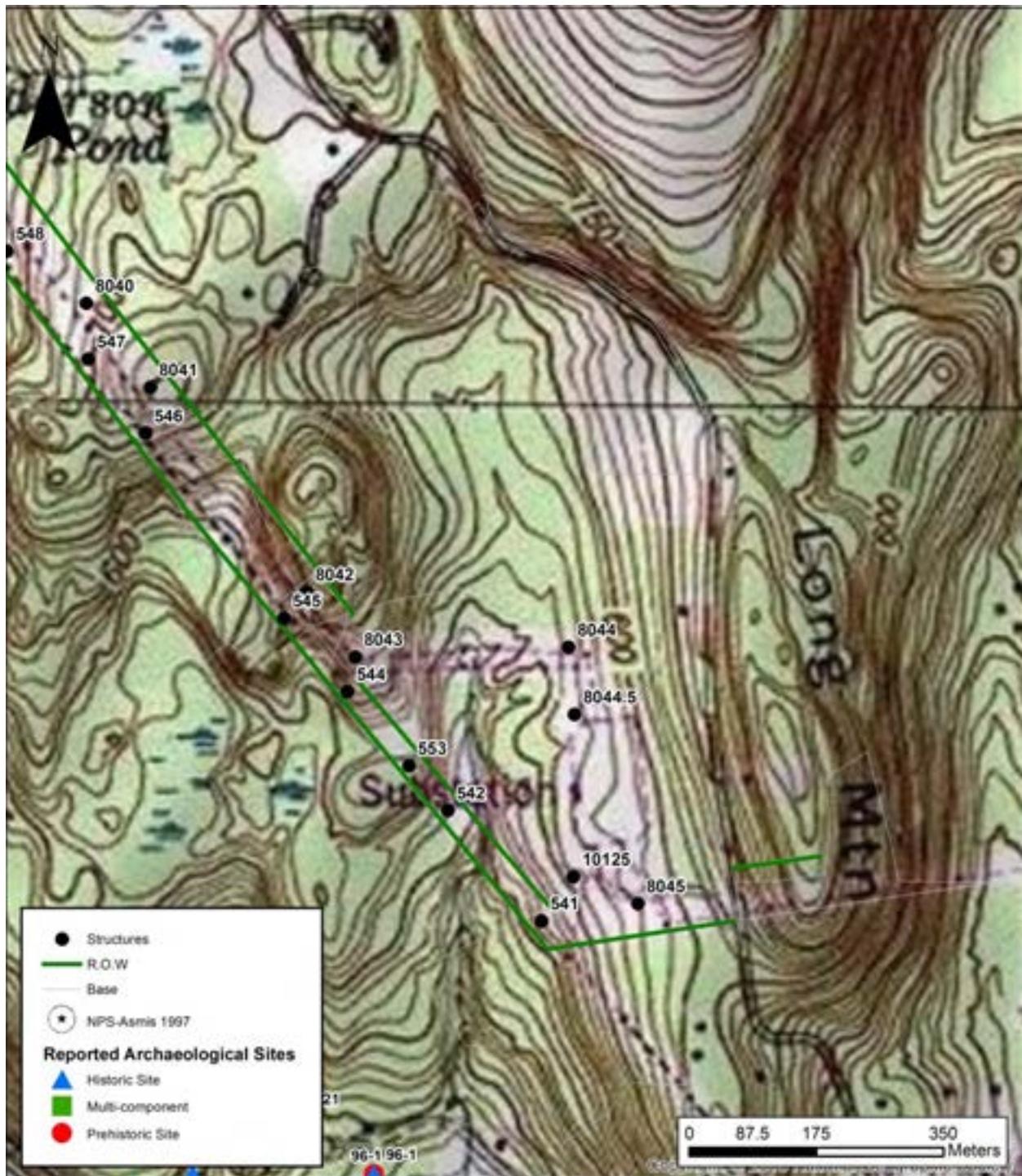


Figure 2; Sheet 5. Excerpt from a 1996 USGS 7.5' series topographic quadrangle depicting the locations of previously identified sites and newly identified cultural resources loci.



Figure 2; Sheet 6. Excerpt from a 1996 USGS 7.5' series topographic quadrangle depicting the locations of previously identified sites and newly identified cultural resources loci.



Figure 2; Sheet 7. Excerpt from a 1996 USGS 7.5' series topographic quadrangle depicting the locations of previously identified sites and newly identified cultural resources loci.

