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November 16, 2021

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

RE: *Notice of Exempt Modification Pursuant to RCSA § 16-50j-57(a) to Existing Energy Facilities in the City of Danbury, Fairfield County, Connecticut (“Notice of Exempt Modification”)*

Dear Attorney Bachman:

The Connecticut Light and Power Company dba Eversource Energy (“Eversource”) hereby gives notice to the Connecticut Siting Council (Council) of its intent, in accordance with Section 16-50j-57(a) of the Regulations of Connecticut State Agencies (“RCSA”), to undertake modifications to its existing 115-kilovolt (“kV”) / 13.8-kV Triangle Substation (“Substation”), located at 93 Triangle Street in the City of Danbury, Fairfield County, Connecticut. The project will involve rebuilding the 13.8-kV distribution portion of the Substation by installing new enclosed, double-bus, metal clad switchgear, which will replace the Substation’s three existing open-air busses (A1, A2 and A3).

The Substation upgrades are required to replace equipment (oil circuit breakers, switches, and insulators) that was installed in the 1950s, address bus clearance needs, update protection and control relays, and add a Distribution System Control and Data Acquisition (DSCADA) system for metering, control, and monitoring of the distribution assets¹. As part of the work, the existing Substation fencing will be repaired, and animal protection will be added.

The Substation consists of three 115/13.8-kV 46.7 MVA transformers. Eversource’s analyses determined that these three transformers do not require replacement at this time. However, this upgrade project has been designed to facilitate the future replacement of the three existing transformers with 115/13.6-kV 62.5 MVA transformers².

For this project, all new equipment will be located within the boundaries of the existing substation footprint. None of the upgraded equipment will exceed the height of the existing equipment at the substation. Attachment A includes an aerial map depicting the general location of Triangle Substation, as well as a schematic of the proposed modifications.

¹ The Substation also has a transmission SCADA system.

² At the time of this future transformer replacement, a separate Notice of Exempt Modification will be filed with the Council.

Proposed Modifications

- Prepare the site and remove obsolete equipment. Remove the existing busses, breakers, switches, and associated infrastructure (e.g., bus supports, leads, foundations). Mobile transformers will be used to provide power to customers during construction, as the existing transformers will be out of service during the execution of the work.
- Grade the site for proper drainage and install new concrete foundations for the prefabricated buildings and bus duct supports. Augment the existing grounding grid to accommodate the new equipment.
- Install new indoor double-bus, metal clad switchgear 15-kV, 3000 Amp, with a total of 33 vacuum circuit breakers (21 feeder breakers, seven main and tie breakers, and five spare feeder breakers) to be housed in two pre-fabricated buildings with all switchgear associated equipment, such as DC power, AC power, protection and control devices, DSCADA equipment, building services such as lighting, heating and air conditioning, fire and smoke detection and alarms, security access and alarms, etc.
- Install two outdoor, NEMA 3R, 15-kV, 3000A, non-segregated phase bus ducts between the 91T and 91TX and 92T to 92TX units, each approximately 21 feet long with switchgear terminations.
- Install four 2500 kcmil cables/phase from the 11A-1X and 11A-2X transformers to feed the new switchgears. Cable routing will include four new cable manholes.
- Install DSCADA equipment to provide capability for control points within the new switchgear breaker positions. The equipment would include a DSCADA cabinet with SEL-3530 Real Time Automation Controller (SEL RTAC) and SEL751 Relays for all feeder breakers.
- Install and wire the communications equipment required for the DSCADA system. Program and test all necessary DSCADA software required for indication and remote control to provide operational capabilities at the Eversource Systems Operations Center.
- Upgrade the transformer load tap changer (LTC) control by replacing the LTC controls on the existing two transformers 11A-1X and 11A-3X with DSCADA ready units.
- Install four sets of three single-phase 50 kVA new SSTs, including visible break disconnect switches.
- Replace the perimeter chain link fence around the Substation with current Eversource standard materials, maintaining equipment clearances.
- Replace the existing deteriorated Substation outdoor control wire trench with new concrete cable trench.

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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 because:

- The work will be within Eversource's existing Triangle Substation property and will not require any expansion of the existing fenced Substation area.
- The work will not affect wetlands or waterways and will not require vegetation removal.
- Eversource's review of the Department of Energy and Environmental Protection's Natural Diversity Data Base ("NDDB") maps identified no state-listed endangered, threatened, or special concern species in the vicinity that would be affected by the proposed work.
- Soils excavated during the work will be removed from the site and disposed of in accordance with applicable regulations.
- The work will result in short-term noise typical of construction activities but will not result in any long-term changes to the noise environment.
- Electric and magnetic field levels will not be altered by the modifications.


Eversource proposes to commence construction in March 2022. Work to install and test/commission the equipment and then to put the new equipment in-service is scheduled to be completed in December 2023. The removal of the open bus equipment is targeted to be completed by May 2025.

Eversource is submitting this filing electronically and will provide three hard copies for the Council's records, along with the requisite fee of \$625.00.

A notice of this exempt modification filing has been provided to the Mayor of the City of Danbury.

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

By:

