



56 Prospect Street
P.O. Box 270
Hartford, CT 06103

Kathleen M. Shanley
Manager – Transmission Siting
Tel: (860) 728-4527

August 15, 2019

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

Re: **Petition No. 1226:** Towantic Switching Station and Line Modification Project
Amendment to the Petition

Dear Ms. Bachman:

On May 26, 2016, the Connecticut Siting Council ("Council") considered and ruled that the subject Petition would not have a substantial environmental effect and would not require a Certificate of Environmental Compatibility and Public Need (the "Project"). The Project authorized by the Council's ruling involved construction, maintenance and operation of the new 115-kV Towantic Switching Station located adjacent to the Towantic Generating Station on Woodruff Hill Road, Oxford, CT and modifications within existing right-of-way to existing 1575 and 1585 115-kV electric transmission lines extending 6.1 miles from Bunker Hill Substation, located at Clough Road, Waterbury, south through Middlebury to the Towantic Switching Station and reconductoring the existing 1575 115-kV electric transmission line extending one mile from the switching station south to Structure 1446 (Oxford Tap) located near the Oxford Substation, Commerce Drive, Oxford.

The purpose of this amendment is to seek Council authorization for modifications needed to comply with the Connecticut Airport Authority ("CAA") requirement to lower Structure 1444 (located near the Oxford Substation) to accommodate the CAA's plan to reduce the runway approach surface slope for the Waterbury-Oxford Airport. This requirement was established by CAA after the Council's ruling and it applies to the existing Structure 1444 and the attached wires because they penetrate the Waterbury-Oxford Airport revised approach surface airspace at their current heights. Besides lowering the height of Structure 1444, two new structures are needed to support lowering of the conductor and the shield wire, both of which currently penetrate the airport's revised approach surface airspace.

The proposed modifications would be made to the existing 1142 (formerly the 1585 Line), 1319 (formerly portion of the 1575 Line) and 1575 115-kV electric transmission lines within Eversource's existing right-of-way ("ROW") in Oxford. The proposed modifications are as follows:

- Replacement of the existing 82-foot double-circuit (1142 and 1575 Lines) steel lattice Structure 1444 with a new 65-foot single-circuit (1142 Line) galvanized steel H-frame Structure 1444 with a concrete foundation, located approximately 15 feet north of the existing structure;
- Installation of a new 55-foot single-circuit (1142 Line) galvanized steel H-frame Structure 1444B with a concrete foundation to be located approximately 80 feet south of the existing Structure 1445;
- Installation of a new 70-foot single-circuit (1319 Line) direct-embed guyed galvanized steel monopole Structure 1444W located approximately 140 feet north of the existing Structure 1443;
- Relocation of the existing conductors on the 1319 Line to the new Structure 1444W;
- On the 1142 Line, between Structures 1443 and 1444B, replacement of the existing conductors with new 556-kcmil Aluminum Conductor Steel Supported ("ACSS") conductors and replacement of the existing shield wire with new alumoweld shield wire;
- On the 1142 Line, between Structures 1444B and 1445, replacement of the existing conductors with new 556-kcmil ACSS conductors and transfer of the existing shield wire (originally located between Structures 1444 and 1445) to this span;
- Relocation of existing optical ground wire ("OPGW") from existing Structure 1444 to the new Structure 1444 and attach the OPGW to the new Structure 1444B;
- Relocation or replacement (in kind) of the FAA light currently installed on the existing Structure 1444 on the new Structure 1444;
- Relocation of the existing FAA marker balls that are currently located between Structures 1443 and 1445 to the new shield wire between Structures 1443 and 1444B; and

- Removal of the de-energized conductors of the 1575 Line from Structures 1444 to 1445A (formerly labelled as Structure 1446A in the Petition);

The work proposed in this amendment will occur in an area containing existing gravel access roads that were constructed and/or improved as part of both this Project and the 1990 Structure Replacement Project (Petition 1058). These existing access roads would require minor vegetation removal to facilitate ease of access but are otherwise well established. Within the ROW, work pads are required to create a safe and level work surface at each of the proposed structure locations and will be approximately 75 feet x 200-250 feet. In addition, two 75 feet x 150-250 feet pull pads, one at each end of the proposed work area, will be utilized to facilitate conductor/wire work and staging. In upland areas, work/pull pads will be comprised of gravel. In the two areas where portion of pads would be located in wetlands, construction mats will be used to limit effects of temporary disturbance to the wetland.

