EVERSOURCE ENERGY

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

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

May 28, 2021

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

Re: Mansfield Substation Expansion Project

Dear Ms. Bachman:

The Connecticut Light and Power Company doing business as Eversource Energy ("Eversource") is requesting a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed modifications to the Mansfield Substation in the Town of Mansfield, Connecticut ("Petition").

Prior to submitting this Petition, Eversource representatives briefed municipal officials about the Project and provided written notice to all abutters of the proposed work and also of the filing of this Petition with the Council. Maps and line lists identifying the notified property owners are provided in the Petition as Attachment B: Mansfield Substation Aerial Map.

Per the Council's instructions in response to COVID-19, Eversource is submitting this filing electronically and will be providing one hard copy for the Council's records. Eversource further understands that the Council will invoice the Company for the requisite $625 filing fee.

Sincerely,

Kathleen M. Shanley
Manager – Transmission Siting

Enclosure

cc: Antonia Moran, Mayor of Mansfield

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
SUBSTATION IN THE TOWN OF MANSFIELD, CONNECTICUT

1. Introduction

The Connecticut Light and Power Company doing business as Eversource Energy ("Eversource") 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 Mansfield Substation (the "Project") that are described herein. 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 proposed Project is to address reliability, aging infrastructure, transformer overloads, voltage, and distribution load serving issues in the Mansfield, Storrs, Stafford, Union, Willington, Ashford, and Rockville areas. The proposed modifications to Eversource's Mansfield Substation ("Substation") will mitigate the identified contingencies and improve reliability of the transmission and distribution system.

3. Project Description

The Project consists of modifications to the Substation located on Eversource's property at 140 North Eagleville Road in Mansfield. The existing Substation is a facility with 69-kV, 27.6-kV, and 13.8-kV equipment. There are two 69-kV transmission lines terminated at the Substation, two 69- to 13.8-kV transformers, one 69- to 27. 6-kV transformer, two 27.6-kV distribution circuits, six 13.8-kV distribution circuits located at the Substation. The proposed project will replace the existing 27.6-kV equipment and associated circuits with new 23-kV equipment and 23-kV circuits. The final proposed configuration will consist of two 69-kV transmission lines terminated at the Substation, two 69- to 13.8-kV transformers, two 115/69-to 23-kV transformers, eight 23-kV distribution circuits, and six 13.8-kV distribution circuits. The proposed modifications to the Substation are shown on Attachment A: Drawing No. 17801-92001 - Mansfield Substation General Arrangement - Plan & Sections - Connecticut Siting Council and Attachment B: Mansfield Substation Aerial Map. Note that new equipment for 69-kV application is being specified with capability for future upgrade to 115-kV.

Detail of the proposed scope of work is as follows:

I. Substation Equipment Removals/Installations

a) Removal of distribution equipment (breakers, disconnect switches, potential transformers, and bus).

b) Replacement of one 69-kV line motor-operated disconnect (MOD) switch with two 115-kV manual group operated disconnect switches.

c) Replacement of two existing transformer MODs with two new 115-kV MODs.

d) Installation of one 115/69- to 23-kV (62. 5MVA) transformer (3x) to replace the existing 69- to-27.6-kV (30 MVA) transformer.[1] Concrete firewalls would be installed on the north and south side of the transformer.

e) Installation of one new 115/69- to 23-kV (62.5MVA) transformer (4x). One concrete firewall would be installed on the east of the side of the transformer.

f) Installation an Imbiber bead oil containment system for the new transformers.

g) Installation of two 115-kV circuit breakers.[2]

[1] The 115/69-23kV transformers initially would be operating at 69- to 23-kV.

[2] The circuit breaker and switchers initially would be operating at 69- to 23-kV.

h) Installation of four 115-kV circuit switchers and associated steel support structures.

i) Installation of distribution 23-kV metal clad switchgear approximately 75 feet long by 24 feet wide by 12 feet high.

j) Installation of a new approximately 40 feet long by 25 feet wide by 14 feet high relay and control enclosure to accommodate the required protections and controls equipment.

k) Installation of underground conduits and cable, foundations, lightning masts, lightning arrestors, steel bus supports, bus connections and structures, distribution feeders, for the equipment listed above.

l) Installation of a temporary 69-kV mobile transformer and circuit switcher for backup support during outages.

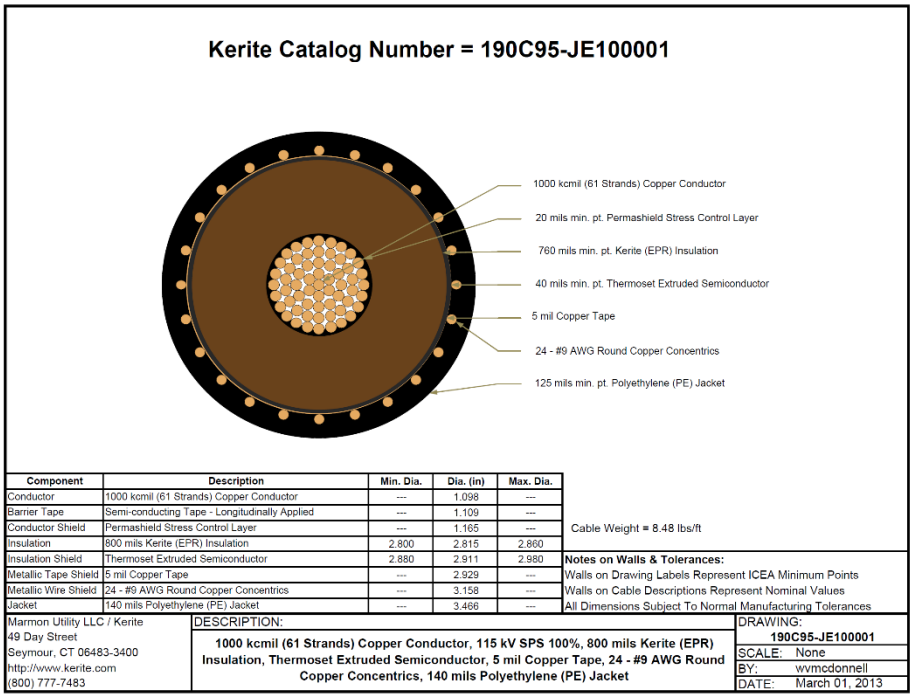
m) Installation of a temporary generator to assist with testing and commissioning.

