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Hartford, CT 06103

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January 8, 2021

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

RE: The Connecticut Light and Power Company's Notice of Exempt Modification Pursuant to RCSA § 16-50j-57(a)(1) to Existing Energy Facility Site at 272-276 East Main Street in the Town of Branford, Connecticut ("Notice of Exempt Modification")

Dear Ms. Bachman:

The Connecticut Light and Power Company doing business as Eversource Energy ("Eversource") hereby gives notice to the Connecticut Siting Council ("Council") of its intent to undertake an exempt modification in accordance with Section 16-50j-57(a) of the Regulations of Connecticut State Agencies ("RCSA") for the modifications to Eversource's Branford Substation described herein.

### **Proposed Modifications**

The proposed modifications would take place on Eversource property at Branford 11J Substation ("Substation") located at 272-276 East Main Street in Branford. The Substation is a 115/23-kV facility with three (3) 115-kV incoming transmission lines, two (2) 115- to 23-kV transformers, one (1) 115-kV capacitor bank, and six (6) 23-kV feeders that exit the facility. The facility also has one (1) 21.875-MVA combustion turbine generator that is owned by NRG and connected to the Eversource system by one (1) 13.8- to 23-kV transformer.

Eversource proposes to replace and upgrade the existing 115-kV A3 bus section with a new 115-kV cable. The existing cable, which is a self-contained fluid filled design manufactured in 1981, is operating beyond its useful life expectancy and is obsolete technology that cannot be replaced in-kind. To mitigate the risk of a future failure due to aging, and alleviate the need to undertake an emergency replacement of the cable, the existing cable will be replaced with current, available technology (cross linked polyethylene of XLPE) as part of Eversource's on-going commitment to maintain system reliability. The 115-kV bus and existing telecommunications conduit will be reconfigured to accommodate the new 115-kV A3 underground cable route. Existing 23-kV equipment and conductors will also be reconfigured or replaced to accommodate the new 115-kV A3 cable.

Specifically, Eversource proposes the following modifications:

Removals:

- Approximately 310 feet of three-phase, single-conductor, 115-kV underground, direct buried cable.
- Two (2) 115-kV cable terminator structures with arresters.
- The existing 115-kV 3T-6 disconnect switch and associated bus.
- Two (2) existing 115-kV structures currently being used to support the three-phase bus.
- Two (2) three-phase bus supports and associated bus.
- Approximately 500 feet of 23-kV overhead three-phase distribution lines including four (4) distribution poles connecting the - substation to the 10X power plant step-up transformer.
- The existing 23-kV 10X1-4 disconnect switch located on the existing distribution pole #2 will be removed and relocated.
- Existing 23-kV metering equipment will be removed from pole #6 and relocated.
- Approximately 170 feet of below grade telecommunication conduit.

Additions:

- One (1) new three-phase, two-conductor per phase, 115-kV below grade duct bank will be installed for the new 115kV bus section between the new 115-kV terminator structures with an approximate length of 520'.
- Two (2) new 115-kV cable terminator structures with arresters.
- One (1) new 115-kV 3T-4 disconnect switch.
- Two (2) new 115-kV structures to be used as three-phase bus supports.
- Five (5) new 115-kV three-phase bus supports and four (4) new 115-kV single-phase bus supports.
- Approximately 200 feet of three-phase overhead conductors comprising of 4 inch AL pipe and 1590 ACSR wire.
- One (1) new 23-kV structure will be installed near the location of pole #6. The structure will support the relocated 23-kV 10X1-4 disconnect switch, relocated 23-kV NRG metering equipment, new 23-kV metering equipment and above grade conductors to reconnect the 10X power plant step-up transformer.
- One (1) new lightning mast with a 70 foot overall height.
- Approximately 210 feet of below grade telecommunication conduit.

The existing substation arrangement with the proposed modifications are shown in Attachment A, Drawing No 11401-92001 – Branford 11J – General Arrangement – Plan & Sections – CSC.

The proposed modifications would not have a substantial adverse environmental effect or cause a significant adverse change or alteration in the physical or environmental characteristics of the Substation because:

- All modifications would be made within the Substation's existing fenced area.
- All new equipment would be shorter than the tallest existing equipment within the Substation and would not cause any significant adverse change in the physical or environmental characteristics of the Substation.
- The work would not affect wetlands or waterways. Except for a small portion of the southeast corner, the substation is in a FEMA zone designated as AE – Base Floodplain.
- Eversource's review of the Connecticut Department of Energy and Environmental Protection's Natural Diversity Data Base (CT DEEP NDDB) identified no state-listed endangered, threatened, or special concern species on or immediately adjacent to the substation property. There are no known occurrences or records of any state-listed endangered, threatened or special species of concern on the substation property. Downstream of the substation, south of East Main Street (Rte. 1.), is a tidal marsh that is mapped as CTDEEP NDDB Critical Habitat.
- There would be no television or radio interference caused by the modifications.
- Sound-pressure levels at all points along the property line would continue to comply with state regulations.
- Electric and magnetic field levels at the Substation boundary would not change as a result of the modifications.

Eversource proposes to commence construction in March 2021. Work is scheduled to be completed by December 2021.

Per the Council's instructions, at this time Eversource is not including the required filing fee of \$625 and understands that the Council will invoice the Company for this amount at a later date.

A notice has been provided to the First Selectman of Branford.

Communications regarding this Notice of Exempt Modification should be directed to Kathleen M. Shanley at (860) 728-4527.