Maps 25, 25A and 25B in Attachment A: "Towantic Switching Station and Line Project", dated August 8, 2019, depict the locations of existing and proposed structures, work pads and pull pads to be used, wetland areas and other ROW features, access roads and other work elements. The cross-section drawings in Attachment B – "Towantic Station Cross Sections" depict typical views along the ROW of the existing and proposed new structures.

The modifications proposed in this amendment would not have a substantial adverse environmental effect for reasons explained below.

- Wetlands, Floodplains, and Floodways
 - The modifications would result in approximately 0.4 acres of temporary impacts to wetlands resulting from the placement of temporary construction mats used for the work pad for new Structure 1444W and the pull pad south of Commerce Drive. No permanent wetland impacts are anticipated as the locations of the structure to be removed and the new structures to be erected are outside of any wetlands. There would be no impacts within the 100-year flood zone.
- Rare Species Review
 - A review of the Department of Environmental Protection's Natural Diversity Database ("NDDB) did not identify any state- or federally-listed endangered species in the vicinity of the modifications.

- Electric and Magnetic Fields
 - There would be no change in electric and magnetic fields beyond the ROW and the Oxford Substation property.
- Radio and Television Signal Reception
 - There would be no increase to television or radio interference from the modifications.
- Soil Erosion and Sedimentation Control
 - Eversource would adhere to the soil erosion and sediment control practices as described in the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control*. Typical soil erosion and sediment control measures include hay bales and filter-fabric sediment control barriers. Soil erosion and sedimentation controls would be inspected regularly and maintained to ensure their integrity and effectiveness.

Eversource has notified representatives of the Town of Oxford about the proposed modifications.

Attached to this original version, please find 15 copies of this Amendment to Petition No. 1226 for modifications to the Project.

Should you have any questions regarding this submission, please do not hesitate to contact me via e-mail at kathleen.shanley@eversource.com or telephone at (860) 728-4527.

