



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

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

February 8, 2017

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

Re: Green Hill Substation 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 the Green Hill Substation in the Town of Madison, Connecticut ("Petition").

Prior to submitting this Petition, Eversource provided written notice of the proposed work to the First Selectman of Madison and to all abutters and the filing of this Petition with the Council. A map and line list identifying the abutting property owners who were notified of the proposed work are provided in Attachment B: Green Hill Substation Project - Petition Map.

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  
Manager – Transmission Siting

Enclosure

cc:

The Honorable Tom Banisch, First Selectman, Town of Madison



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**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 THE EXISTING  
SUBSTATION IN THE TOWN OF MADISON, CONNECTICUT**

1. 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 Green Hill 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 eliminate potential transmission voltage criteria violations in the Haddam to Branford area that were identified in the May 2014 Greater Hartford and Central Connecticut Area (“GHCC”) Needs Assessment performed by the Independent System Operator of New England (“ISO-NE”) and in subsequent analyses by Eversource. The modifications to Eversource’s Green Hill Substation (“Substation”) will address the low voltage criteria violations in this area.

## **3. Project Description**

The Project consists of modifications to the existing Substation located on Eversource’s property at 775 Green Hill Road in Madison. The Substation is a facility with 115-kV and 23-kV equipment, three 115- to 23-kV transformers, two 115-kV transmission lines terminated at the Substation and ten 23-kV distribution circuits. All proposed modifications would take place on Eversource’s property. Detail of the proposed scope of work is provided as follows:

- a) Installation of six 115-kV manually-operated breaker disconnect switches.
- b) Installation of six 115-kV sulfur hexafluoride (“SF<sub>6</sub>”) circuit breakers.
- c) Installation of two sets of 115-kV current limiting reactors.

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- d) Installation of two 25.2-MVAR capacitor banks.
- e) Installation of three new lightning masts for protection of the new equipment.
- f) Relocation of one 115-kV capacitor coupled voltage transformers (CCVT) approximately four feet to the east of the current location to accommodate the new capacitor bank 10K bus line up.
- g) Installation of foundations and bus support for the equipment and structures listed above.
- h) Installation of underground conduits and cable, lightning arrestors, mounting and support structures, batteries, relay/controls to accommodate the new equipment, and improvements to the existing paved access road.
- i) A portion of the existing fence on the south side and a portion on the west side of the Substation would be extended approximately 50 feet south and approximately 50 feet west, respectively, from the existing fence location to accommodate the new equipment. The new section of fence would be approximately 300 feet long. The new fencing would enclose an area of approximately 24000 square feet (0.55 acre).

The new fence section would be seven feet high with one and a quarter inch mesh and one foot of three-strand barbed wire mounted at the top of the fence.

Due to the terrain in the expansion area, the Project requires the installation of a retaining wall. The length of precast wall would be approximately 450 feet with a maximum height of 16 feet above grade. The new Substation fence would be affixed on top of the new retaining wall.

Approximately, 35,000 square feet (0.80 acre) of clearing would be required for the Substation fence extension and the new retaining wall.

The proposed modifications to the Substation are shown on Attachment A (Drawing No. 17605-92001) - Green Hill Substation General Arrangement - Plan & Sections – Connecticut Siting Council and Attachment B: Green Hill Substation Project – Petition Mapping.

4. The proposed modifications would not have a substantial adverse environmental effect because:

- a) Radio and Television Interference

There would be no change to the existing television or radio interference in the vicinity of the Substation as a result of the proposed modifications.

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b) Sound Levels

Sound levels at all points along the property lines would continue to meet state regulations set out in Regulations of Connecticut State Agencies §§ 22a-69-3.3, -3.5(a), -3.7, -4(g).

c) Appearance of Substation

All new equipment would be shorter than the tallest existing structure within Substation. The new equipment would not cause any significant adverse change in the physical or environmental characteristics of the Substation.