n) Installation of a 115-kV underground cable:

A single-circuit underground 115-kV line, consisting of three ethylene propylene rubber ("EPR") cables, or phases. Each phase of the circuit will include one 1000-kcmil copper conductor cable insulated to 115-kV with approximately 0. 8 inches of EPR insulation. Each such cable, which will be approximately 3. 5 inches in diameter, will be installed in a separate PVC ("polyvinyl chloride") conduit. Figure 1 provides a cross-section of a typical 1000-kcmil copper conductor EPR 115-kV cable.

The PVC conduits will be encased in concrete to form an approximately 250 feet-long duct bank, and the remainder of the trench backfilled with native soil to efficiently dissipate heat from the cable system. The duct bank will be buried to provide a minimum of 36 inches of cover from the top of the duct bank to the existing surface grade. See Attachment A for the location of the cable within the Substation.

Figure 1 – Typical Cross Section - 1000-kcmil copper conductor EPR 115-kV cable



II. Fence and Retaining Wall

A portion of the existing fence on north and south side of the Substation would be extended to accommodate the new equipment. The length of the replacement fence would be approximately 190 feet and would be extended approximately 130 feet northwest and 60 feet south from the existing fence location. The replacement fence would be similar to the existing fence in height and appearance at 7 feet high with one and a quarter inch mesh and one foot of top-mounted, three-strand barbed wire, except at the location of the northwest corner.[3] A new 20 feet wide access gate would be located along the northeast side of the Substation expansion area. The entirety of the Substation expansion would be on Eversource property.

Two concrete retaining walls would be installed: the first wall, approximately 30 feet long and ranging from approximately 6 inches to 2.5 feet high, located at the southwestern corner and the second, approximately 44 feet long and ranging approximately from 6 inches to 5 feet high (due to grade), located at northwestern corner of the Substation.

[3] The grade on the outside of the substation is higher at the northwest corner. The new fence will be installed on top of a retaining wall. The total height of retaining wall plus the fence would be approximately 11.5 feet high.

For additional safety, guard rails (4.5 feet high) would be installed on top of the retaining walls outside of the expanded fence line. The location of the fence extension and retaining walls are depicted on Attachments A and B.

4. Construction Methods

The Project would be constructed, operated, and maintained in accordance with established industry practices and in accordance with Eversource's 2016 *Best Management Practices Manual for Massachusetts and Connecticut* ("BMPs"). Construction-related vehicular traffic would utilize the existing Substation access. Project-related traffic is expected to be temporary and highly localized in the vicinity of the Substation.

Establishing Staging Area/Laydown Yards

The Project plans to use staging/laydown areas on University of Connecticut ("UCONN") property that abut the Substation.[4] The laydown areas, to be located on the southeast and southwest side of the Substation, will have a temporary construction fence installed as depicted on the Attachment B: Petition Map.

Access to the laydown areas abutting the Substation property will be from North Eagleville Road. The laydown area size, in total, is approximately 39,430 square feet. The Project would require tree removal for these laydown areas: approximately 9 Dogwood, 8 White Pines and 2 Eastern Red Cedar trees.[5] The laydown areas would be used for construction trailers, storing construction materials, equipment, tools, fuel, and supplies. An additional temporary fence will be installed on the southeast and southwest side of the existing Substation fence to define the laydown areas and secure construction equipment.

An additional laydown area would be located near UCONN's Transfer Station and Water Pollution Control Facility (located at 25 LeDoyt Road, Storrs Mansfield), approximately 0.5 mile from the Substation. The exact location of the area is