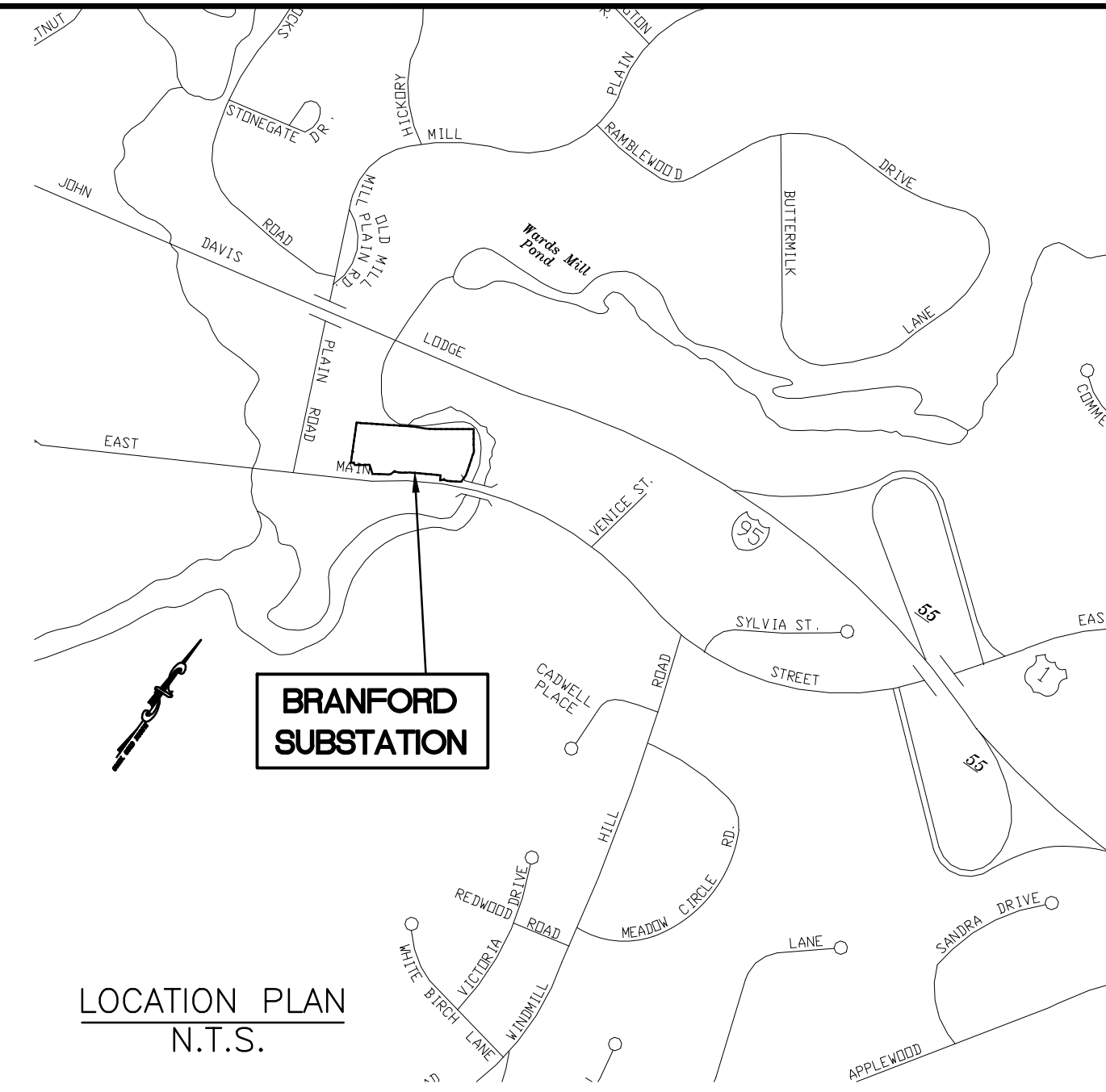
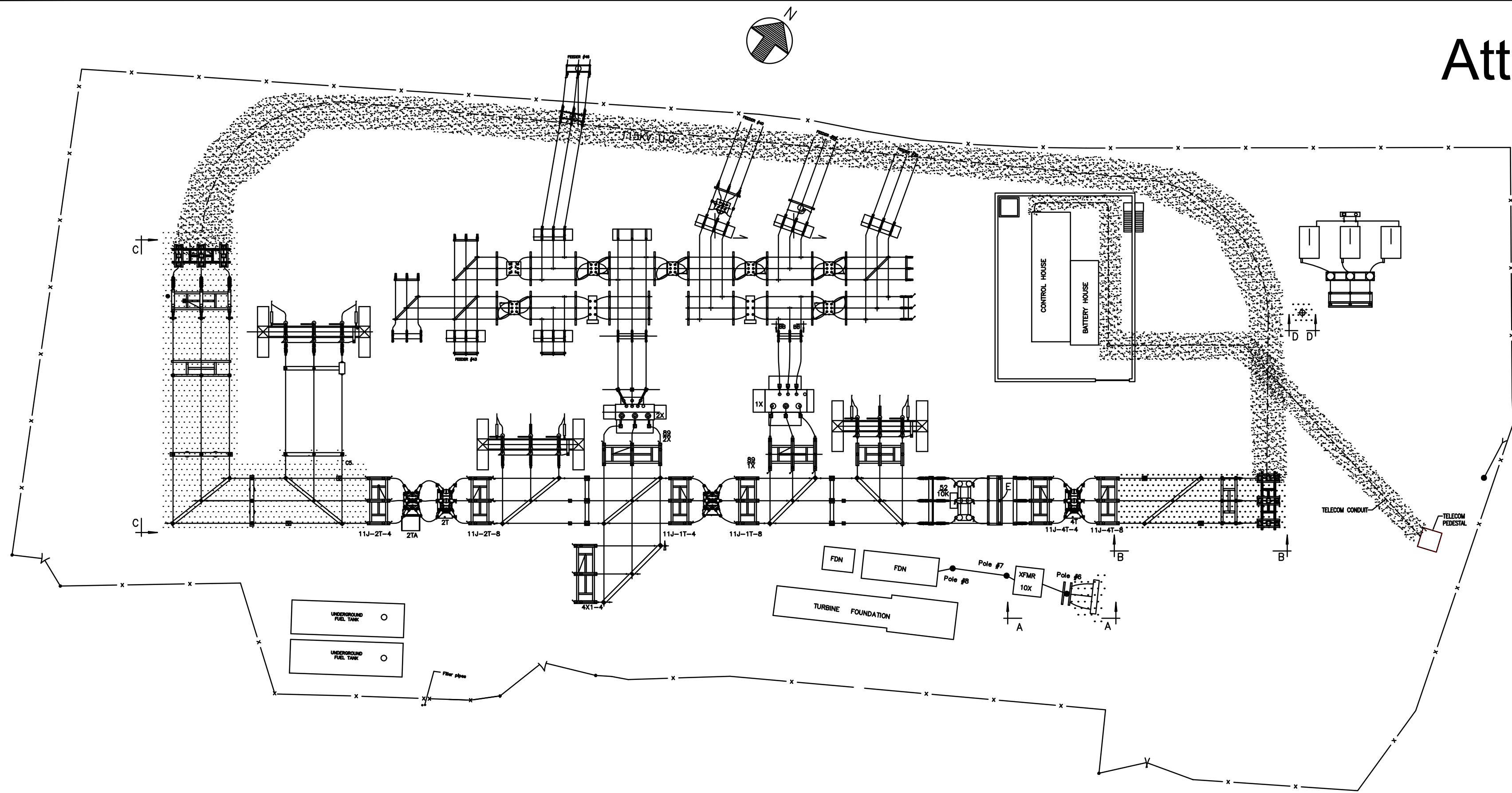