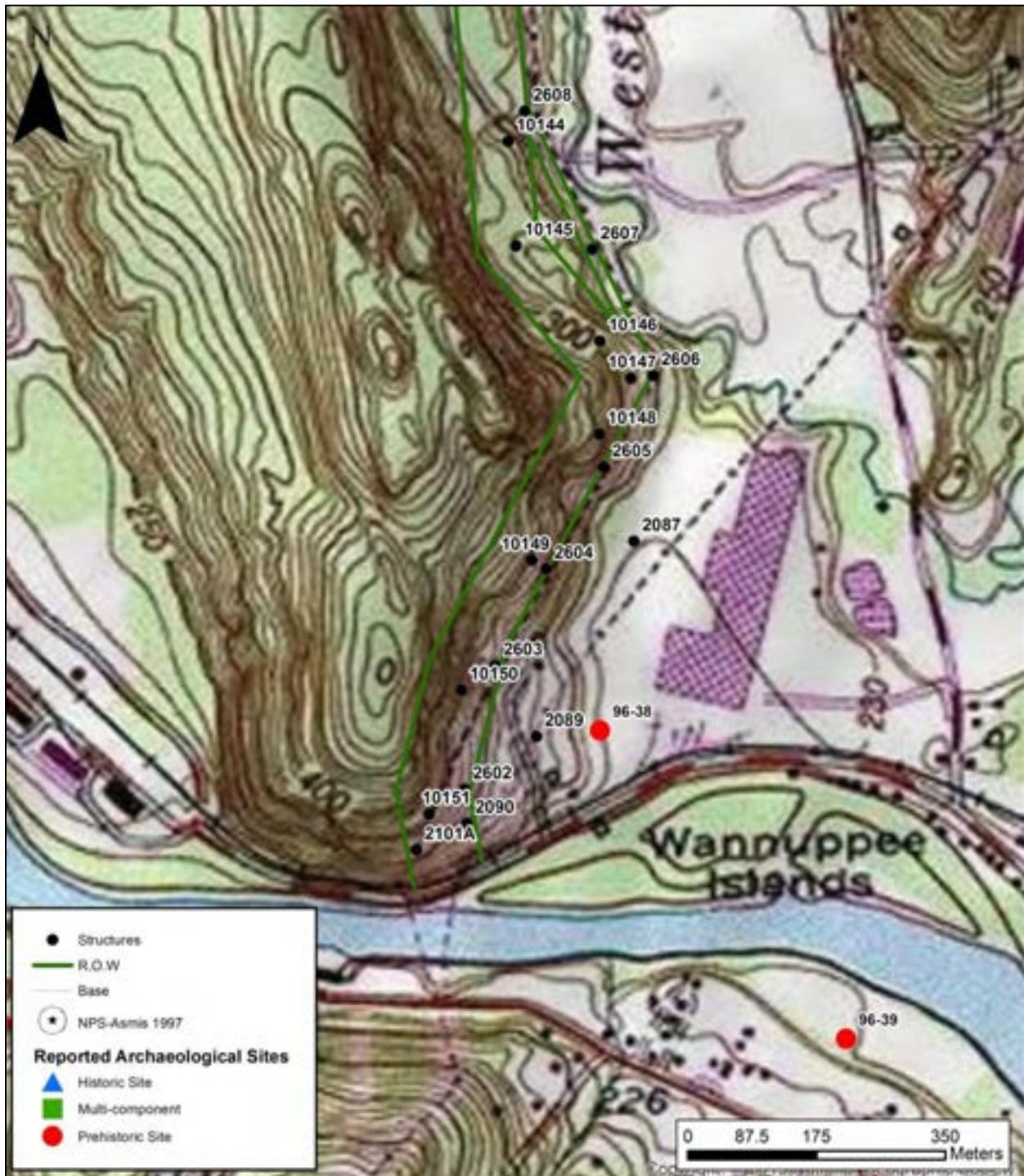


Figure 2; Sheet 8. Excerpt from a 1996 USGS 7.5' series topographic quadrangle depicting the locations of previously identified sites and newly identified cultural resources loci.



Photo 1. Overview photo of Structure 552 and Locus 552-01 facing west.



Photo 2. Overview photo of the Joseph Brown house foundation facing northeast.



Photo 3. Overview photo of the stone lined well associated with the Joseph Brown house foundation facing northeast.



Photo 4. Overview photo Locus 569-01 facing northwest.



Photo 5. Overview photo Locus 2610-01 facing southeast.

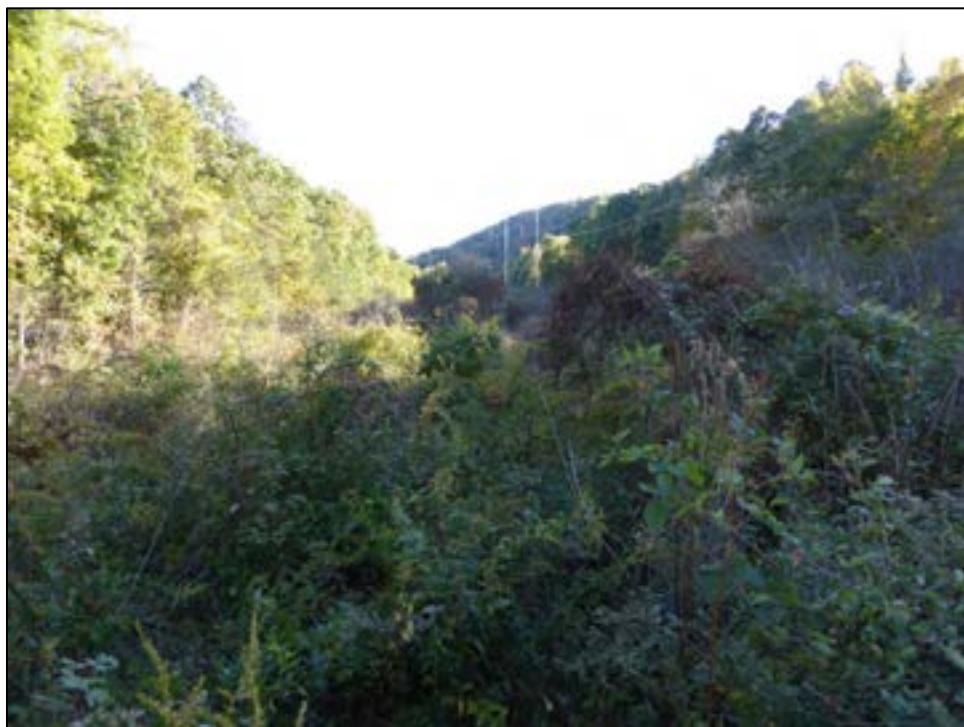


Photo 6. Overview photo Locus 2609-2610-AR-01 facing south.