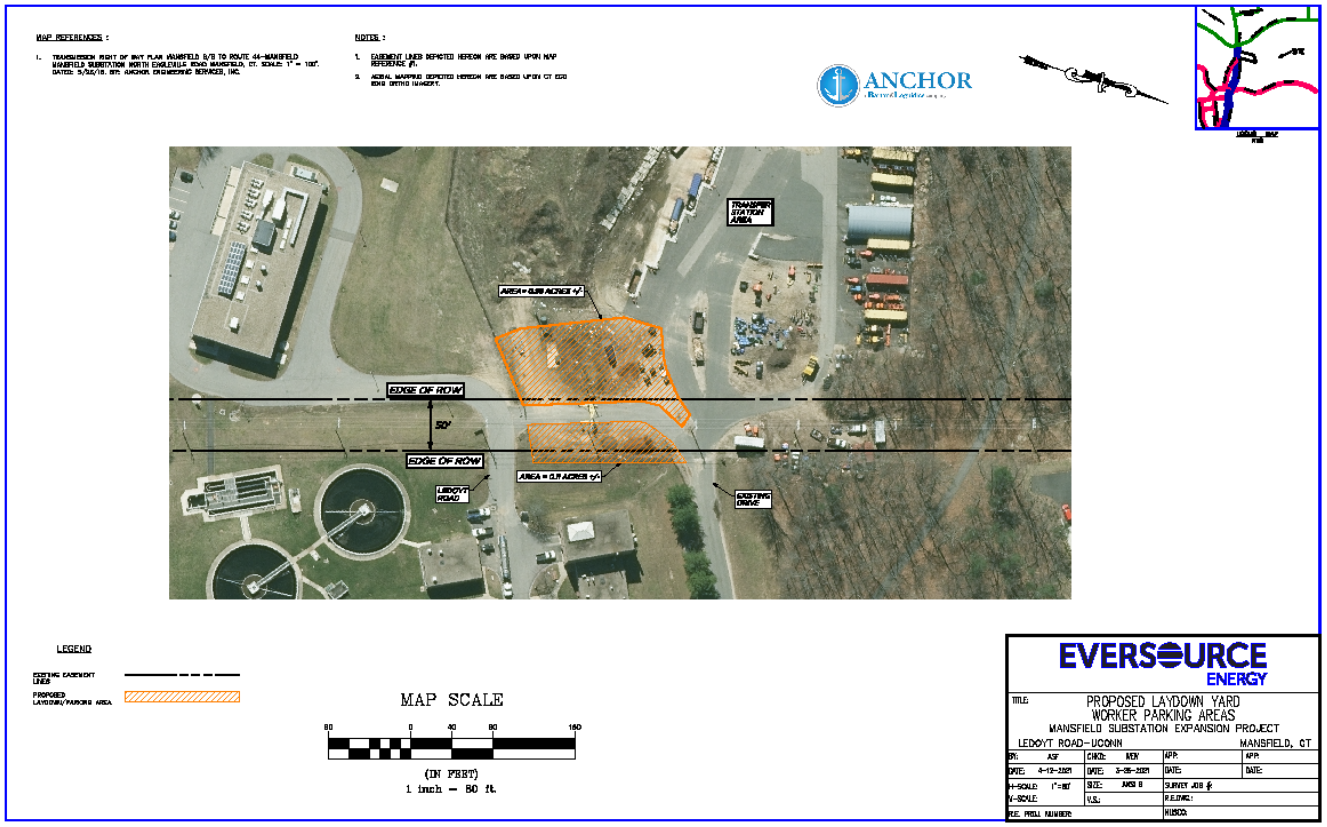
[4] UCONN representatives have orally agreed to the staging areas/laydown areas on its property, a written agreement between Eversource and UCONN is in development.

[5] Eversource is currently corresponding with UCONN on a replanting plan.

depicted on the Figure 2 below. The laydown area is split in two sections, a section on each side of the existing driveway. The total size of this laydown area is approximately 17,590 square feet. This area will be used for vehicle parking and surface material storage.

Erosion and sedimentation controls will be installed at the laydown areas and maintained in accordance with BMPs. Silt fencing would be installed prior to construction to demarcate the line of construction and prevent migration of sediment or construction materials into wetlands.

Figure 2 – Proposed Laydown Yard



Clearing

Some clearing is required to accommodate the Substation expansion. Eversource would clear approximately 6,000 square feet (0.14 acre) of trees and vegetation on Eversource property. In addition, as mentioned above, the Project would require tree removal for the laydown areas abutting the Substation property as described above. No clearing would occur within the wetland resources.

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

Grading

Grading would be required for the proposed extension on south side of the Substation. Fill would be added on the south end of the Substation and earthwork and site grading would be performed to level the expansion area to the existing Substation subgrade elevation.

5. The Project would not have a substantial adverse environmental effect or cause a significant adverse change or alteration in the physical or environmental characteristics because:

a) Radio and Television Interference

There would be no change to the existing television or radio interference at the Substation.

b) Sound Pressure

Sound-pressure levels at all points along properties lines would continue to meet state regulations set out in Regulations of Connecticut State Agencies §§ 22a-69-1 et seq.

c) Substations Appearance

All new equipment would be shorter than the tallest existing structure on Eversource's property. The proposed 69-kV relay and control enclosure would be on the south side of the Substation, parallel with North Eagleville Road and would not result in a significant change in views of the facility.

d) Substation Security Measures and Lighting

The Substation will use the existing lighting and install additional lighting for safety and security purposes. The new 69-kV Control enclosure will be equipped with security cameras and card readers.

e) Environmental Effects

- Eversource's review of the Connecticut Department of Energy and Environmental Protection's ("CT DEEP") Natural Diversity Data Base ("NDDB") did not identify any state-listed endangered, threatened, or special concern species within the Project area. On April 8, 2021, Eversource received a notice of determination from NDDB stating the project would have no anticipated negative impacts to state-listed species.
- The Project will not result in any permanent impacts to wetlands. Eversource will be placing temporary construction matting in the wetland to facilitate construction resulting in 2,400 square feet of temporary wetland impacts. No clearing of wetland vegetation is anticipated. The 100-year flood zone aligns with the road frontage and cuts across the southeast corner of the property slated to be used as a temporary staging /laydown area.
- A cultural (archaeological and historical) resource review of the Project was completed by Heritage Consultants, LLC ("Heritage") on April 8, 2021. Heritage indicated that no adverse impacts to cultural resources are anticipated to occur as a result of the proposed modifications.
- The Project would not affect groundwater or surface water resources or cross any aquifer protection areas. No public supply reservoirs are in the vicinity of the Project. Lastly, the Project would not affect public/private water supply wells.
- Eversource's review of the CT DEEP *Aquifer Protection Areas* map of Mansfield Connecticut indicates the site is not within a designated Aquifer Protection Area. Standard Eversource construction practices of the Project would conform to best management practices for erosion and sediment

control, including those provided in the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control* and the BMPs

- The Project would have approximately one acre of new ground disturbance and, as a result, Eversource will be submitting a Connecticut General Construction Permit for the Discharge of Stormwater to CT DEEP. Eversource will adhere to the conditions of the CT DEEP approved Storm Water Pollution and Control Plan.