By:

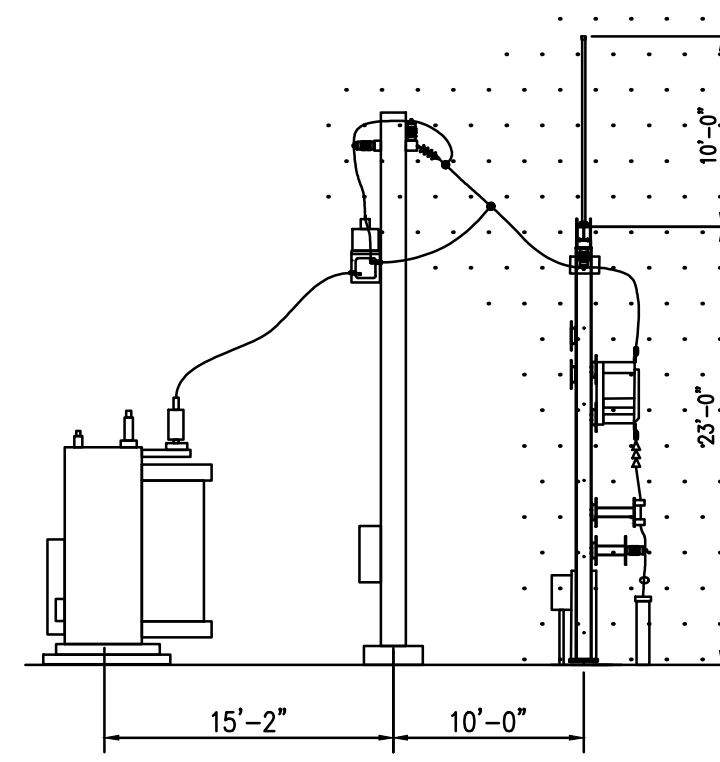
Kathleen M. Shanley  
Manager – Transmission Siting