Photo 7. Overview photo Locus 568-AR-01 facing south.

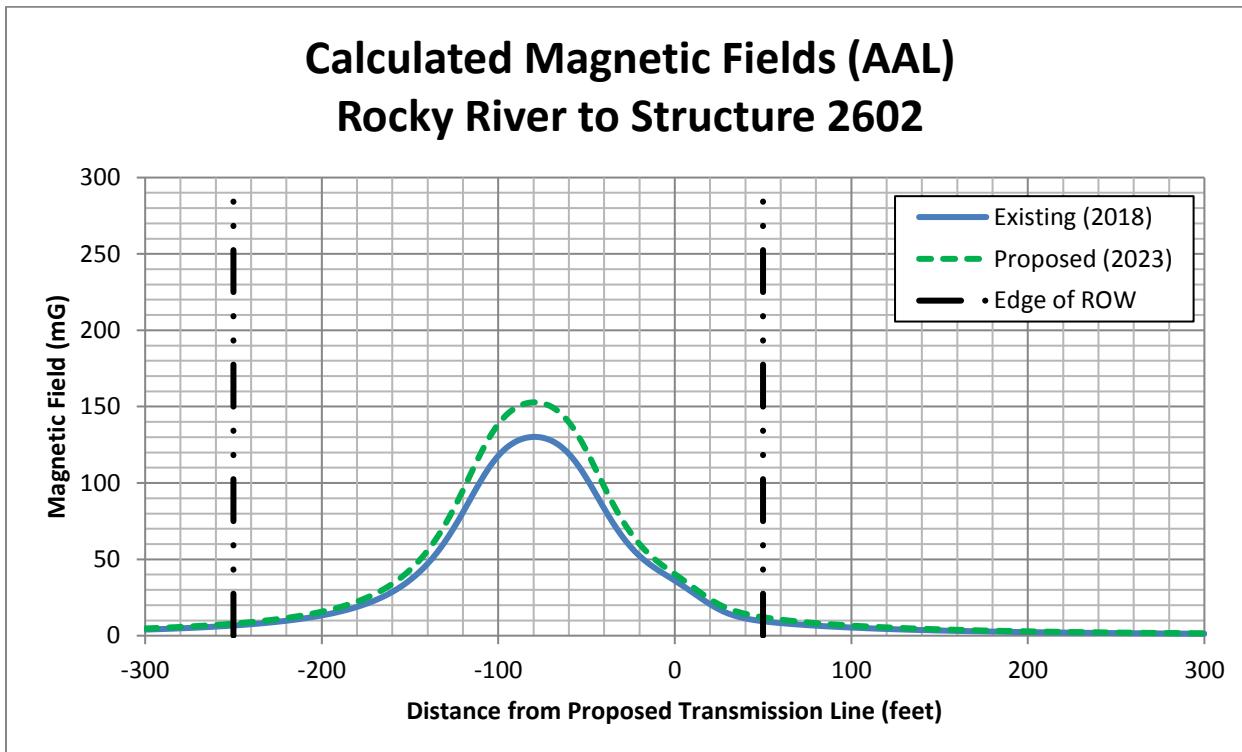


## ATTACHMENT F



Attachment F

These calculations are shown in the figures and Table E.1 below. MF Calculations are shown in Figures E-1 through E-5. EF calculations are shown in Figures E-6 through E-10.