- No publicly accessible scenic or recreational resources were identified within the Project area.

- Electric and magnetic field levels at the boundary of the Substation would not change as a result of the modifications.

6. Municipal Outreach

In November 2020 and March 2021, Eversource consulted with the municipal officials in the Town of Mansfield and UCONN representatives to brief them on the proposed Project. Eversource also provided representatives of the Town of Mansfield and UCONN representatives with written notice of the Petition filing. In conjunction with the submission of the Petition, all abutting property owners were notified of the filing and provided information on how to submit comments to the Council and how to obtain additional information on the Project. In addition, Eversource representatives will contact adjacent property owners via mail to notify them of the start of construction activities. Project representatives will also be available throughout the construction process to address any specific questions or concerns regarding Project or restoration activities.

7. Construction Schedule and Work Hours

Eversource proposes to begin construction in September 2021 and complete construction and restoration by the end of June 2024. The proposed construction hours are Monday through Saturday, 7:00 a.m. to 7:00 p.m. Sunday hours may be necessary due to unforeseen conditions such as inclement weather, or outage constraints. In addition, extended hours after 7:00 p.m. may be necessary from Monday through Saturday to complete necessary test and commissioning (quiet work activities) within the Substation during a scheduled outage.

8. Conclusion

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.

9. 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: _____

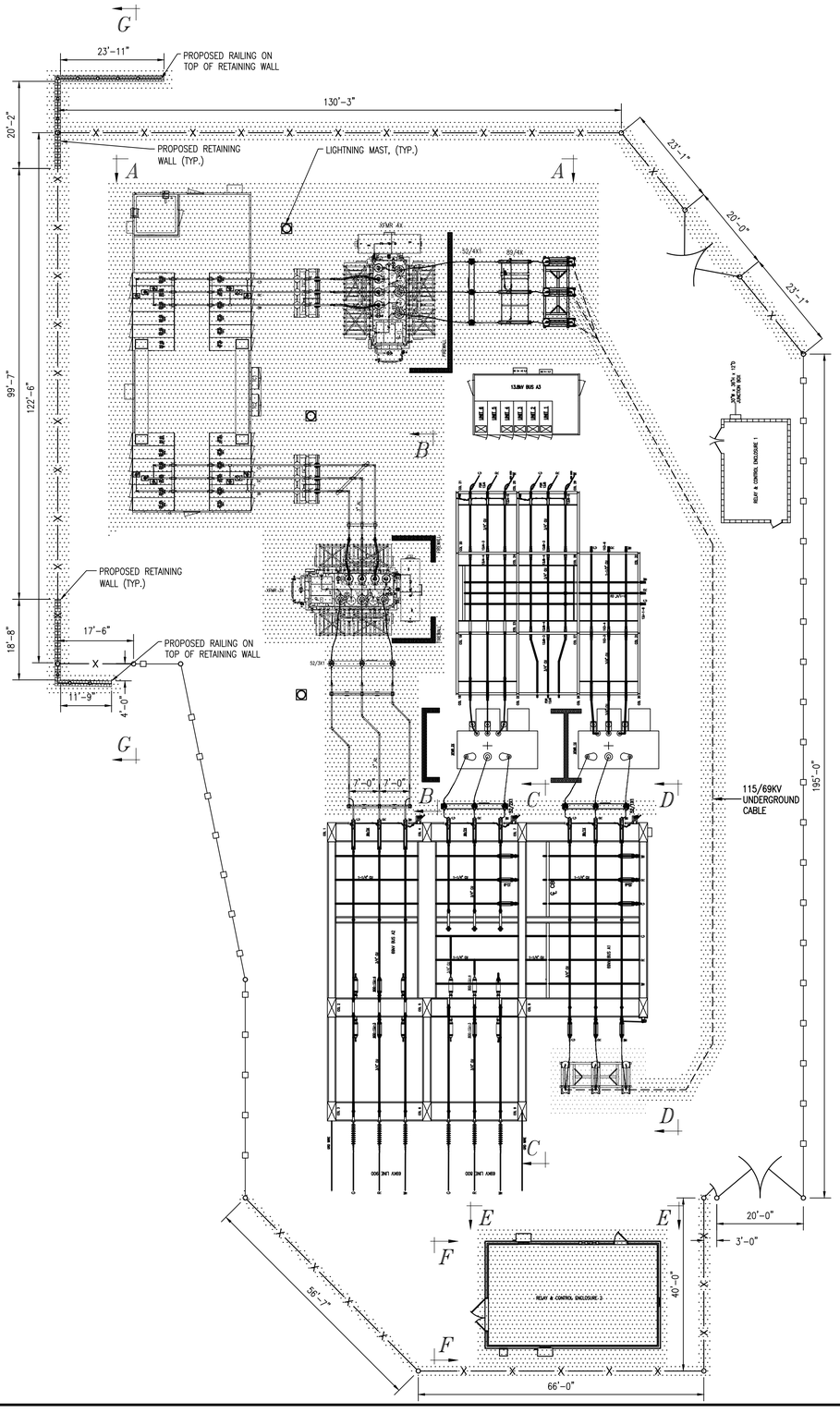
Kathleen M. Shanley
Manager – Transmission Siting