As previously stated, the modifications would include an extension of the existing fence line and would require installation of a new retaining wall due to the existing topography. However, this change is not anticipated to result in an adverse physical change to the facility.

d) Lighting

The Substation has existing low level lighting for safety and security purposes. Additional low level lighting would be added in the vicinity of the new equipment installations.

e) Environmental Effects

- Eversource's review of Natural Diversity Data Base information available via the data sharing agreement with Connecticut Department of Energy and Environmental Protection's ("CT DEEP") indicated that there are no state-listed endangered, threatened, or special concern species in the vicinity of the Substation.
- Eversource's review of the CT DEEP Aquifer Protection Areas map of Madison, Connecticut (dated October 2016) confirmed that the Project would not be located within an Aquifer Protection Area. Additionally, the Project would not affect public/private water supply wells.
- Eversource does not anticipate the need to disturb or clear any wetland vegetation. The proposed modifications are not located within a 100- or 500-year flood zone.

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- Clearing/vegetation removal would occur entirely within Eversource-owned property and a forested buffer between the Substation and abutters to the south would remain.
- A cultural (archaeological and historical) resources review of the Project was conducted by Heritage Consultants, LLC (“Heritage”) in September 2016. The report from Heritage indicates that the project area is not within an area of archeological sensitivity and no adverse impacts to cultural resources are anticipated to occur as a result of the proposed modifications.
- No scenic or recreational resources were identified within the Project area.
- Eversource would minimize vegetation clearing activities to the extent practicable and restore temporarily disturbed areas in accordance with Eversource’s Best Management Practices Manual for Massachusetts and Connecticut (September 2016) (“BMPs”).
- Project construction would conform to best management practices for erosion and sedimentation (“E&S”) controls, including those provided in the Eversource BMPs.
- Electric and magnetic field levels at the Substation property line would not change as a result of the proposed modifications.

## 5. Project Outreach

In December 2016, Eversource consulted with the municipal officials in the Town of Madison to brief them on the proposed Project. Eversource also provided representatives of the Town of Madison 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 the Project construction or restoration activities.

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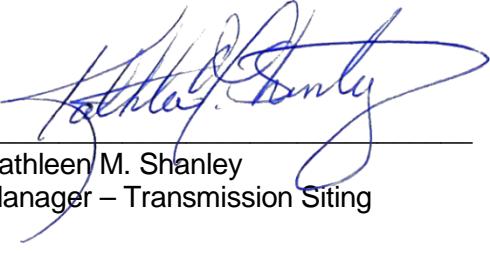
## 6. Hours and Schedule

Normal construction work hours would be Monday through Saturday from 7:00 AM to 7:00 PM, daylight hours permitting. Sunday work hours may be required for work performed during transmission outages, inclement weather, and/or critical path items. Eversource proposes to begin construction during the spring of 2017 and expects that construction would be completed by the end of 2018.

7. 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.
8. 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