**Figure E-1: Calculated MF – Section 1 – Rocky River Station and Structure 2602**

## Calculated Magnetic Fields (AAL) Structure 2602 to Structure 2620

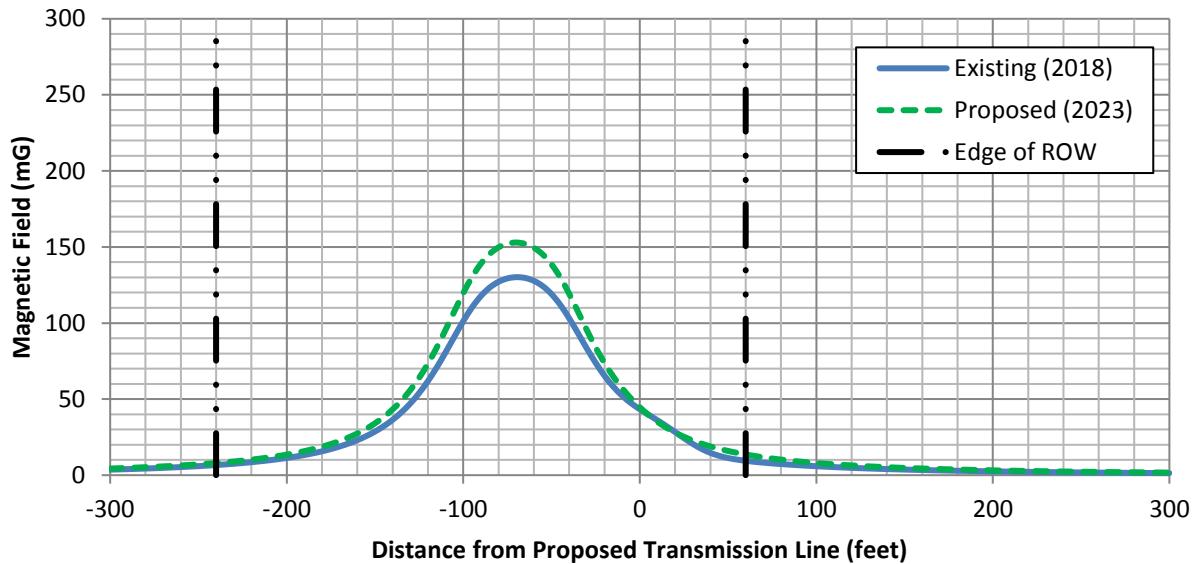


Figure E-2: Calculated MF – Section 2 – Structure 2602 to Structure 2620

## Calculated Magnetic Fields (AAL) Structure 2620 to Long Mountain Jct.

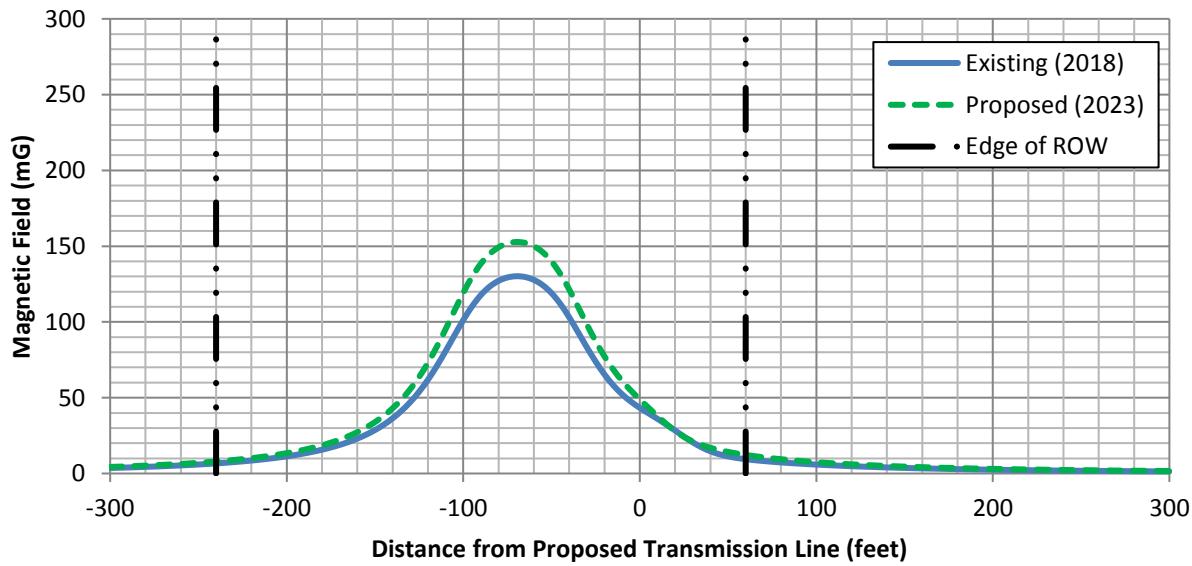


Figure E-3: Calculated MF – Section 3 – Structure 2620 and Long Mountain Junction