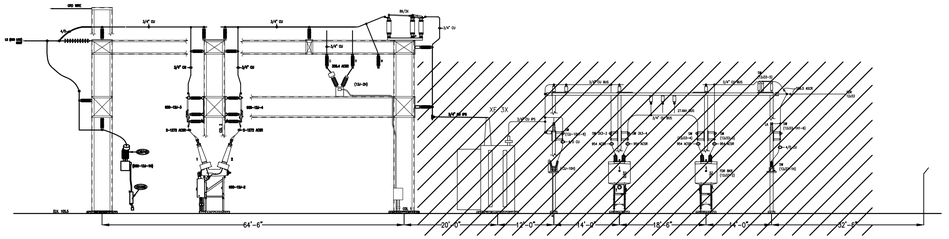
List of Attachments

Attachment A: Drawing No. 17801-92001 - Mansfield Substation General Arrangement - Plan & Sections - Connecticut Siting Council
Attachment B: Mansfield Substation Aerial Map
Attachment C: Letter to the Abutters and Affidavit

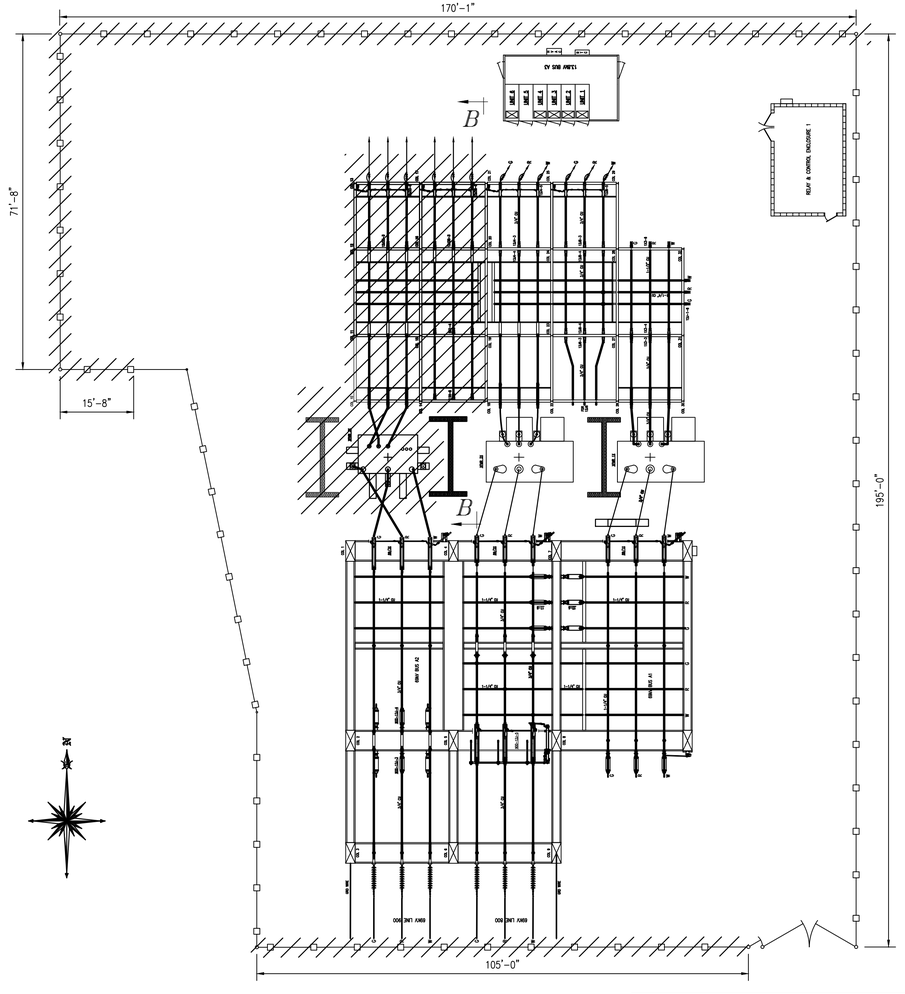
ATTACHMENT A

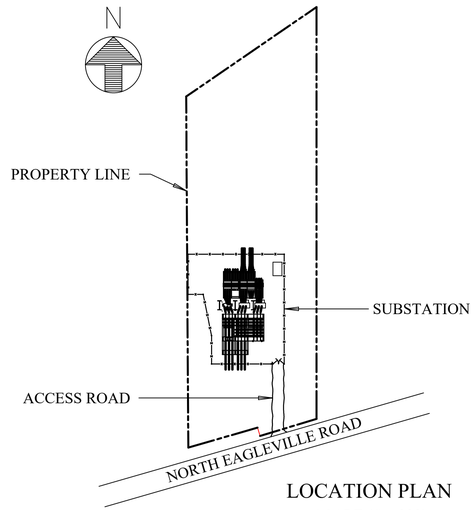
ES VER: 05/2015





SECTION B-B





LOCATION PLAN
SCALE 1" = 200'