Sincerely,

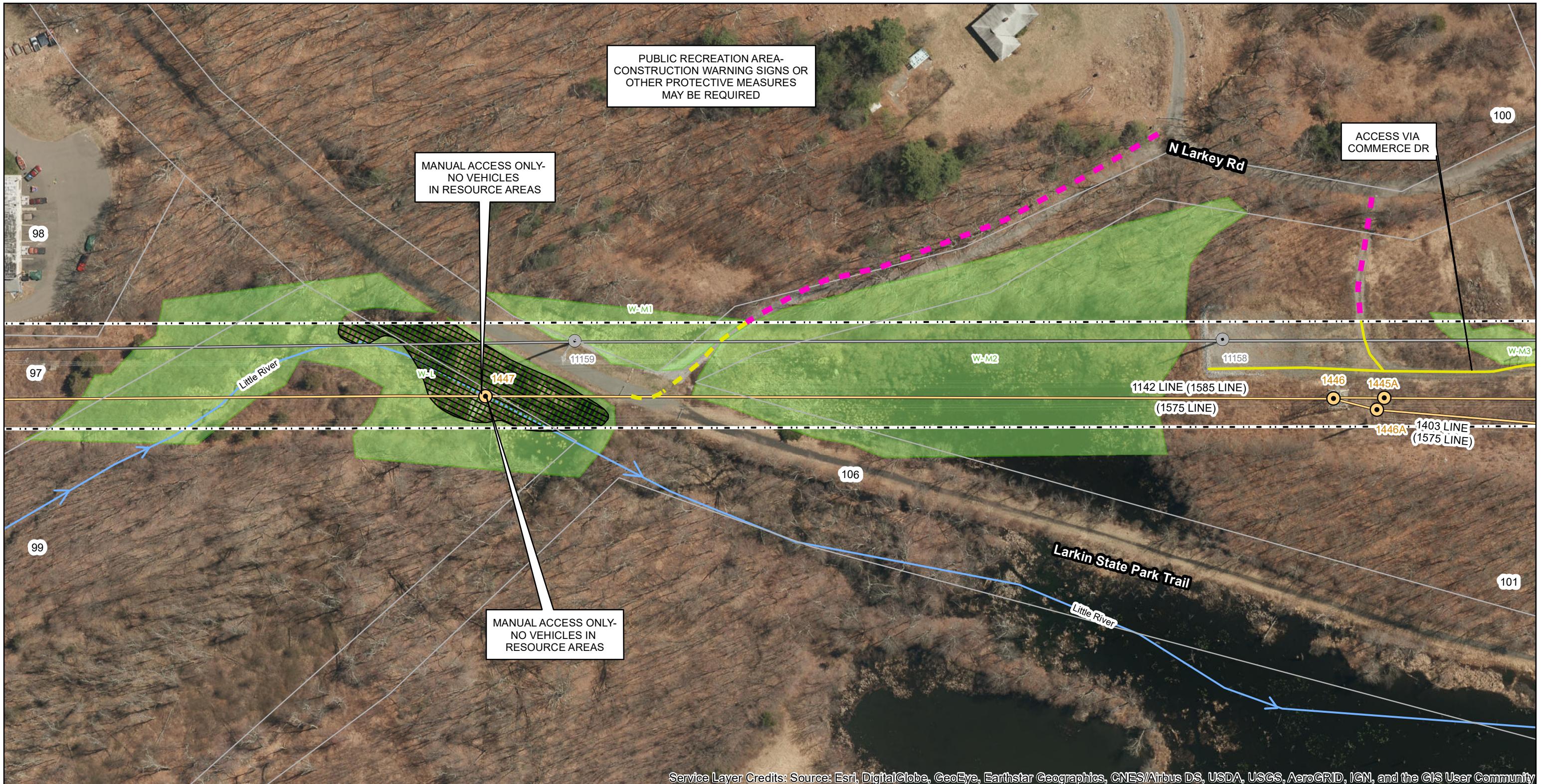


Kathleen M. Shanley

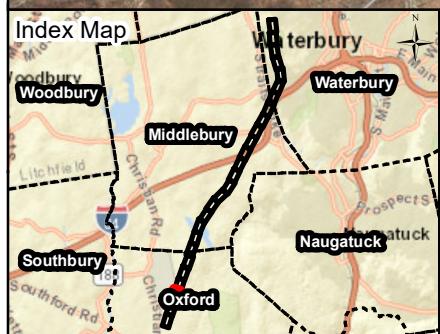
Enclosures: Attachments

Attachment A

Towantic Switching Station and Line Project Maps



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Legend

- Ex. 1575/1585 Structures
- Ex. 1575/1585 Line
- Proposed 1575/1585 Structures
- Proposed 1575/1585 Line
- Ex. 1990 Structures
- Existing 1990 Line
- Access - Existing
- Access - Proposed
- Access - Off ROW Existing
- Access - Off ROW Proposed
- Proposed Construction Mats
- Proposed Construction Pad
- Vernal Pools
- Field Delineated Wetlands
- Estimated Wetlands
- Parcels
- ROW Limits
- Perennial Stream/River
- Intermittent Stream
- Culverts

- Rare Species Habitat
- FEMA 100 Year Flood Zone
- FEMA Regulatory Floodway
- Line List Properties Reference Number
- Existing Distribution Structure To Be Removed
- Proposed Distribution Structure
- Gate
- 1 inch = 100 feet



Data Sources:
CAI
GZA
Eversource
CT DEEP
AECOM, Davison
FEMA
Base Map acquired from
ESRI Online.

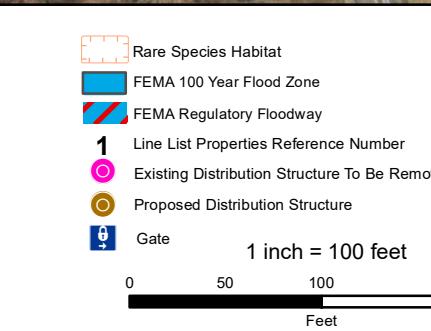
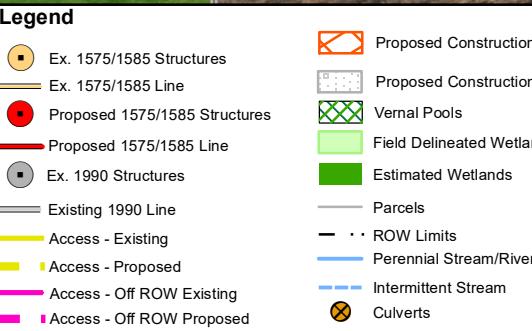
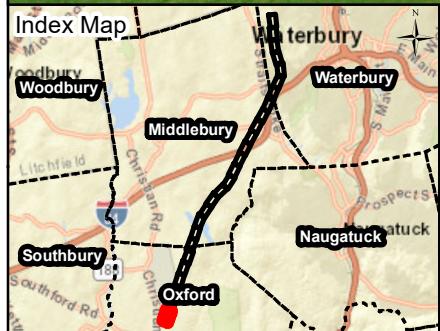
TOWANTIC SWITCHING STATION AND LINE PROJECT

AUGUST 08, 2019
WATERBURY, MIDDLEBURY, & OXFORD, CT
25 OF 26

EVERSOURCE
ENERGY

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





Data Sources:
CAI
GZA
Eversource
CT DEEP
AECOM, Davison
FEMA
Base Map acquired from
ESRI Online.