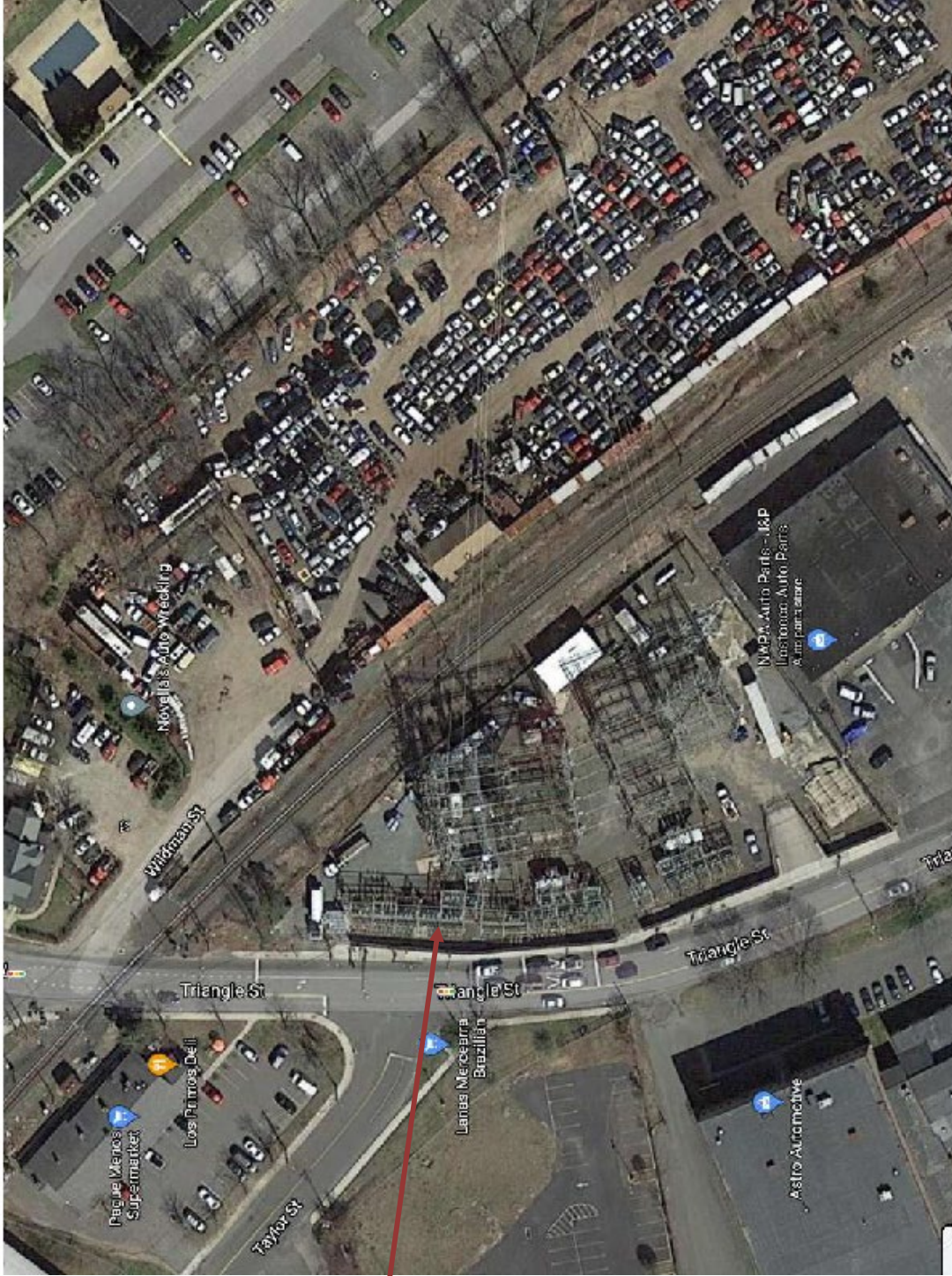


Kathleen M. Shanley
Manager - Transmission Siting

cc: Joseph M. Cavo, Mayor, City of Danbury

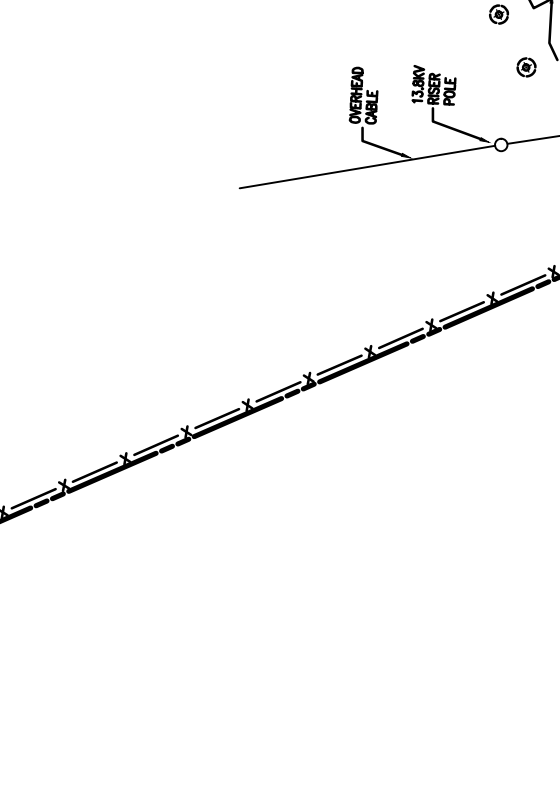