PLAN VIEW

0 8' 16' 32'
SCALE IN FEET

EXISTING SUBSTATION FENCE

EXPANDED SUBSTATION FENCE

PROPOSED REMOVAL

PROPOSED ADDITION

NO.	DATE	AS BUILT REVISIONS	BY	CHK	APP	APP

REVISIONS DURING CONSTRUCTION

EVERSOURCE ENERGY

TITLE
MANSFIELD 12J
GENERAL ARRANGEMENT – PLAN
CONNECTICUT SITING COUNCIL
MANSFIELD, CT

BY KPK	CHKD JR/KPK	APP JR	APP PSM		
DATE 8/88	DATE 8/88	DATE 8/88	DATE 8/88		
H-SCALE 1/16" = 1' - 0"	SIZE D	FIELD BOOK & PAGES			
V-SCALE	V.S.	R.E. DWG			
R.E. PROJ. NUMBER		DWG NO. 17801-92001 PG 1			

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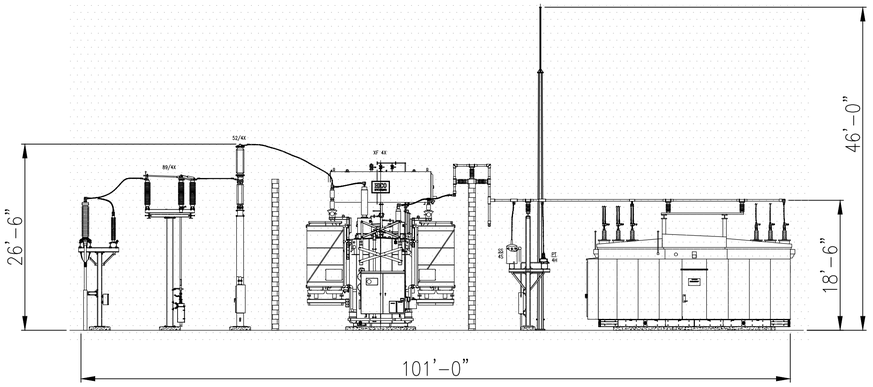
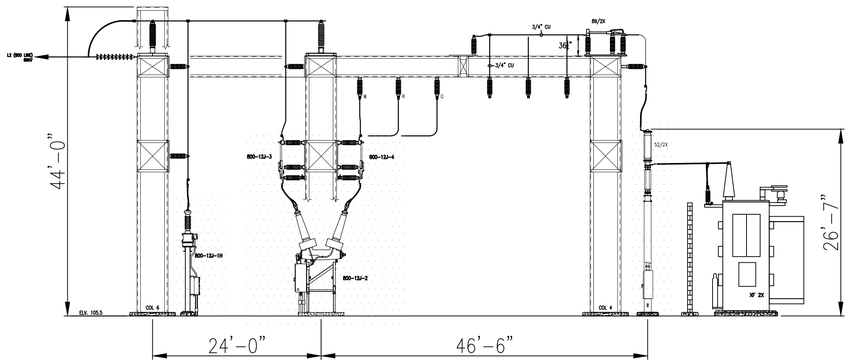
ES VER: 05/2015



SECTION A-A

3/32" = 1'-0"



SECTION C-C

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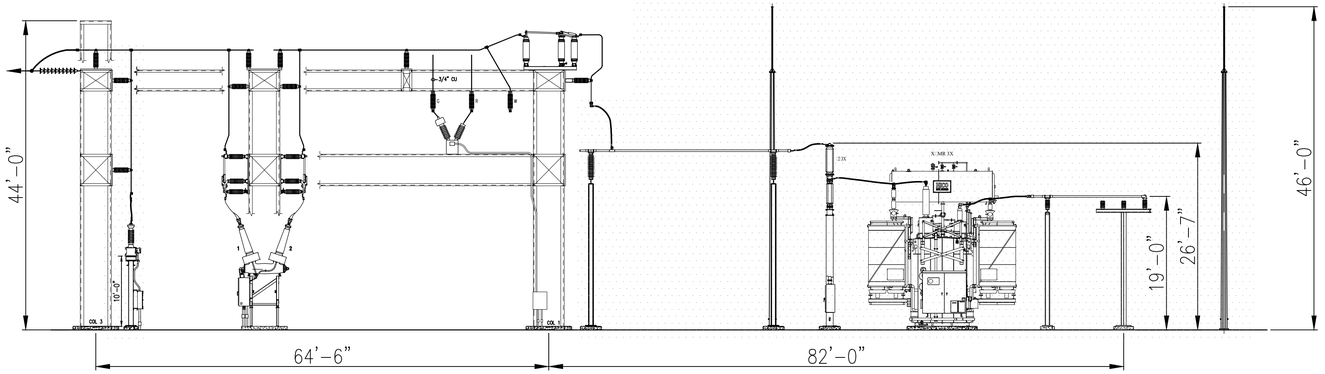

SECTION B-B

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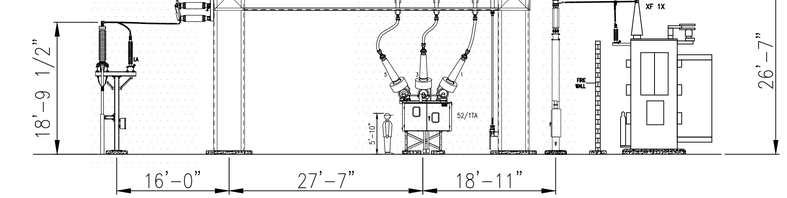