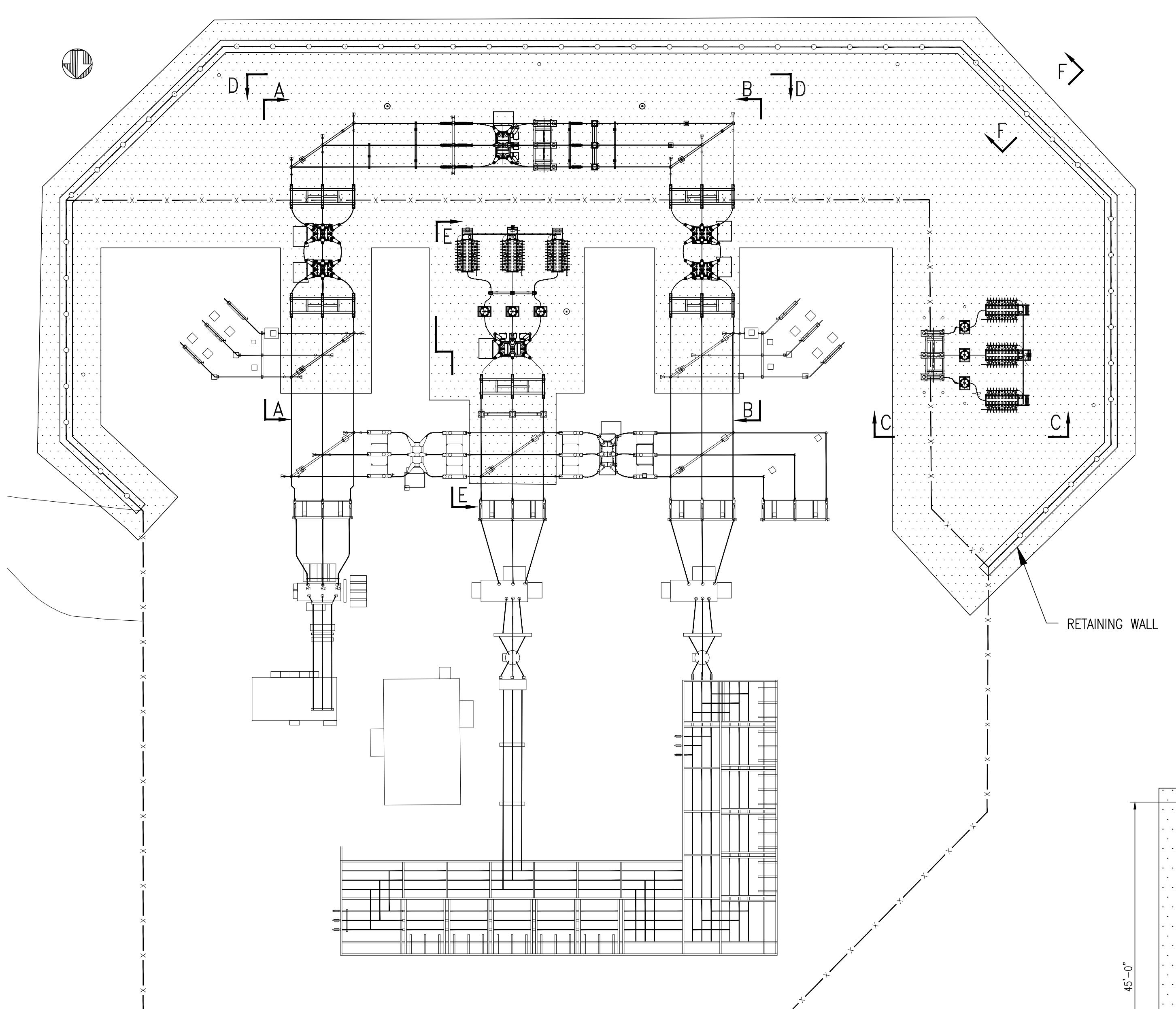
### List of Attachments

- Attachment A: Drawing No. 17605-92001 - Green Hill Substation General Arrangement - Plan & Sections – Connecticut Siting Council.
- Attachment B: Green Hill Substation Project - Petition Map
- Attachment C: Letter to the Abutters and Affidavit