TOWANTIC SWITCHING STATION AND LINE PROJECT

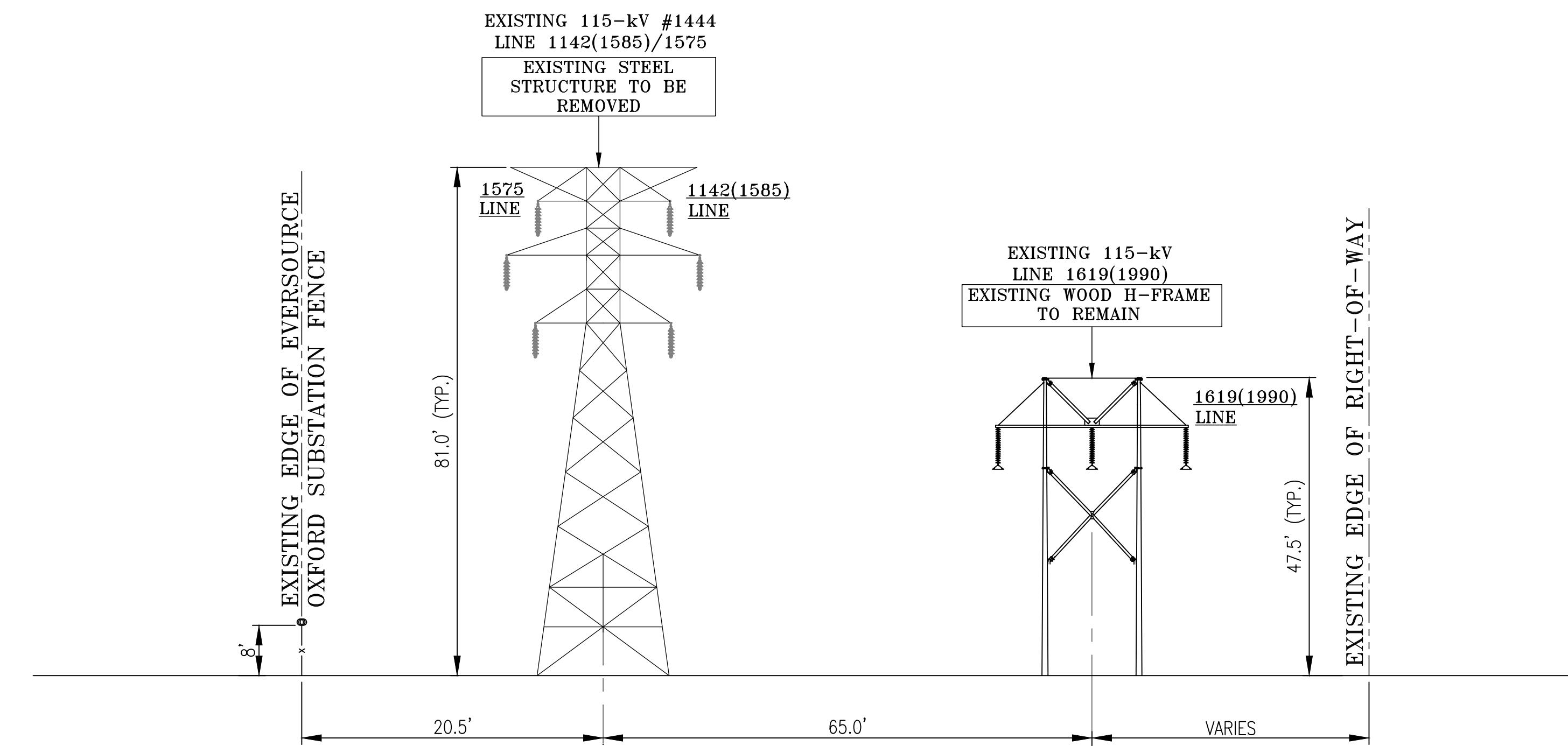
AUGUST 08, 2019
WATERBURY, MIDDLEBURY, & OXFORD, CT
25B OF 26