Cc: James Cosgrove, Town of Branford, First Selectman

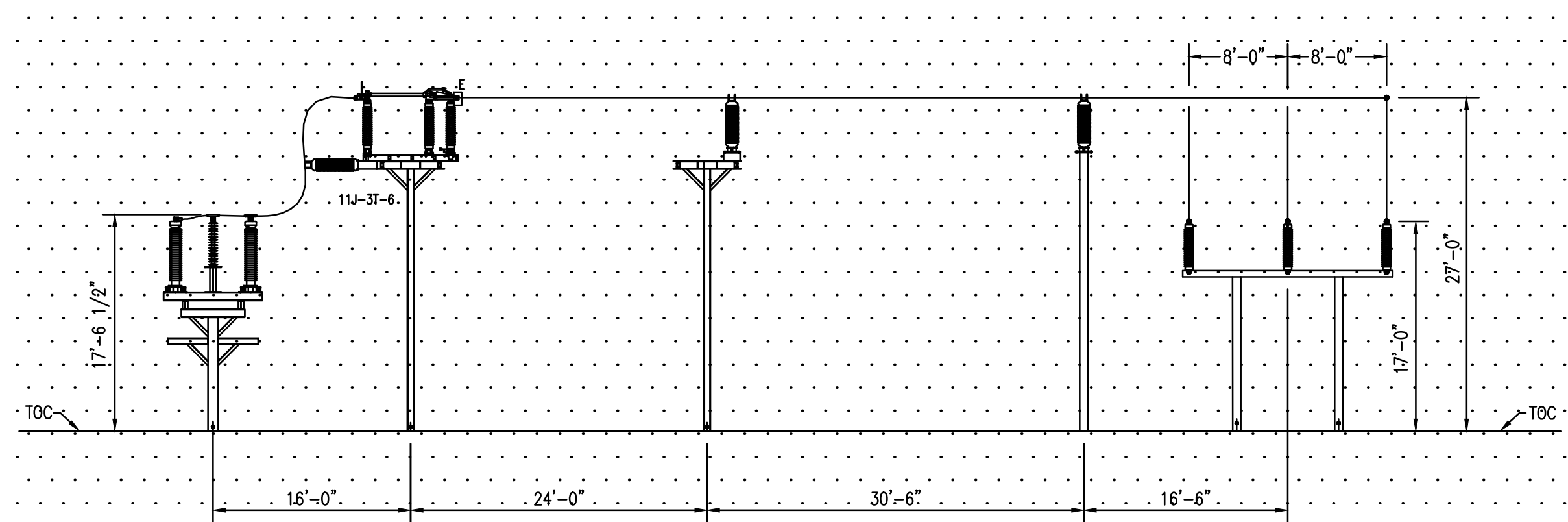
# Attachment A



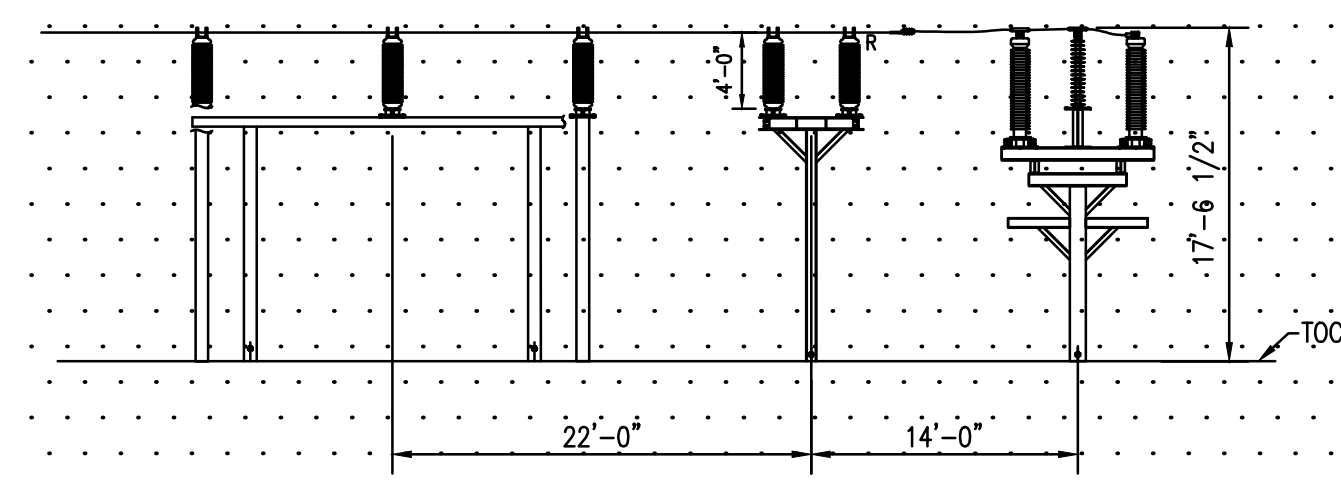
LOCATION PLAN  
N.T.S.



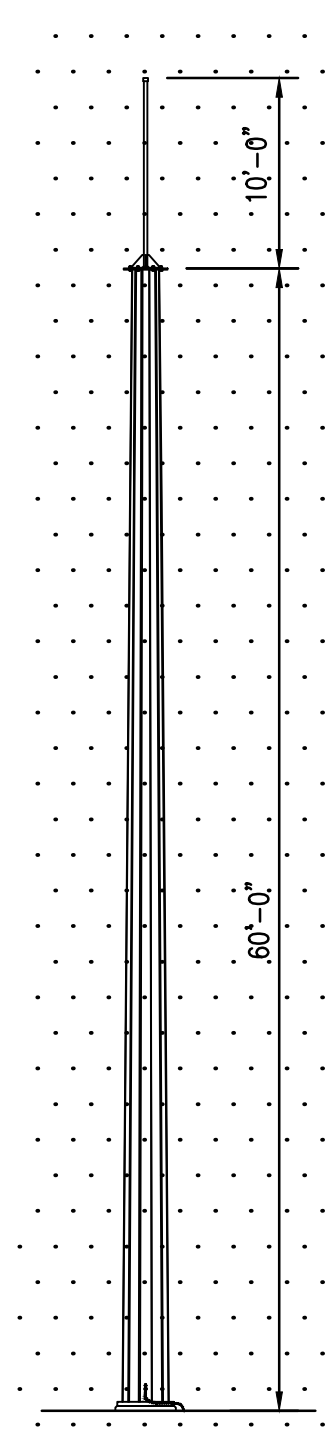
SECTION "A-A" (23kV)  
N.T.S.