## Calculated Magnetic Fields (AAL) Long Mountain Jct. to S Kent Rd

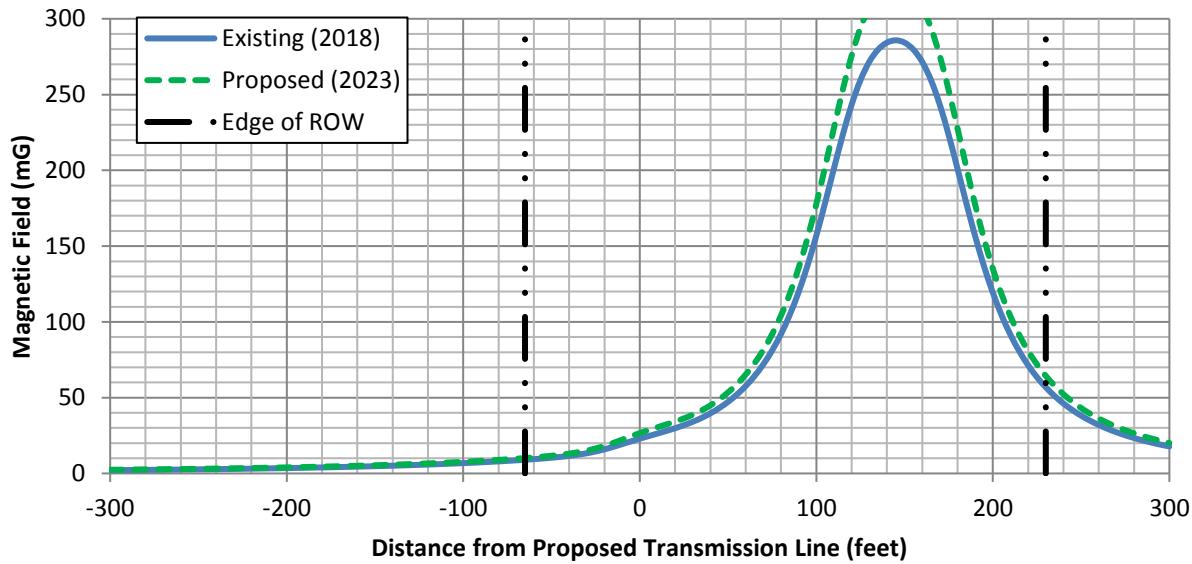


Figure E-4: Calculated MF – Section 4 – Long Mountain Junction to S Kent Rd

## Calculated Magnetic Fields (AAL) S Kent Rd to Bulls Bridge

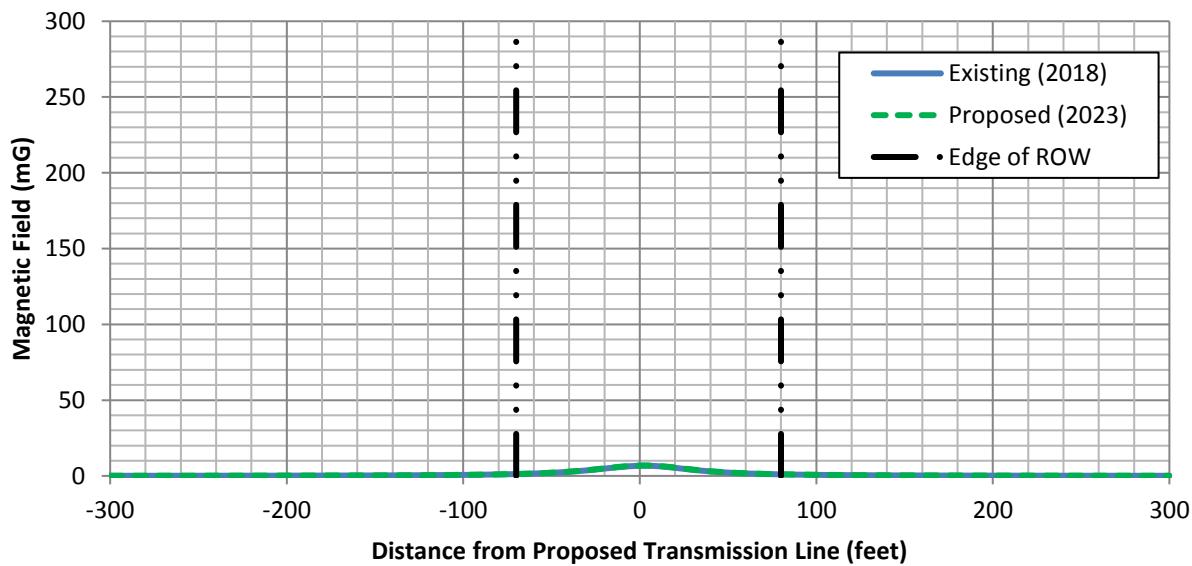


Figure E-5: Calculated MF – Section 5 – S Kent Rd to Bulls Bridge Station

## Calculated Electric Fields Rocky River to Structure 2602

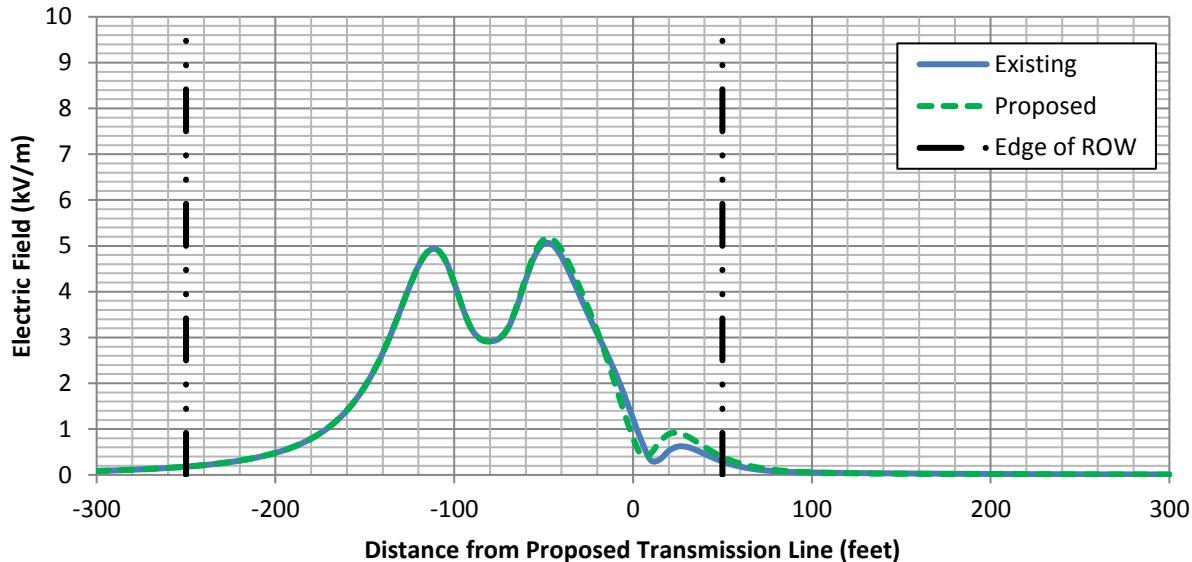