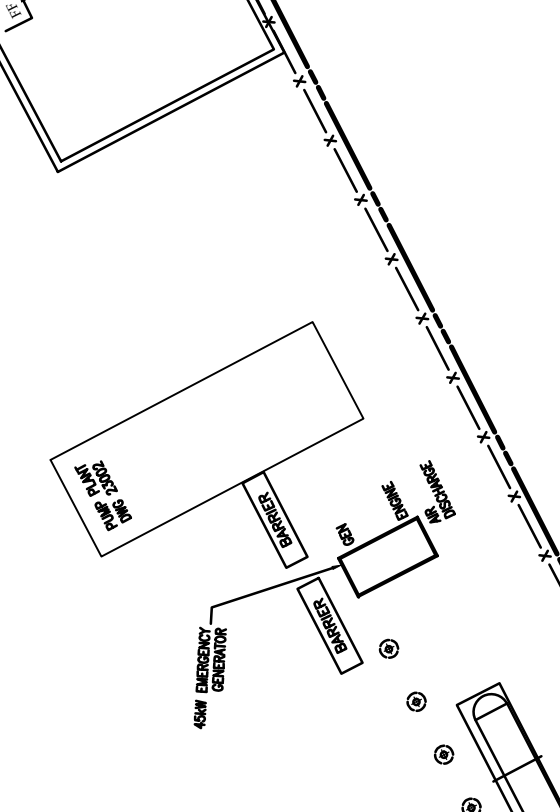
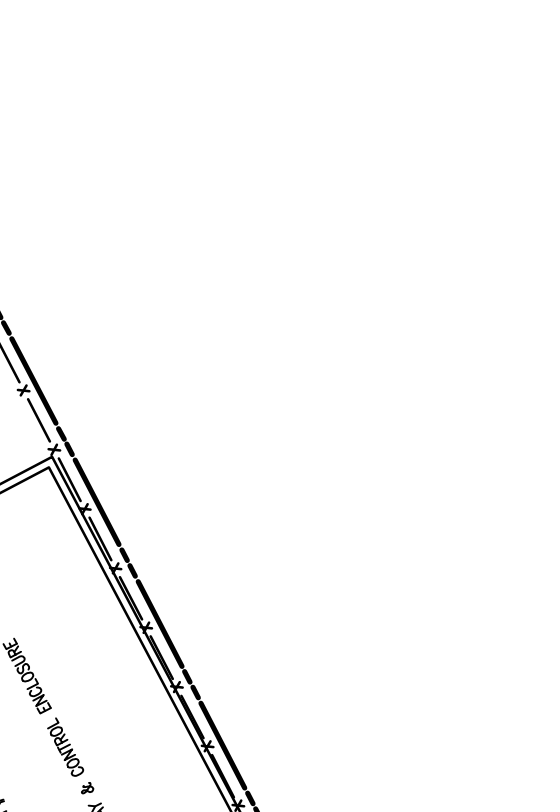
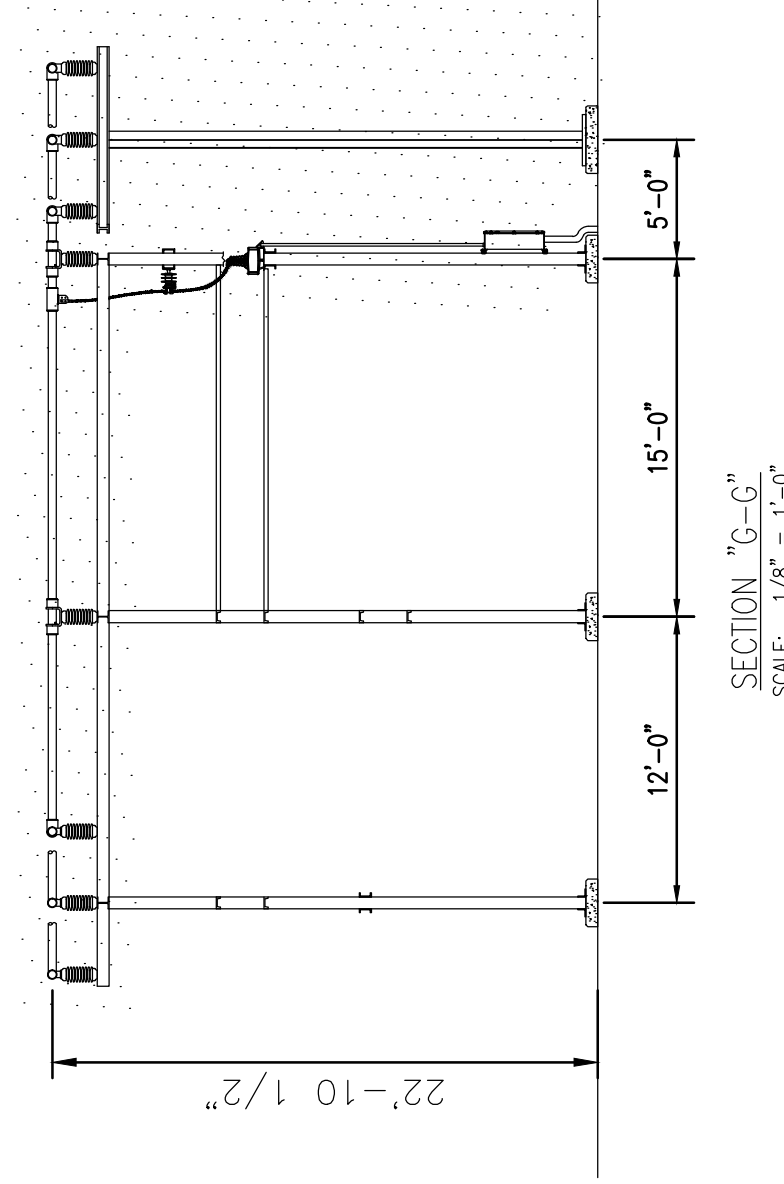
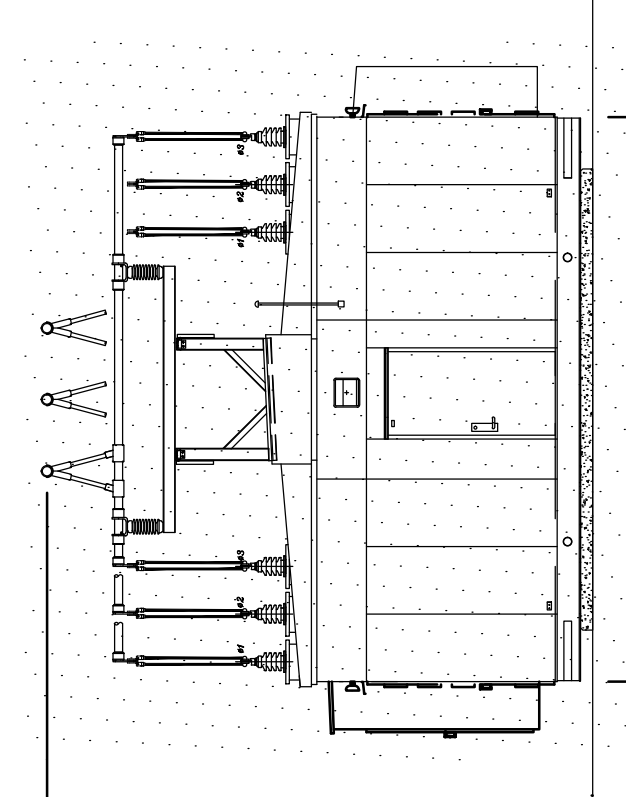
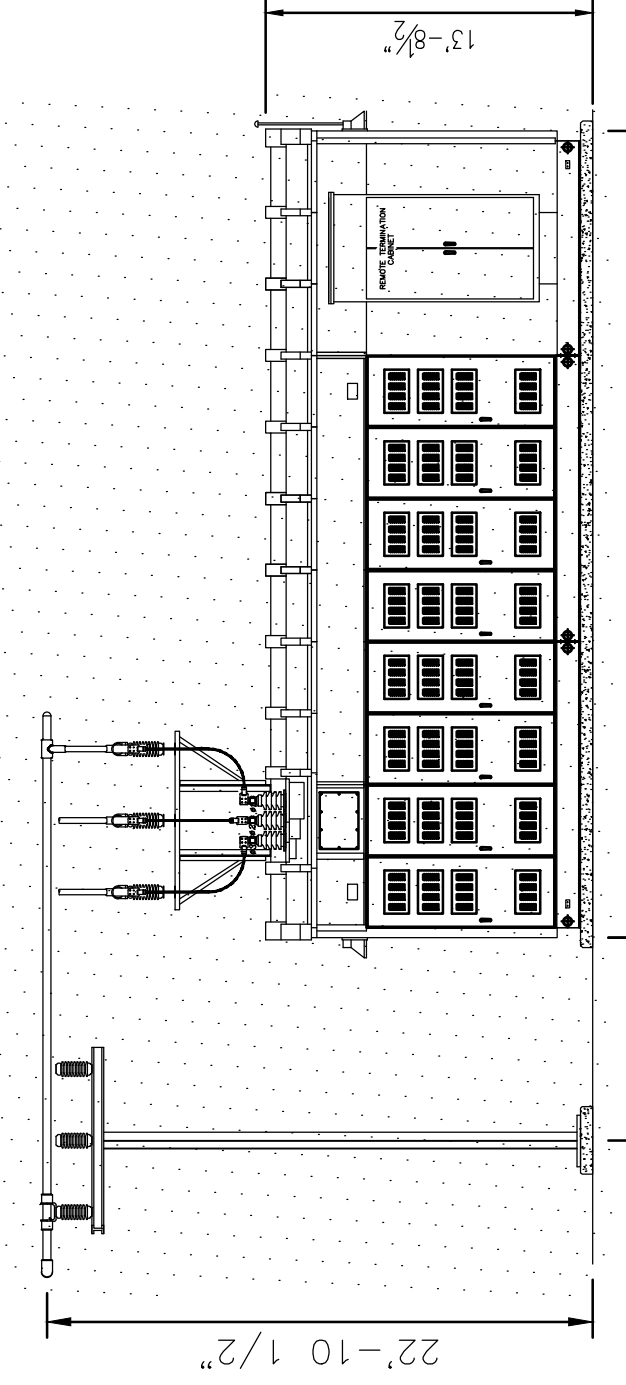