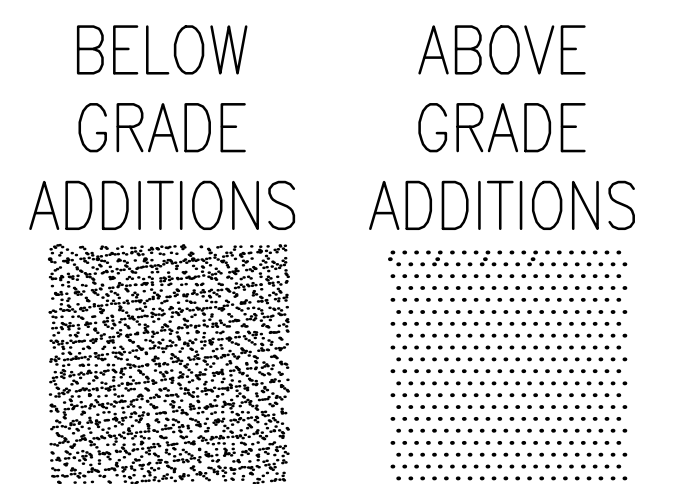
SECTION "C-C" (115kV)  
N.T.S.



SECTION "B-B" (115kV)  
N.T.S.



SECTION "D-D" (23kV)  
N.T.S.



NOT TO SCALE

## REV AV ADDITIONS

REVISIONS DURING CONSTRUCTION						
AV	DATE	DESCRIPTION	R/J	REC	DKH	
AV	12/20	115KV U.G. CABLE REPLACEMENT PROJECT BY CAI W/O #TMC84801				