Figure E-6: Calculated EF – Section 1 – Rocky River Station and Structure 2602

## Calculated Electric Fields Structure 2602 to Structure 2620

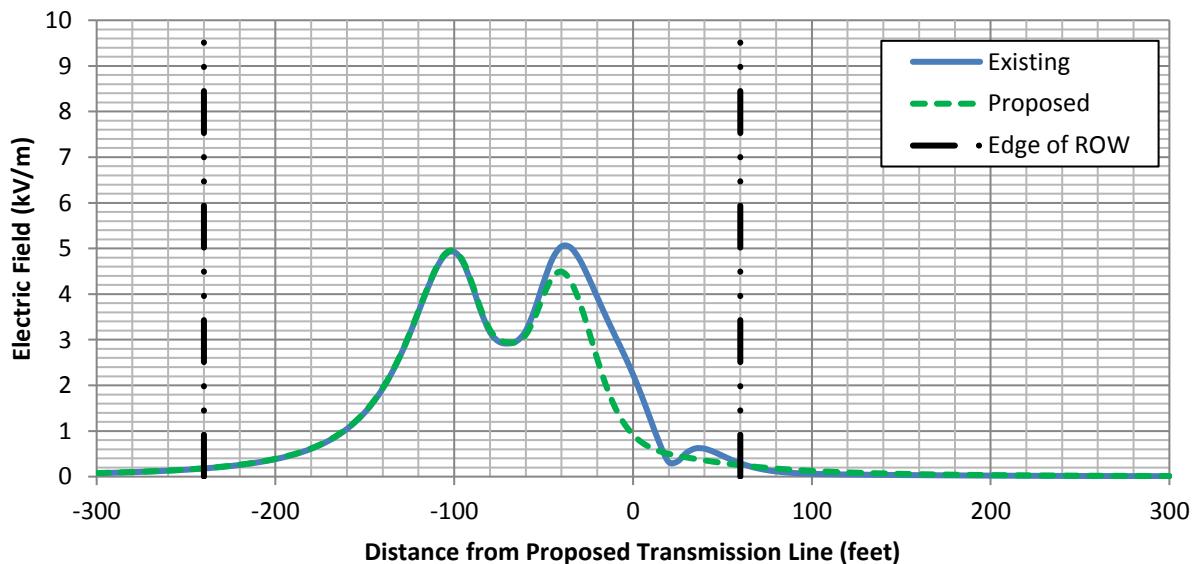


Figure E-7: Calculated EF – Section 2 – Structure 2602 to Structure 2620

## Calculated Electric Fields Structure 2620 to Long Mountain Jct.

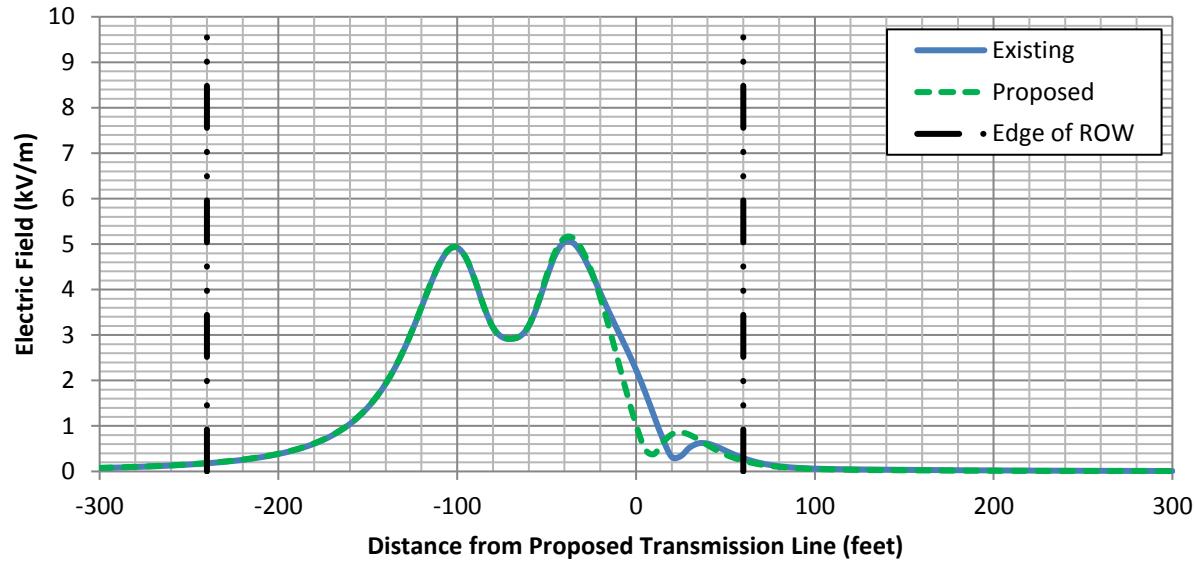


Figure E-8: Calculated EF – Section 3 – Structure 2620 and Long Mountain Junction