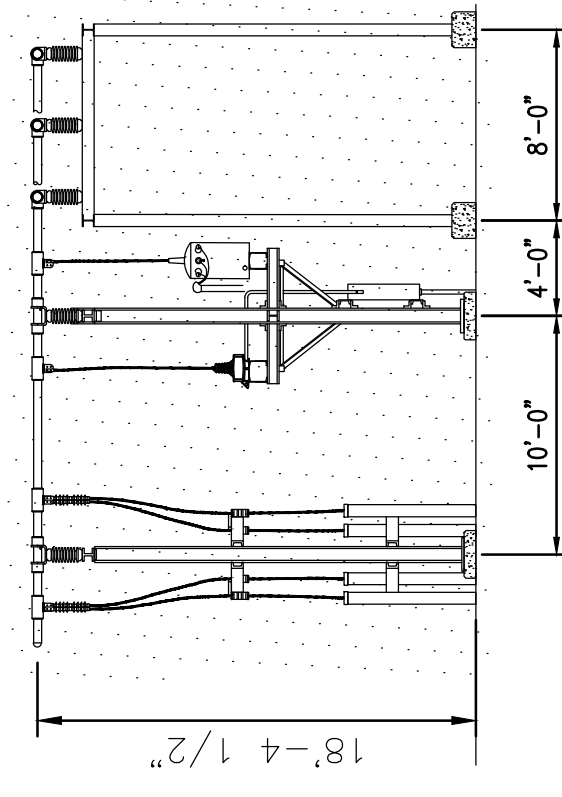
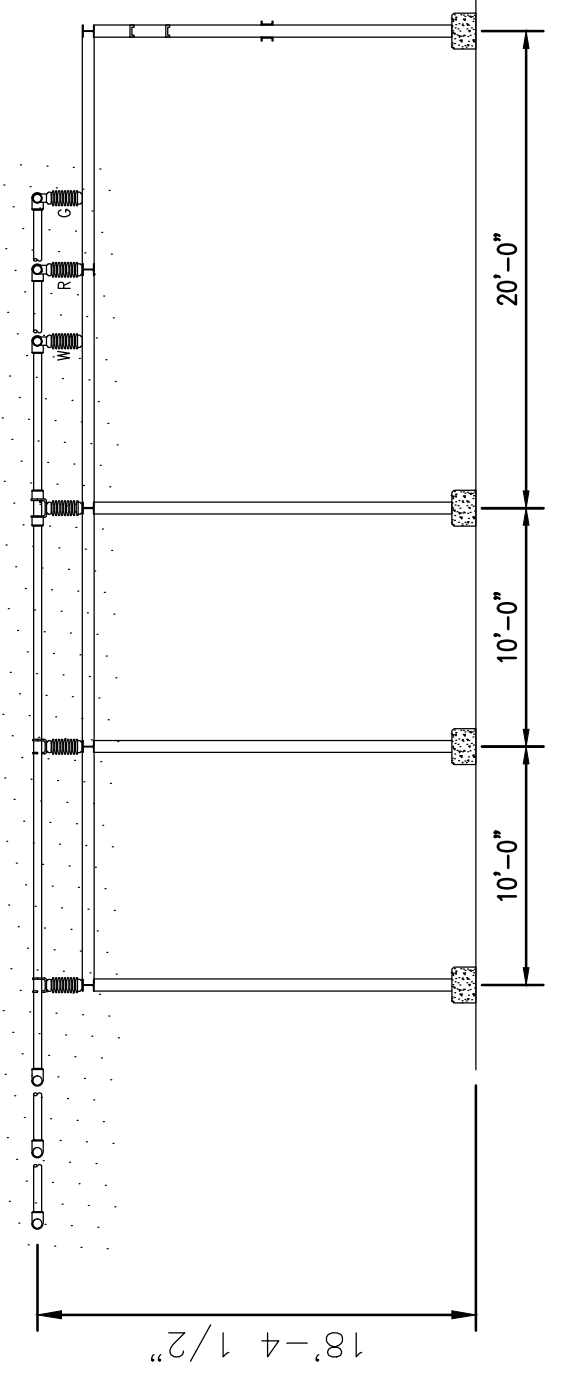
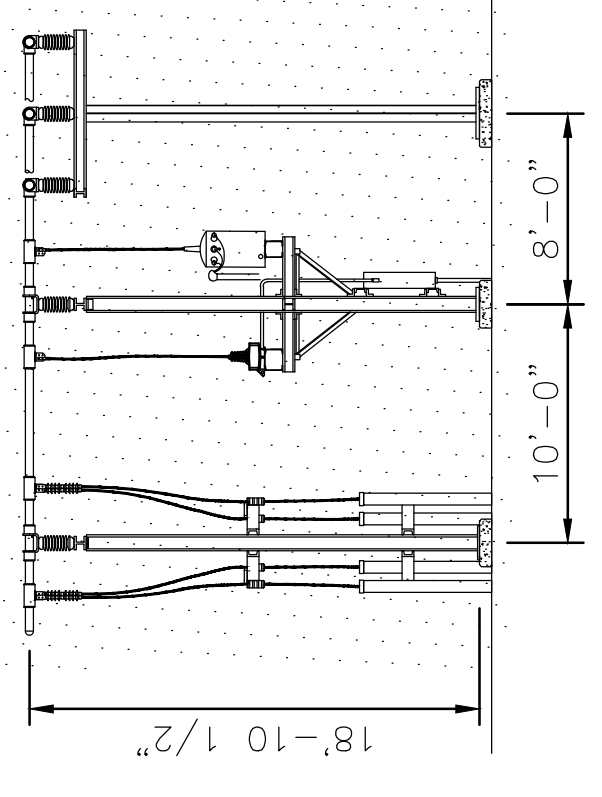
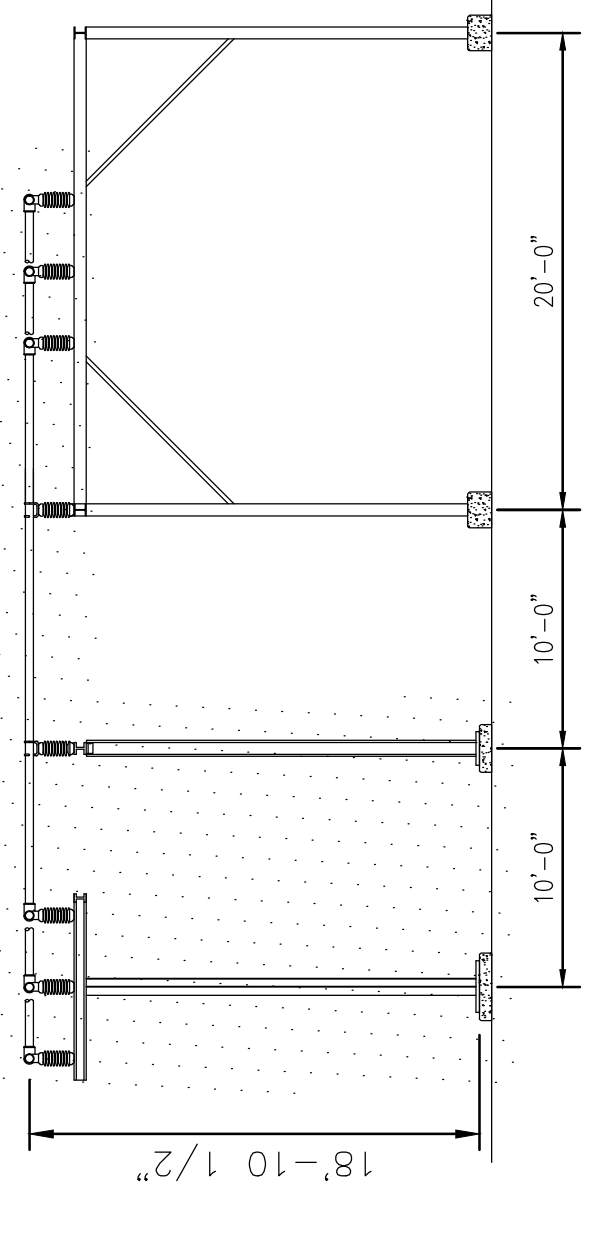