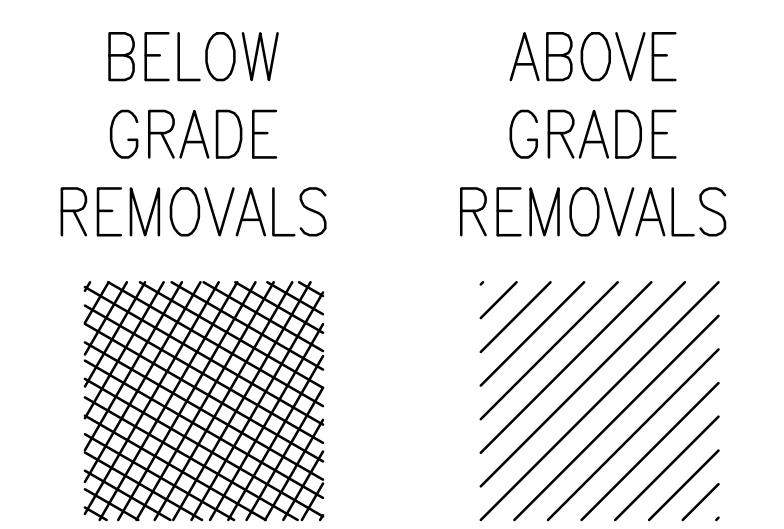
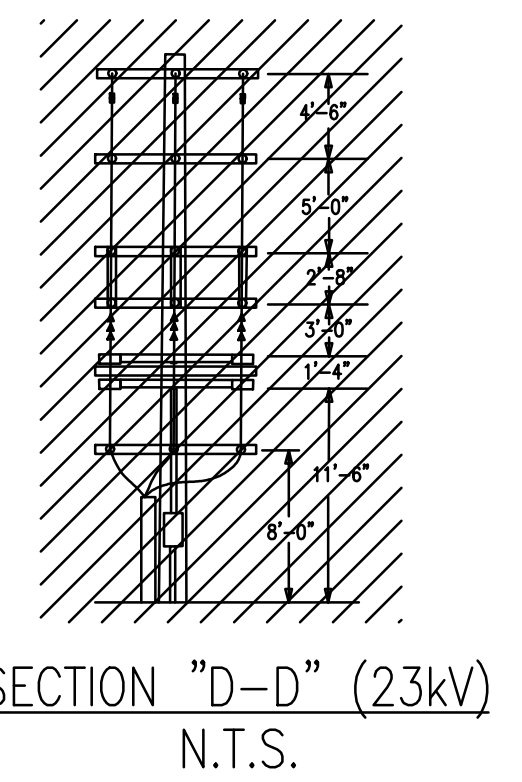
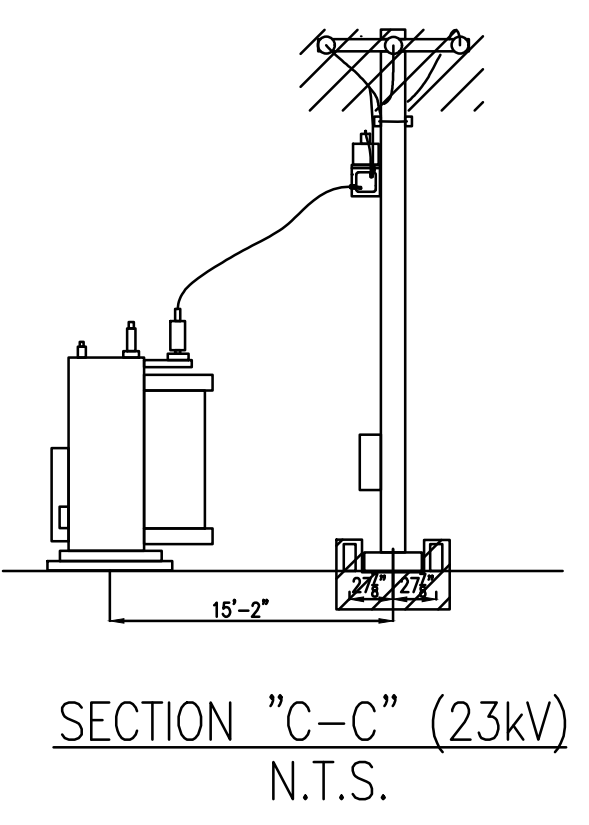
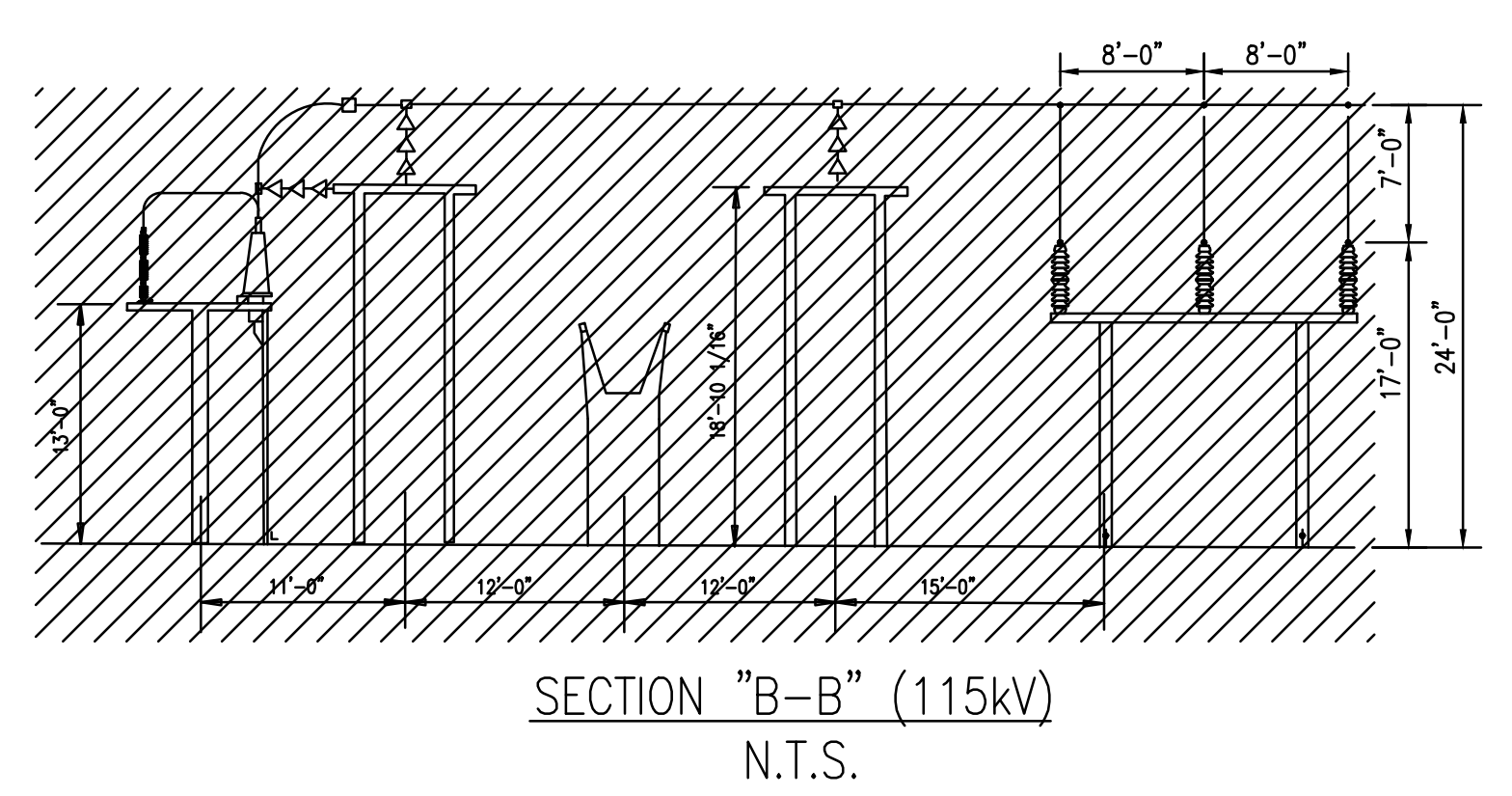