## ATTACHMENT A





PLAN VIEW

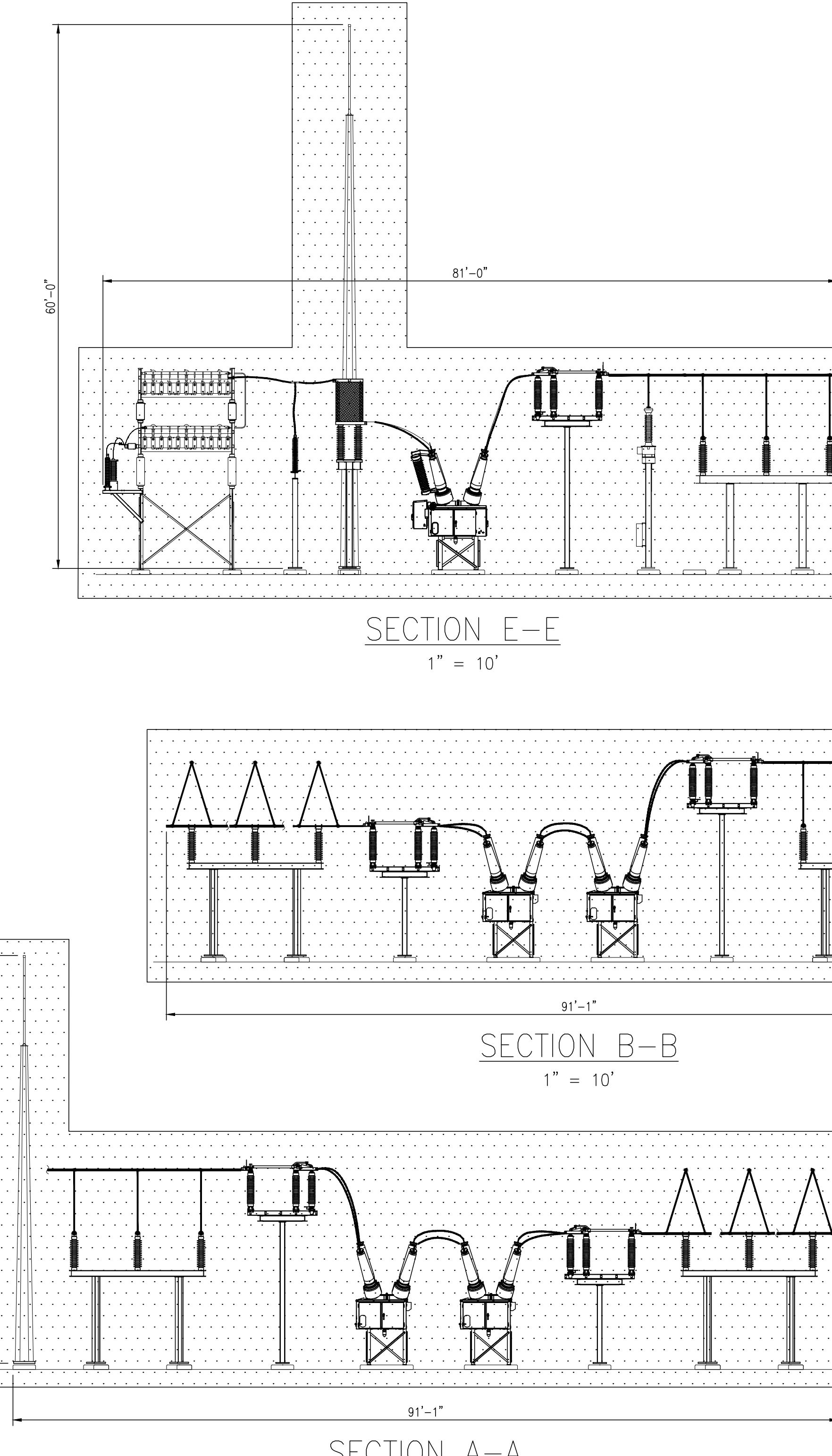
1" = 25'

0  
5 10 15 20 25

142'-4"