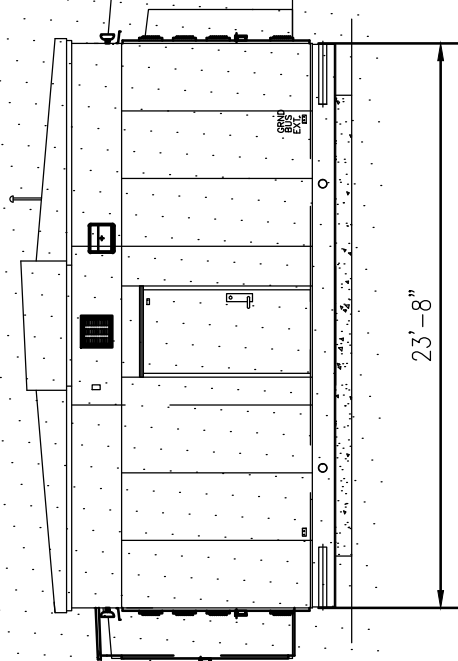
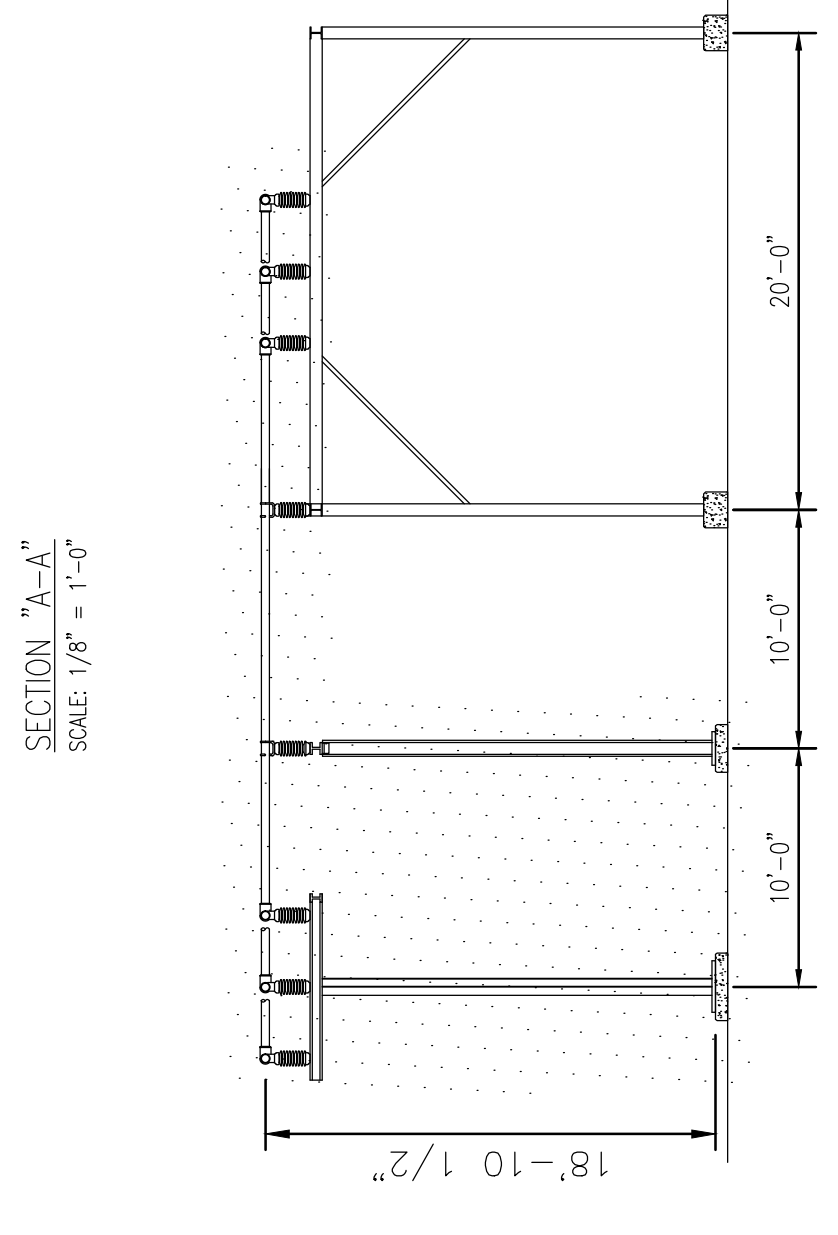
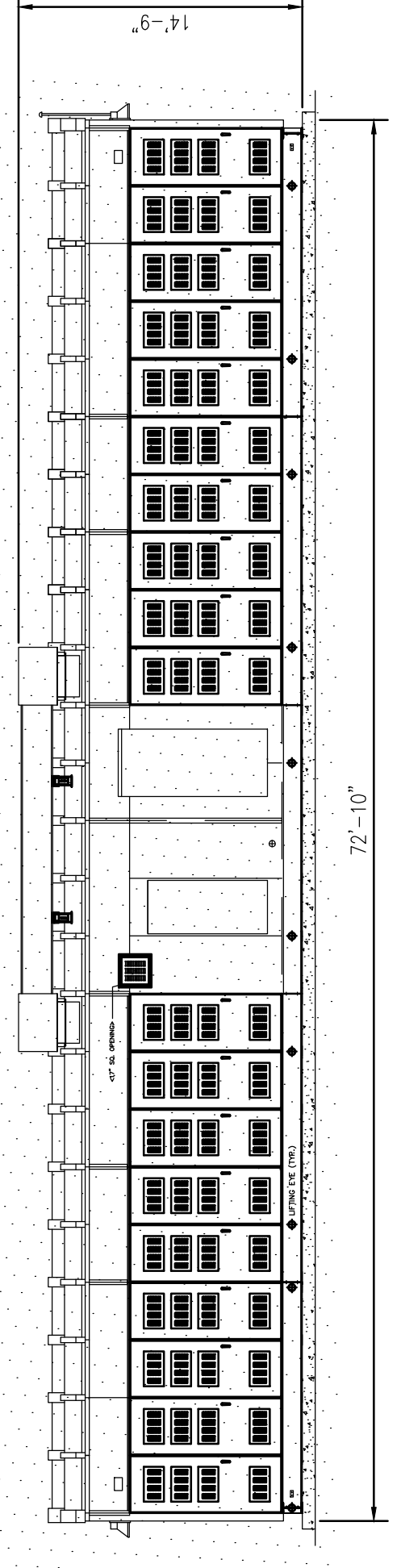
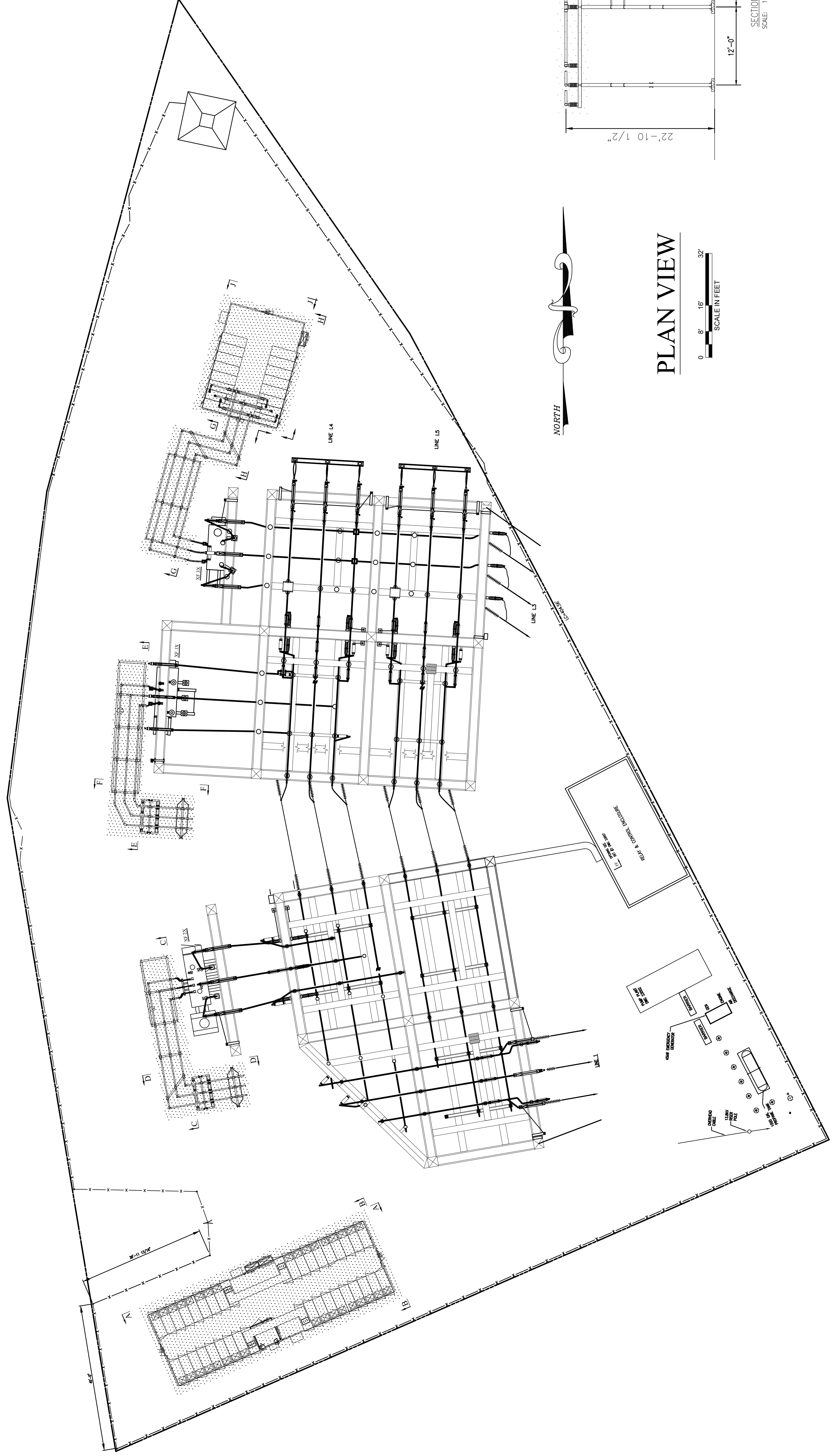