SECTION D-D

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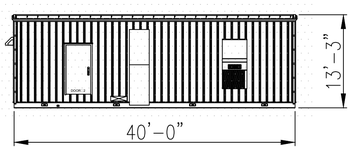
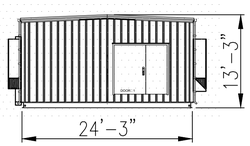


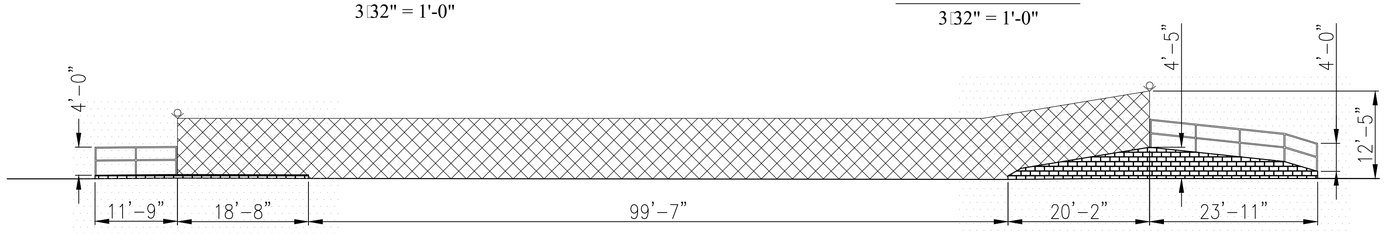
SECTION E-E

3/32" = 1'-0"



SECTION □-□

3/32" = 1'-0"



SECTION G-G

3/32" = 1'-0"

PROPOSED ADDITION

REVISIONS DURING CONSTRUCTION

NO.	DATE	AS BUILT REVISIONS	BY	CHK	APP	APP

EVERSOURCE ENERGY

TITLE

MANSFIELD 12J

GENERAL ARRANGEMENT – SECTIONS

CONNECTICUT SITING COUNCIL

MANSFIELD, CT

BY	KPK	CHKD	JR/KPK	APP	JR	APP	PSM
DATE	8/88	DATE	8/88	DATE	8/88	DATE	8/88
H-SCALE	N.T.S.	SIZE	D	FIELD BOOK & PAGES			
V-SCALE	N.T.S.	V.S.		R.E. DWG			
R.E. PROJ. NUMBER				DWG NO.	17801-92001 PG 2		

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ATTACHMENT B

MAP REFERENCES :

1. TRANSMISSION RIGHT OF WAY PLAN MANSFIELD S/S TO ROUTE 44–MANSFIELD MANSFIELD SUBSTATION NORTH EAGLEVILLE ROAD MANSFIELD, CT. SCALE: 1" = 100'. DATED: 5/26/16. BY: ANCHOR ENGINEERING SERVICES, INC.
2. MANSFIELD SUBSTATION EXPANSION PROJECT MANSFIELD, CT. SCALE: 1" = 50'. DATED: JUNE 2020. BY: ALL POINTS TECHNOLOGY CORPORATION. SHEET 1 OF 1.

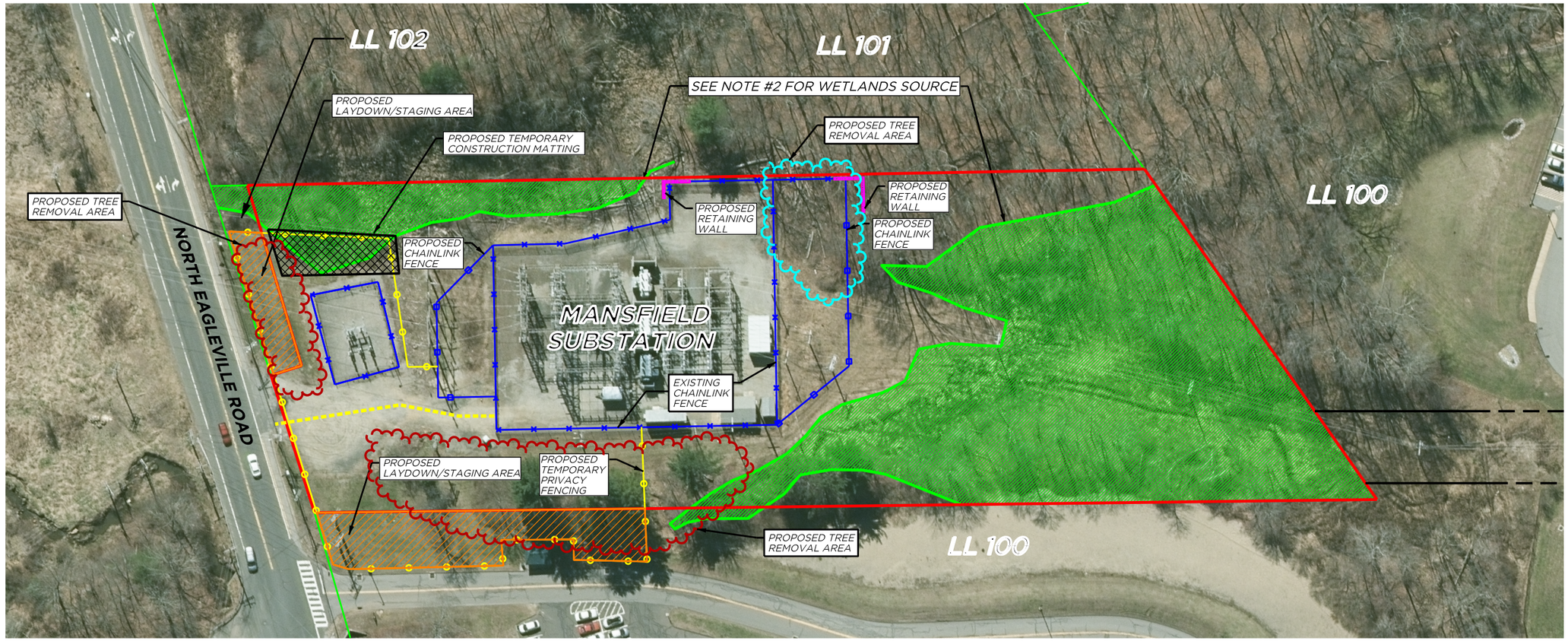
NOTES :