SECTION D-D

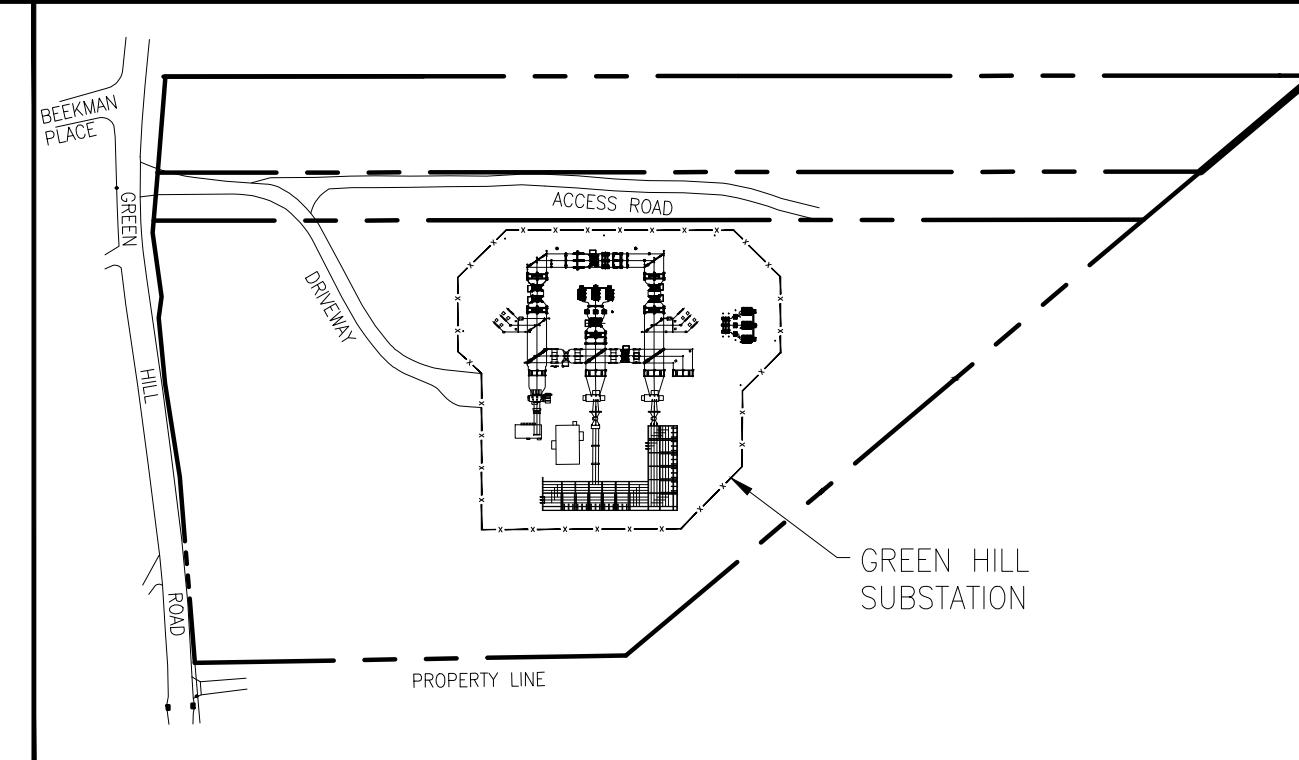
1" = 10'



SECTION A-A

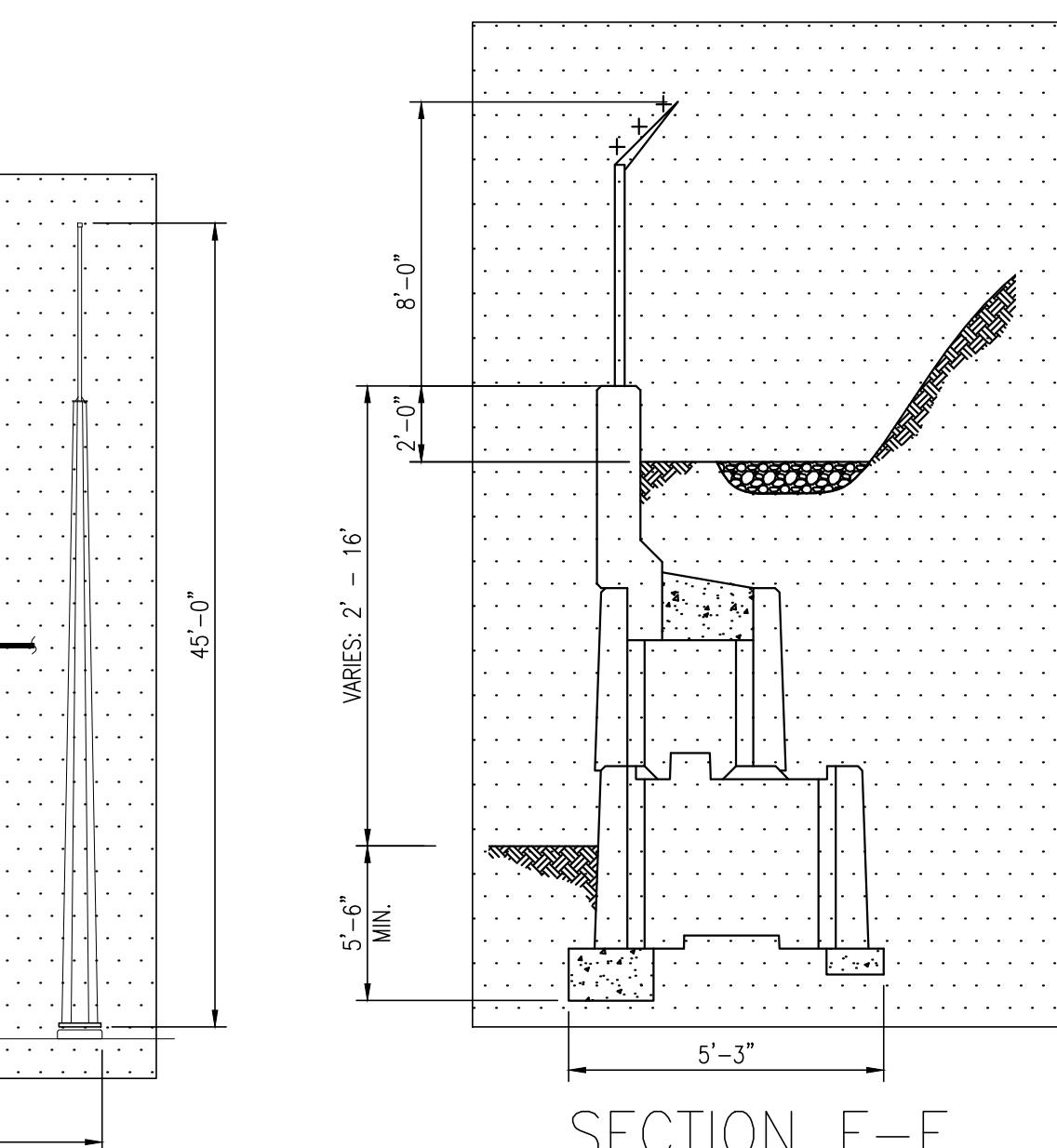
1" = 10'