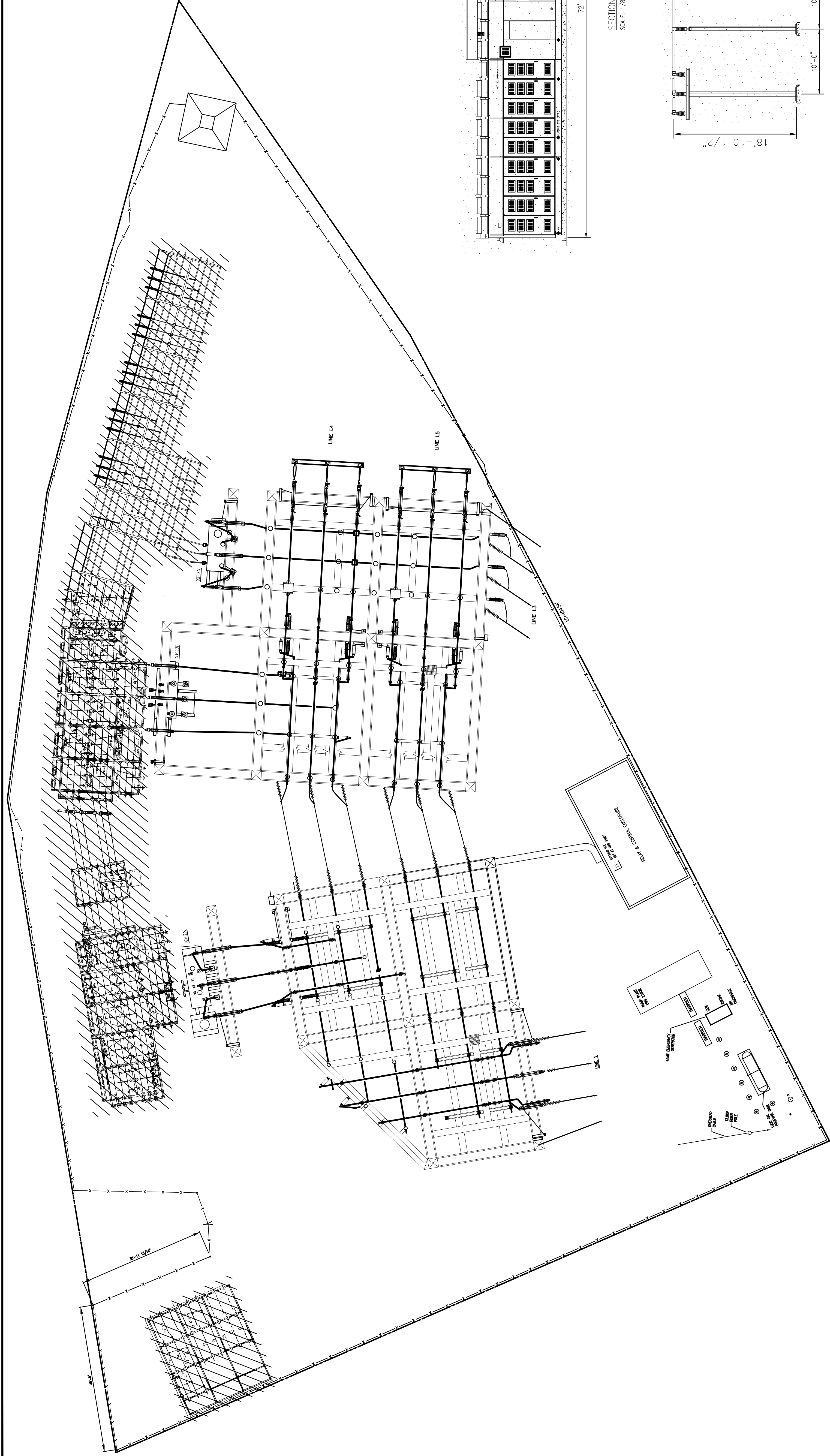
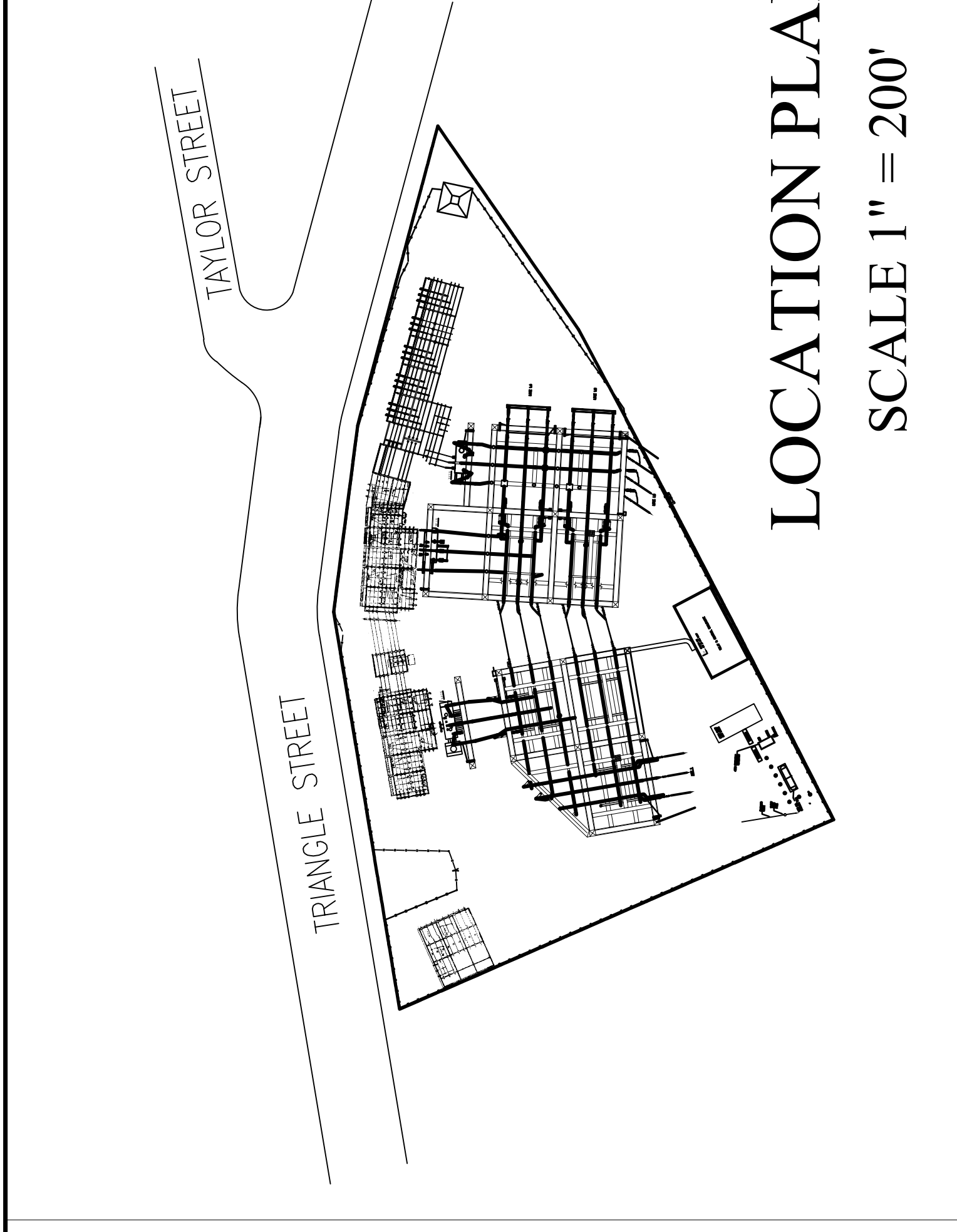
ATTACHMENT A
MAPS AND DRAWINGS

Aerial View of Triangle Substation, Triangle Street, City of Danbury, CT



Triangle Substation





NO.	DATE	AS BUILT REVISIONS	BY	CHK	APP	DATE	REV

EVERSOURCE ENERGY

TRIANGLE 11A
GENERAL ARRANGEMENT - PLAN
CONNECTICUT SITTING COUNCIL
DANBURY, CT

DATE	6/2021	DATE	6/2021
SCALE	AS NOTED	SCALE	AS NOTED
DESIGNER	DMH	PROJECT MANAGER	DMH
CHECKER	DMH	DATE	6/2021
DATE	6/2021	DATE	6/2021
SCALE	AS NOTED	SCALE	AS NOTED
PROJECT NO.	13402-92001	PROJECT NAME	