## Calculated Electric Fields Long Mountain Jct. to S Kent Rd

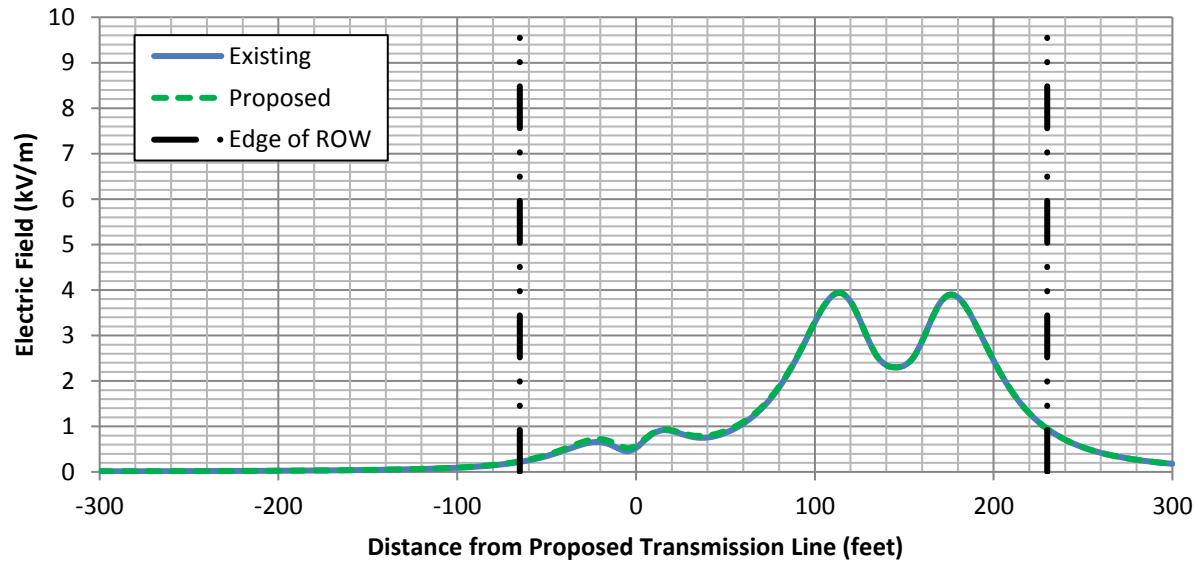


Figure E-9: Calculated EF – Section 4 – Long Mountain Junction to S Kent Rd

## Calculated Electric Fields S Kent Rd to Bulls Bridge

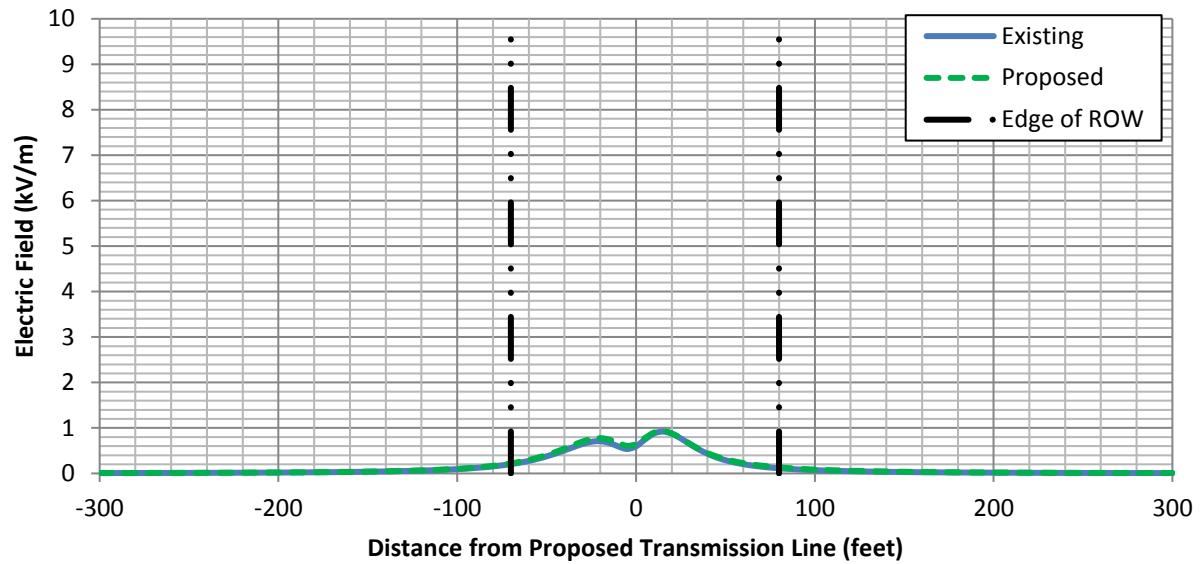


Figure E-10: Calculated EF – Section 10 – S Kent Rd to Bulls Bridge Station

## **ATTACHMENT G**



56 Prospect Street  
Hartford, CT 06103

June 30, 2017

Dear Neighbor,

As part of its everyday effort to deliver reliable energy and superior customer service to its customers, Eversource Energy ("Eversource") is submitting a petition to the Connecticut Siting Council ("CSC") for a proposed transmission upgrade project in your area.

The upgrade, called the 1555 Line Rebuild Project ("Project"), involves replacing the existing wood structures with weathering steel structures. Due to the age and condition of the existing structures, Eversource needs to replace these structures in order to maintain the integrity of the system and continue to provide reliable electric service to our customers. Depending on location and topography of the right-of-way, the replacement structures may increase or decrease in height in order to conform to current mandatory system reliability standards.

The Project will be located entirely within existing rights-of way between Bulls Bridge Substation on Kent Road and Rocky River Substation on Kent Road in New Milford, CT. Pending CSC approval of this proposed work, construction is expected to begin in late-summer 2017 and restoration of any affected areas is anticipated to be complete by mid-2018.

For more information please call 1.800.793.2202 or send an email to [TransmissionInfo@eversource.com](mailto:TransmissionInfo@eversource.com).

If you would like to send comments regarding Eversource's petition to the CSC, please send them via email to [siting.council@ct.gov](mailto:siting.council@ct.gov) or a letter to the following address:

Melanie Bachman, Acting Executive Director  
Connecticut Siting Council  
Ten Franklin Square  
New Britain, CT 06051

Thank you.

Sincerely,

*Anuj Mathur*

Anuj Mathur  
Eversource Project Manager

**AFFIDAVIT OF SERVICE OF NOTICE**

STATE OF CONNECTICUT )  
COUNTY OF HARTFORD ) ss. Berlin

Sec. 16-50j-40 of the Regulations of Connecticut State Agencies ("RCSA") provides that proof of notice to the affected municipalities, property owners and abutters shall be submitted with a petition for declaratory ruling to the Connecticut Siting Council ("Council"). In accordance with that RCSA section, I hereby certify that I caused notice of proposed modifications of The Connecticut Light and Power Company doing business as Eversource Energy to be served by mail or courier upon the following municipal official:

**Municipal Official:**

The Honorable David Gronbach  
Mayor of New Milford  
New Milford Town Hall  
10 Main Street  
New Milford, CT 06776

I also certify that I caused notice of the proposed modifications to be served by mail or courier upon 70 owners of abutting properties shown on the maps in Attachment A to the Petition.