EVERSOURCE
ENERGY

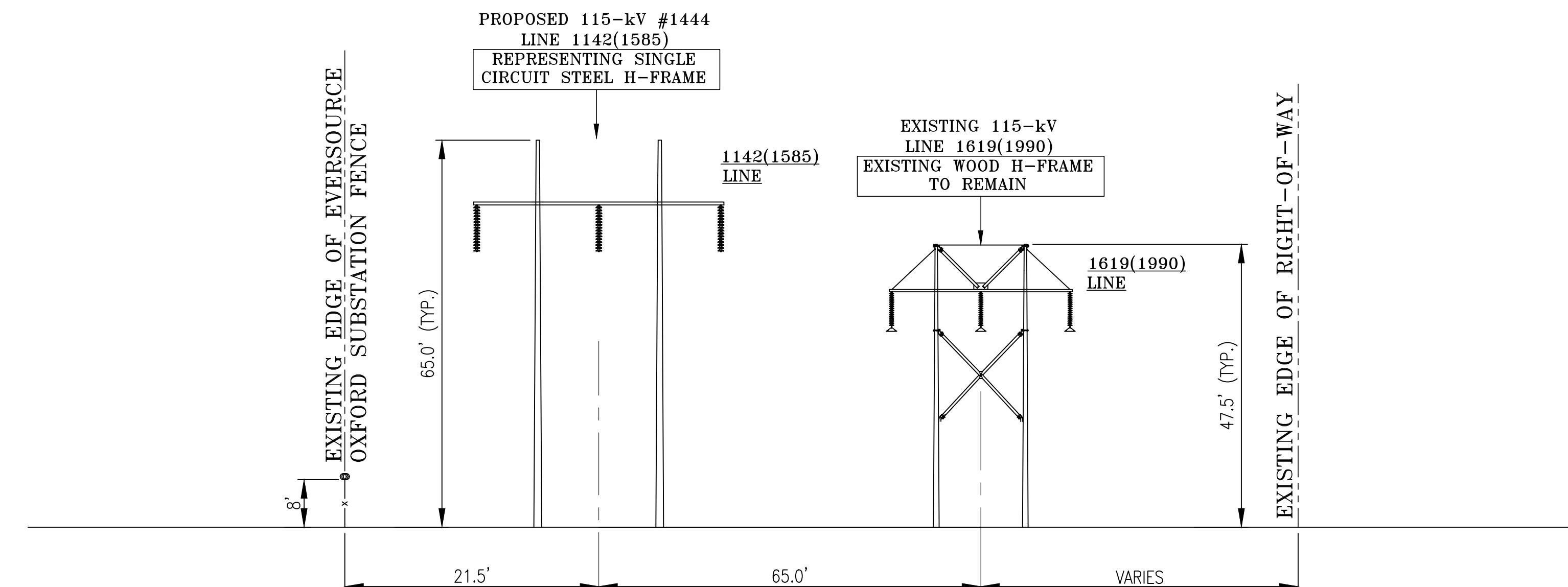
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