LEGEND  
 - - - EXISTING FENCELINE  
 - - - NEW FENCELINE  
 [Hatched Area] PROPOSED 2017 ADDITIONS



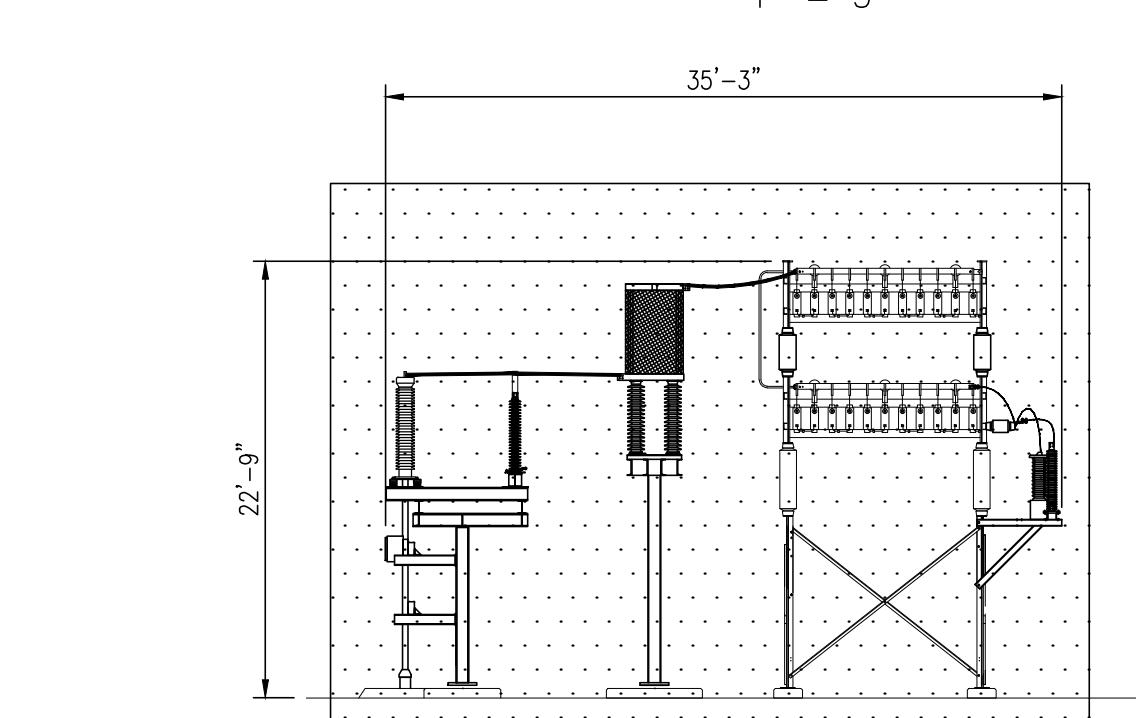
LOCATION PLAN

1" = 200'