1. PROPERTY LINES DEPICTED HEREON ARE BASED UPON MAP REFERENCE #1.
2. WETLANDS DEPICTED HEREON ARE BASED UPON FIELD LOCATION JUNE 2020 AND MAP REFERENCE #2.
3. AERIAL MAPPING DEPICTED HEREON ARE BASED UPON CT ECO 2019 ORTHO IMAGERY.
4. PARCEL OWNED BY STATE OF CONNECTICUT DOES NOT HAVE ASSOCIATED PARCEL ID ON TOWN OF MANSIFIELD GIS ONLINE PROEPRTY INFORMATION WEBSITE

ANCHOR
a Barton&Loguidice company

NAD 83 GRID

LOCUS MAP
NTS



LEGEND

- CL&P dba EVERSOURCE OWNED PROPERTY
- PARCEL BOUNDARY
- STATE WETLAND DELINEATION LINE
- ACCESS–EXISTING
- EXISTING CHAINLINK FENCE
- PROPOSED CHAINLINK FENCE
- PROPOSED TEMPORARY PRIVACY FENCE
- PROPOSED RETAINING WALL
- PROPOSED LAYDOWN/STAGING AREA
- PROPOSED TEMPORARY CONSTRUCTION MATTING
- PERMANENTLY REMOVED TREES
- REMOVED TREES TO BE REPLACED UPON PROJECT COMPLETION

MAP SCALE

80 0 40 80 160

(IN FEET)
1 inch = 80 ft.

EVERSOURCE ENERGY

TITLE: MANSFIELD SUBSTATION AERIAL MAP MANSFIELD SUBSTATION EXPANSION PROJECT 140 NORTH EAGLEVILLE ROAD MANSFIELD, CT			
BY: ASF	CHKD: WEW	APP:	APP:
DATE: 4-12-2021	DATE: 11-23-2020	DATE:	DATE:
H-SCALE: 1"=80'	SIZE: ANSI B	SURVEY JOB #:	S22362
V-SCALE:	V.S.:	R.E.DWG.:	
R.E. PROJ. NUMBER:	077-03.086	NUSCO:	24112

Line List	Owners Name, First	Owners Name, Last	Site Address
LL 100	UNIVERSITY OF CONNECTICUT		NORTH EAGLEVILLE ROAD
LL 101	K. SHAH	SATARI	80 HUNTING LODGE ROAD
LL 102	STATE OF CONNECTICUT	DEPARTMENT OF TRANSPORTATION	NORTH EAGLEVILLE ROAD

ATTACHMENT C

AFFIDAVIT OF SERVICE OF NOTICE

STATE OF CONNECTICUT)
) ss. Berlin
COUNTY OF HARTFORD)

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. 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 upon the following municipal official:

Municipal Official:

Honorable Antonia Moran
Mayor of Mansfield
4 South Eagleville Road
Mansfield, CT 06268

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

Helen Taylor
Project Siting Specialist

On this the 27th day of May, 2021, before me, the undersigned representative, personally appeared, Helen Taylor, 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.

Officer of the Superior Court
Juris No. 4133193

EVERSOURCE

P.O. Box 270
Hartford, CT 06141-0270

May 27, 2021

Dear Neighbor,

Maintaining infrastructure is one of the many ways Eversource supports the safe and secure transmission of electricity throughout the region. We are submitting a petition to the Connecticut Siting Council (CSC) for a proposed substation improvement project in your area.

Proposed Project Information

The proposed project consists of modifications to the Mansfield Substation located on Eversource property at 140 North Eagleville Road in Mansfield, CT. Substation equipment upgrades include removal and replacement of transformers and associated equipment, as well as the addition of a new transformer, circuit breakers and switchgear.

In addition to the equipment modifications, Eversource is proposing to extend the fence line to the north and south of the substation to accommodate new equipment. Two concrete retaining walls will also be installed in the north-west corner of the yard. All work will be conducted on Eversource property, with some laydown areas on University of Connecticut property.

This proposed work is necessary to ensure the continued reliability, safety and security of the transmission of electricity throughout the region. If the CSC approves the proposed work, construction is expected to begin in the Fall of 2021 and conclude by the Summer 2024, including restoration of any affected areas.

Contact Information

Eversource is committed to being a good neighbor and doing our work with respect for you and your property. For more information please call our project hotline at 1-800-793-2202 or send an email to ProjectInfo@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 or send a letter to the following address: Melanie Bachman, Executive Director, Connecticut Siting Council, Ten Franklin Square, New Britain, CT 06051.

Sincerely,

Jeremy Tremper

Jeremy Tremper
Eversource Project Manager – Mansfield Substation Project