Anuj Mathur  
Project Manager

Anuj Mathur  
Project Manager

On this the 30 day of June, 2017, before me, the undersigned representative, personally appeared, Anuj Mathur, known to me (or satisfactorily proven) to be the person whose name is subscribed to the foregoing instrument and acknowledged that she executed the same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

Joan McGehee

Notary Public

My Commission expires ANNE M. CIZEK

NOTARY PUBLIC - CT 173654  
MY COMMISSION EXPIRES MAR. 31, 2024

## ATTACHMENT H

Attachment H: Structure Heights Above Ground Level (AGL)

EXISTING 115-kV (AGL)			NEW 115-kV (AGL)		EXISTING 345-kV (AGL)	
STRUCTURE#	Existing Type	Existing Height	Proposed Type	Proposed Height	STRUCTURE#	Height
<b>Bulls Bridge SS</b>					<b>398 Line</b>	
577	Monopole	79.0	Monopole	98.0		
576	Monopole	70.0	Monopole	61.0		
575	Monopole	70.0	Monopole	93.5		
574	Monopole	92.5	H-frame	70.0	<b>8017.0</b>	<b>98.8</b>
573	Monopole	79.0	H-frame	74.5		
572	Monopole	65.5	Monopole	78.5		
571	Monopole	65.5	Monopole	70.0		
570	Monopole	83.5	Monopole	103.0		
569	Monopole	92.5	Monopole	103.0	8022.0	60.3
568	Monopole	79.0	Monopole	79.0	8023.0	69.2
567	Monopole	97.0	Monopole	103.0	8024.0	85.0
					8025.0	72.4
566	Monopole	79.0	Monopole	99.0	8026.0	81.5
565	Monopole	79.0	Monopole	103.0	8027.0	84.5
564	Monopole	74.5	Monopole	93.5	8028.0	84.5
563	Monopole	88.0	Monopole	98.0	8029.0	63.2
562	Monopole	79.0	Monopole	84.0	8030.0	77.8
561	Monopole	70.0	Monopole	79.0	8031.0	71.9
560	Monopole	88.0	Monopole	88.5	8032.0	71.8
559	Monopole	74.5	Monopole	84.0	8033.0	67.2
558	Monopole	70.0	Monopole	75.0	8034.0	70.5
557	Monopole	74.5	Monopole	79.0	8035.0	75.6
556	Monopole	70.0	Monopole	75.0	8036.0	68.9
555	Monopole	74.5	Monopole	88.5	8037.0	67.6
554	Monopole	92.5	Monopole	88.5	8038.0	<b>139.0</b>
553	Monopole	74.5	Monopole	84.0		
552	Monopole	65.5	Monopole	93.5	8039.0	80.2
551	Monopole	74.5	Monopole	75.0	8040.0	83.2
550	Monopole	79.0	Monopole	103.0	8041.0	81.2
549	Monopole	79.0	Monopole	84.0	8042.0	85.3
548	Monopole	83.5	Monopole	88.5		
547	Monopole	83.5	Monopole	84.0	<b>Long Mountain S/S</b>	120.6
546	Monopole	83.5	Monopole	84.0	<b>321 Line</b>	
545	Monopole	74.5	Monopole	84.0	10126.0	106.0
544	Monopole	61.0	Monopole	70.0	10127.0	65.9
543	Monopole	61.0	Monopole	66.0	10128.0	66.0
542	H-frame	70.0	H-frame	79.0	10129.0	66.2
					10130.0	90.0
541	H-frame	52.0	H-frame	52.0	10131.0	78.9
10126	H-frame	82.5	H-Frame	106.0	10132.0	82.2
2627	H-frame	43.0	H-frame	52.0	10133.0	85.0
2626	H-frame	47.5	H-frame	79.0	10134.0	80.9
2625	H-frame	47.5	H-frame	61.0	10135.0	78.0
2624	H-frame	47.5	H-frame	83.5	10136.0	85.5
2623	H-frame	47.5	H-frame	74.5	10137.0	67.6
2622	H-frame	43.0	H-frame	74.5	10138.0	84.5
2621	H-frame	38.5	H-frame	65.5	10139.0	94.0
2620	H-frame	38.5	Monopole	84.0	10140.0	93.8
2619	H-frame	43.0	Monopole	79.0	10141.0	75.6
2618	H-frame	43.0	Monopole	88.5	10142.0	84.7
2617	H-frame	47.5	Monopole	103.0	10143.0	79.0
2616	H-frame	43.0	Monopole	73.5	10144.0	82.1
2615	H-frame	43.0	Monopole	93.5	10145.0	79.3
2614	H-frame	43.0	Monopole	88.5	10146.0	76.3
2613	H-frame	43.0	Monopole	84.0	10147.0	80.0
2612	H-frame	43.0	Monopole	84.0	10148.0	77.5
2611	H-frame	47.5	Monopole	93.5	10149.0	71.9
2610	H-frame	47.5	Monopole	98.0	10150.0	78.5
2609	H-frame	47.5	Monopole	93.5	10151.0	98.7
2608	H-frame	43.0	Monopole	88.5	10152.0	109.7
2607	H-frame	43.0	Monopole	84.0		
2606-1	New		Monopole	84.0		
2606	H-frame	52.0	Monopole	93.5		
2605	H-frame	43.0	Monopole	84.0		
2604	H-frame	34.0	Monopole	66.0		
2603	H-frame	47.5	Monopole	83.5		
2602	H-frame	47.5	H-frame	74.5		
2601	LATTICE	61.0	3-Pole	74.5		
<b>Rocky River SS</b>						