Attachment B

Towantic Station Cross Sections

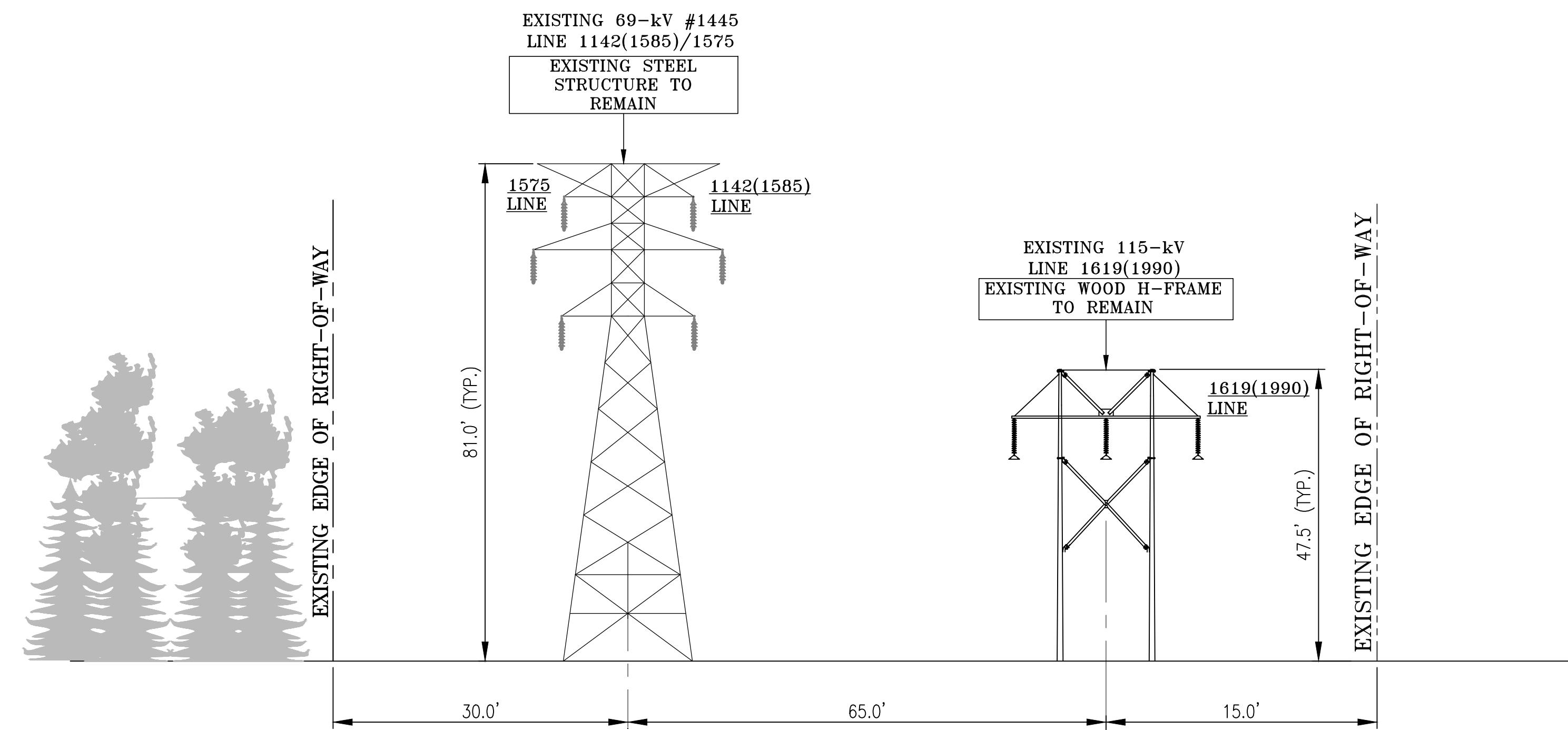


**EXISTING R.O.W. CONFIGURATION
DOUBLE CIRCUIT LATTICE TOWER DESIGN
LOOKING FROM COMMERCE DR NORTH TO TOWANTIC STATION
IN THE TOWN OF OXFORD, CT
0.14 MILES, STR. #1444**