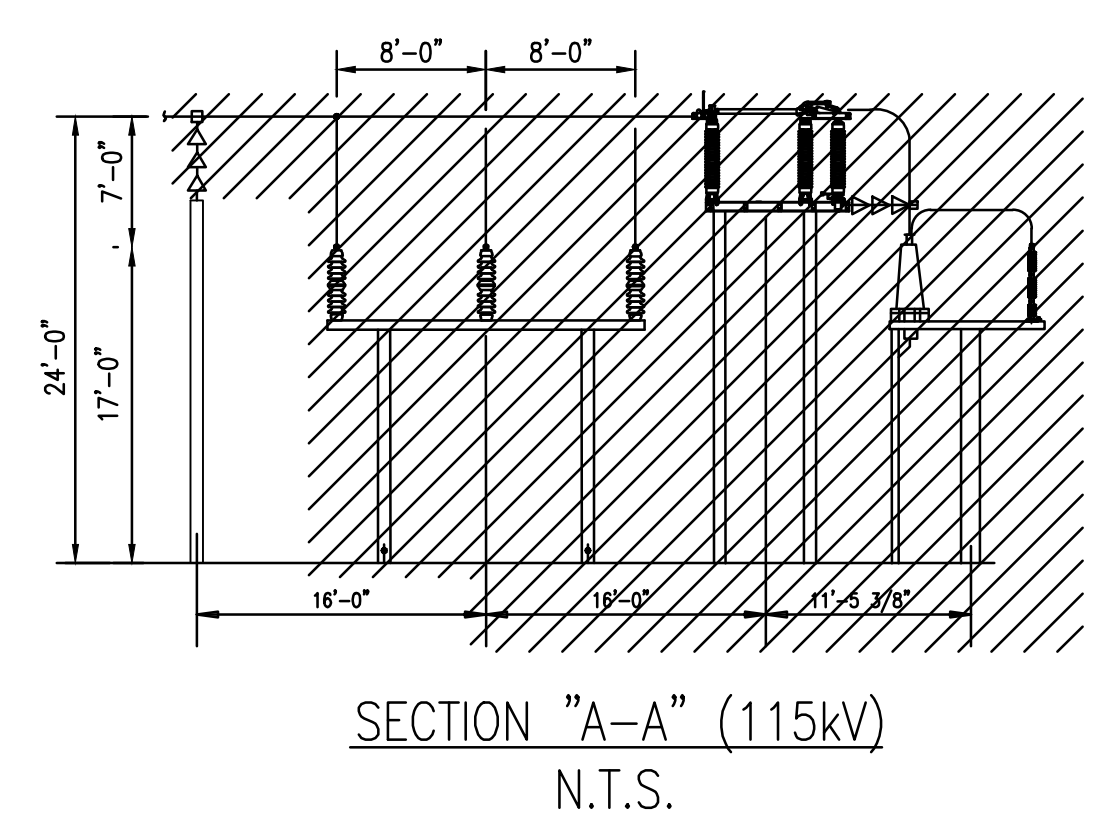
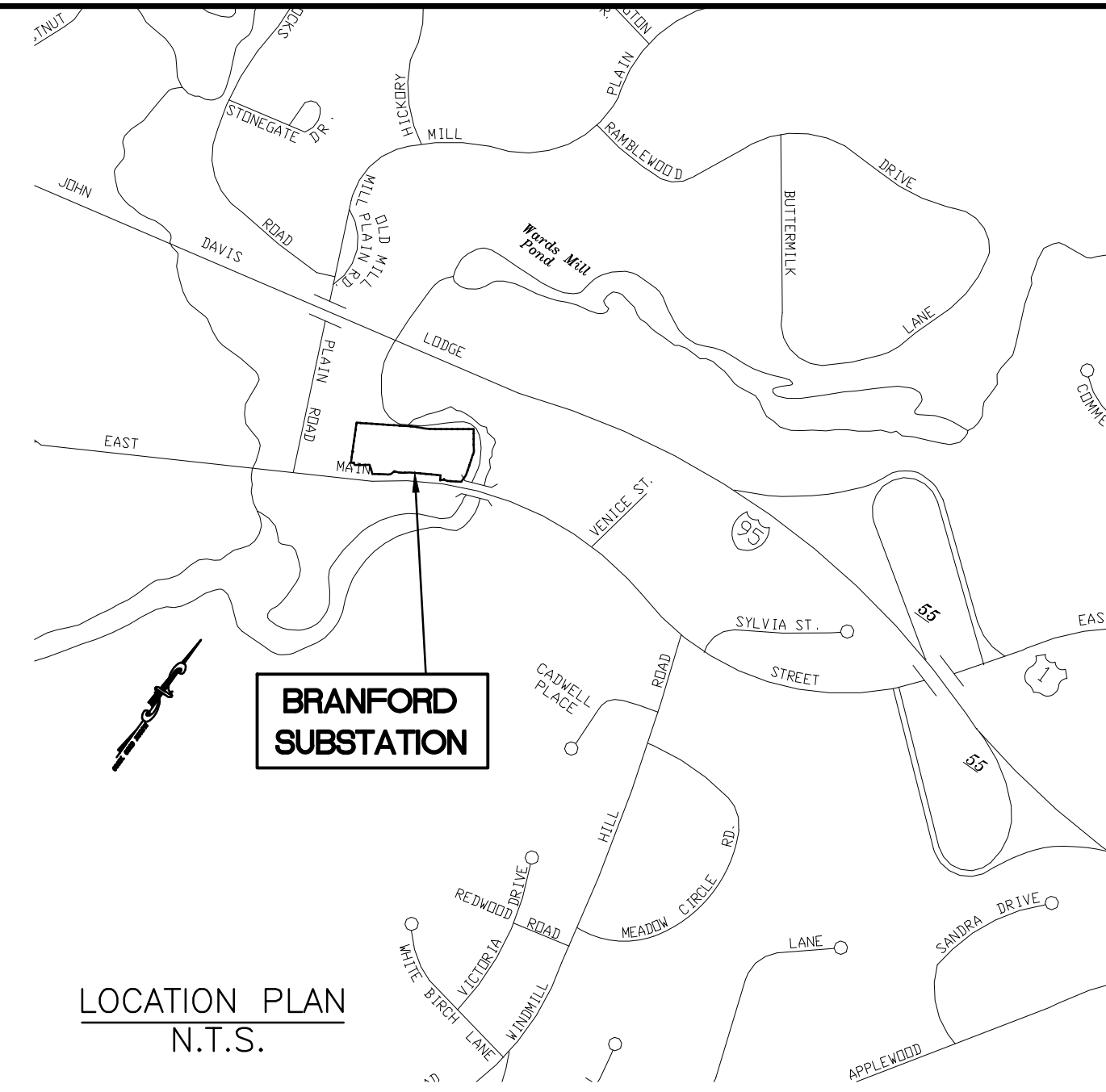
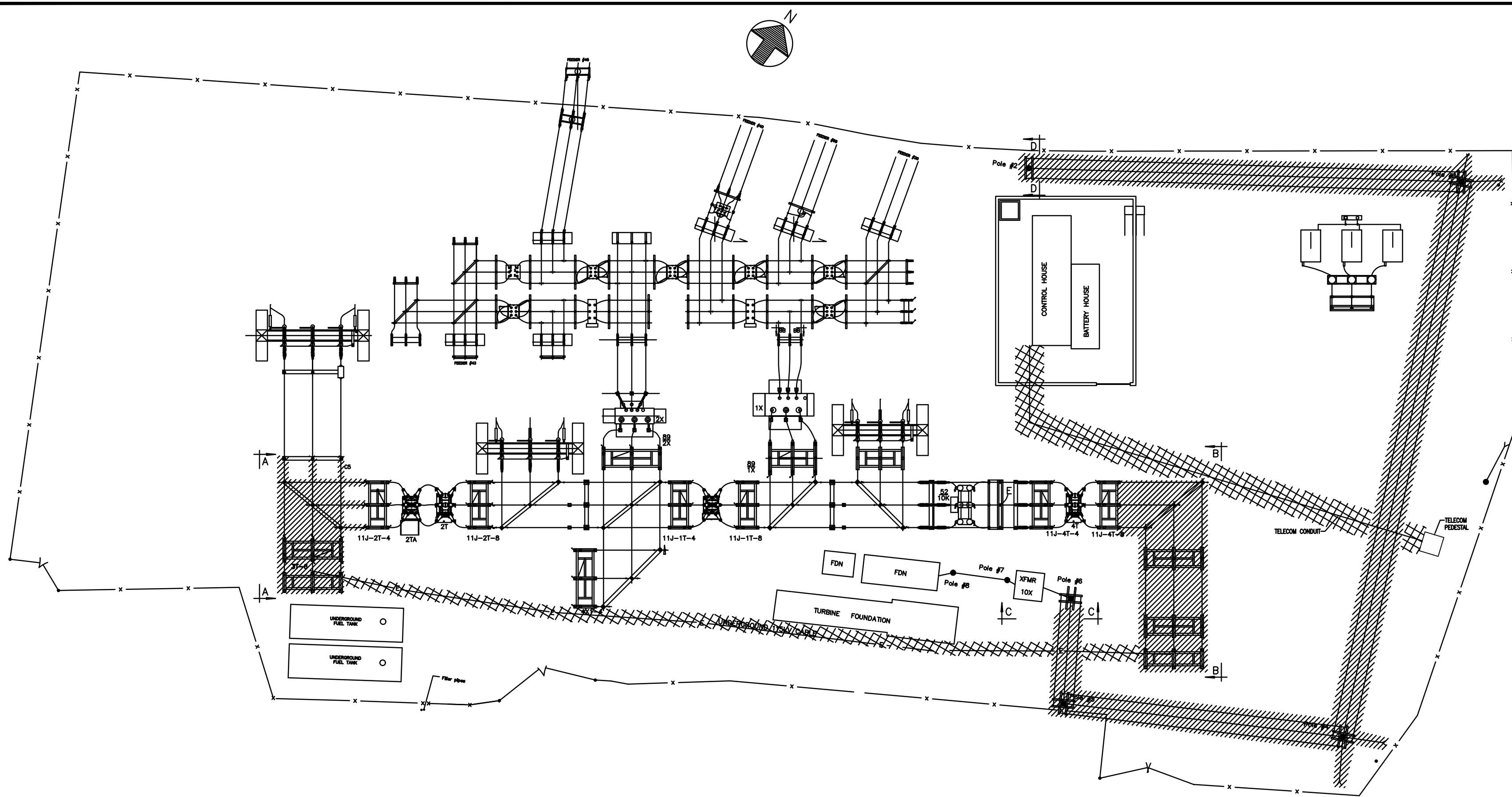
# EVERSOURCE ENERGY