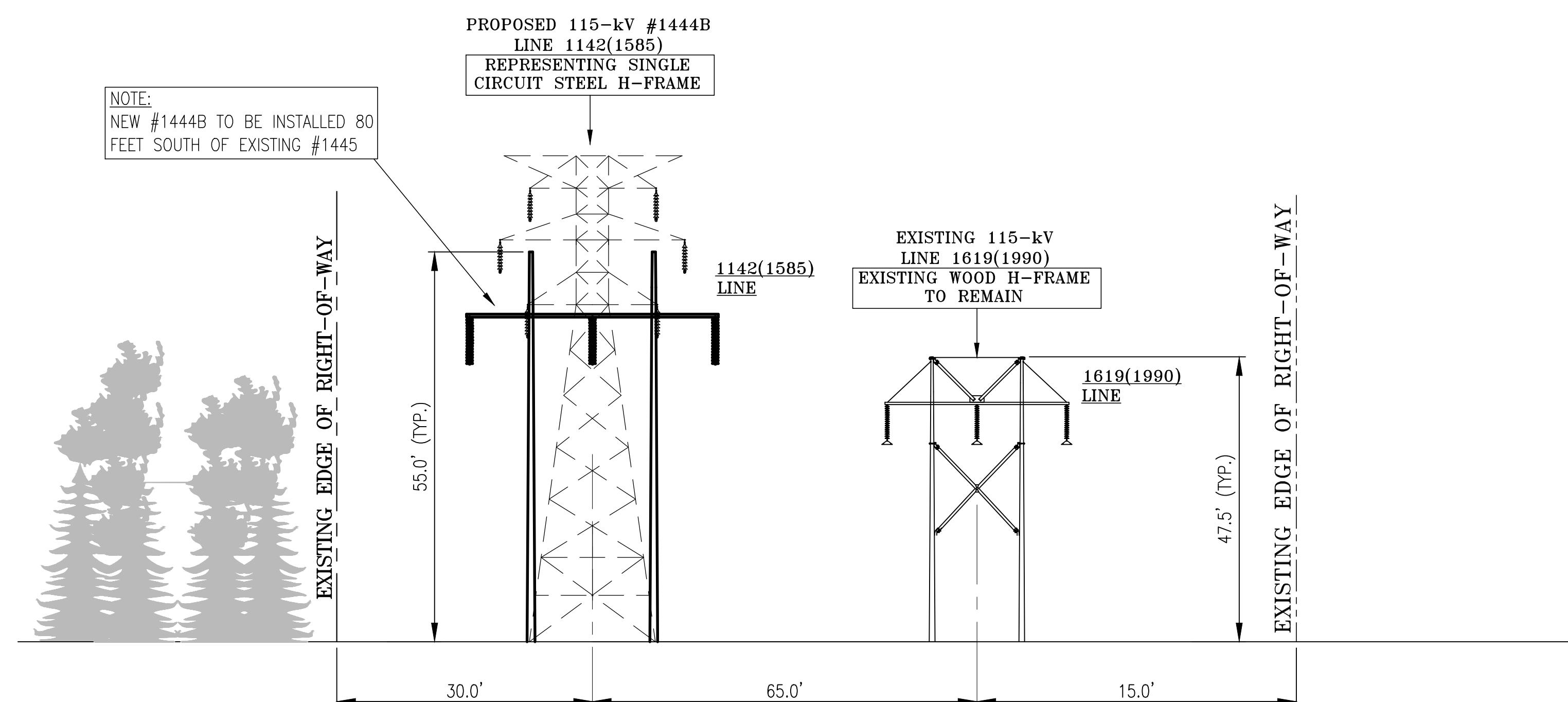


**PROPOSED R.O.W. CONFIGURATION
NO ADDITIONAL RIGHT-OF-WAY REQUIRED
SINGLE CIRCUIT STEEL H-FRAME DESIGN
LOOKING FROM COMMERCE DRIVE NORTH TO TOWANTIC STATION
IN THE TOWN OF OXFORD, CT
0.14 MILES, STR. #1444**

TOWANTIC STATION					
LINE 1575/1142(1585) & 1619(1990) EXISTING/PROPOSED R.O.W. CROSS SECTIONS					
TOWN OF OXFORD, CT					
BY	AMW	CHKD	PRG	APP	DEH
DATE	05/13/19	DATE	05/13/196	DATE	05/13/19
H-SCALE	N.T.S.	SIZE	D	FIELD BOOK & PAGES	
V-SCALE	N.T.S.	V.S.		R.E. DWG	
RE. PROL. NUMBER	XXXXXXX	DWG NO.	01027-85001p001		



EXISTING R.O.W. CONFIGURATION
DOUBLE CIRCUIT LATTICE TOWER DESIGN
LOOKING FROM OXFORD STATION NORTH TO TOWANTIC STATION
IN THE TOWN OF OXFORD, CT
0.08 MILES, STR. #1444B



PROPOSED R.O.W. CONFIGURATION
NO ADDITIONAL RIGHT-OF-WAY REQUIRED
SINGLE CIRCUIT STEEL H-FRAME DESIGN
LOOKING FROM OXFORD STATION NORTH TO TOWANTIC STATION
IN THE TOWN OF OXFORD, CT
0.08 MILES, STR. #1444B

TOWANTIC STATION					
LINE 1575/1142(1585) & 1619(1990)					
EXISTING/PROPOSED R.O.W. CROSS SECTIONS					
BY	AMW	CHKD	PRG	APP	DEH
DATE	05/13/19	DATE	05/13/196	DATE	05/13/19
H-SCALE	N.T.S.	SIZE	D	FIELD BOOK & PAGES	
V-SCALE	N.T.S.	V.S.		R.E. DWG	
RE. PROJ. NUMBER	XXXXXXX	DWG NO.	01027-85001p002		