BRANFORD 11J  
GENERAL ARRANGEMENT - PLAN & SECTIONS - CSC

BRANFORD, CT

NO.	DATE	DESCRIPTION	BY	CHK	APP	APP
4	01/18	FLOOD MITIGATION - ASBUILT #4045881	HNB	HK	HMW	
3	09/16	SPLIT 1655/1537 DCT, INSTALL 2TA #404341BR (BY RUE)	RH	SL	GM	
2	08/16	FLOOD MITIGATION #CS000881				
1	08/16	REPLACE 115KV BREAKER #40458801				
		AS BUILT REVISIONS				

DATE	WSP	DATE	WSP	DATE	APP	ARK	DATE	APP	ARK
9/03/03		9/03/03		9/03		9/03		9/03	



REV AV REMOVALS

NOT TO SCALE

REVISIONS DURING CONSTRUCTION					
AV	DATE	DESCRIPTION	BY	CHK	APP
AV	12/20	115KV U.G. CABLE REPLACEMENT PROJECT BY CAI WO #TMC84801	RJG	REC	DKH

**EVERSOURCE ENERGY**

BRANFORD 11J  
 GENERAL ARRANGEMENT - PLAN & SECTIONS - CSC  
 BRANFORD, CT

BY	WSP	CHKD	WSP	APP	ARK	APP	ARK
DATE	9/03/03	DATE	9/3/03	DATE	9/03	DATE	9/03
H-SCALE	N.T.S.	SIZE	D	FIELD BOOK & PAGES			
V-SCALE	N.T.S.	V.S.		R.E. DWG			
NO.	DATE	DESCRIPTION	BY	CHK	APP	APP	R.E. DWG
		AS BUILT REVISIONS					DWG NO. 11401-92001

4	01/18	FLOOD MITIGATION - ASBUILT #4045881	HNB	HK	HMW		
3	09/16	SPLIT 1655/1537 DCT, INSTALL 2TA #404341BR (BY RUE)	RH	SL	GM		
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