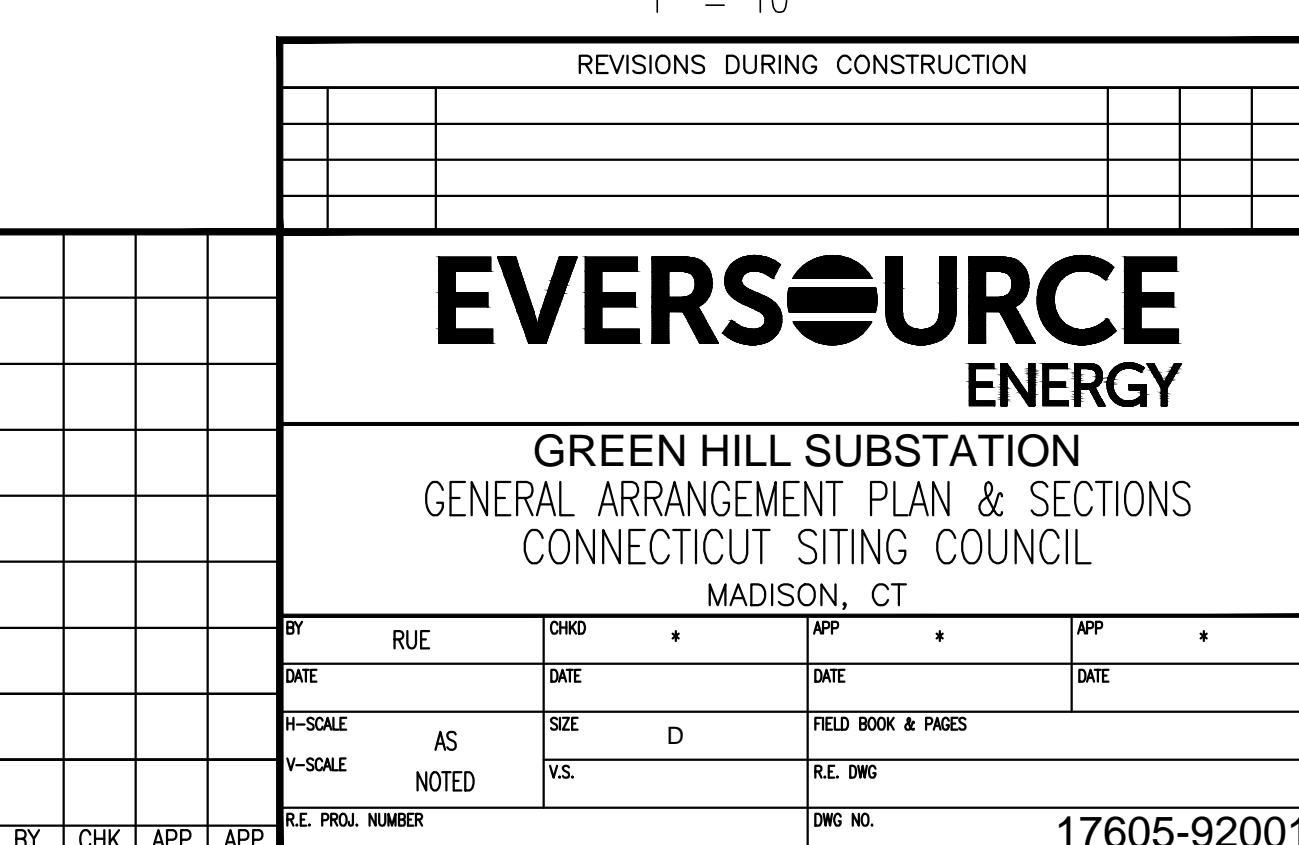
SECTION E-E

1" = 10'



SECTION F-F

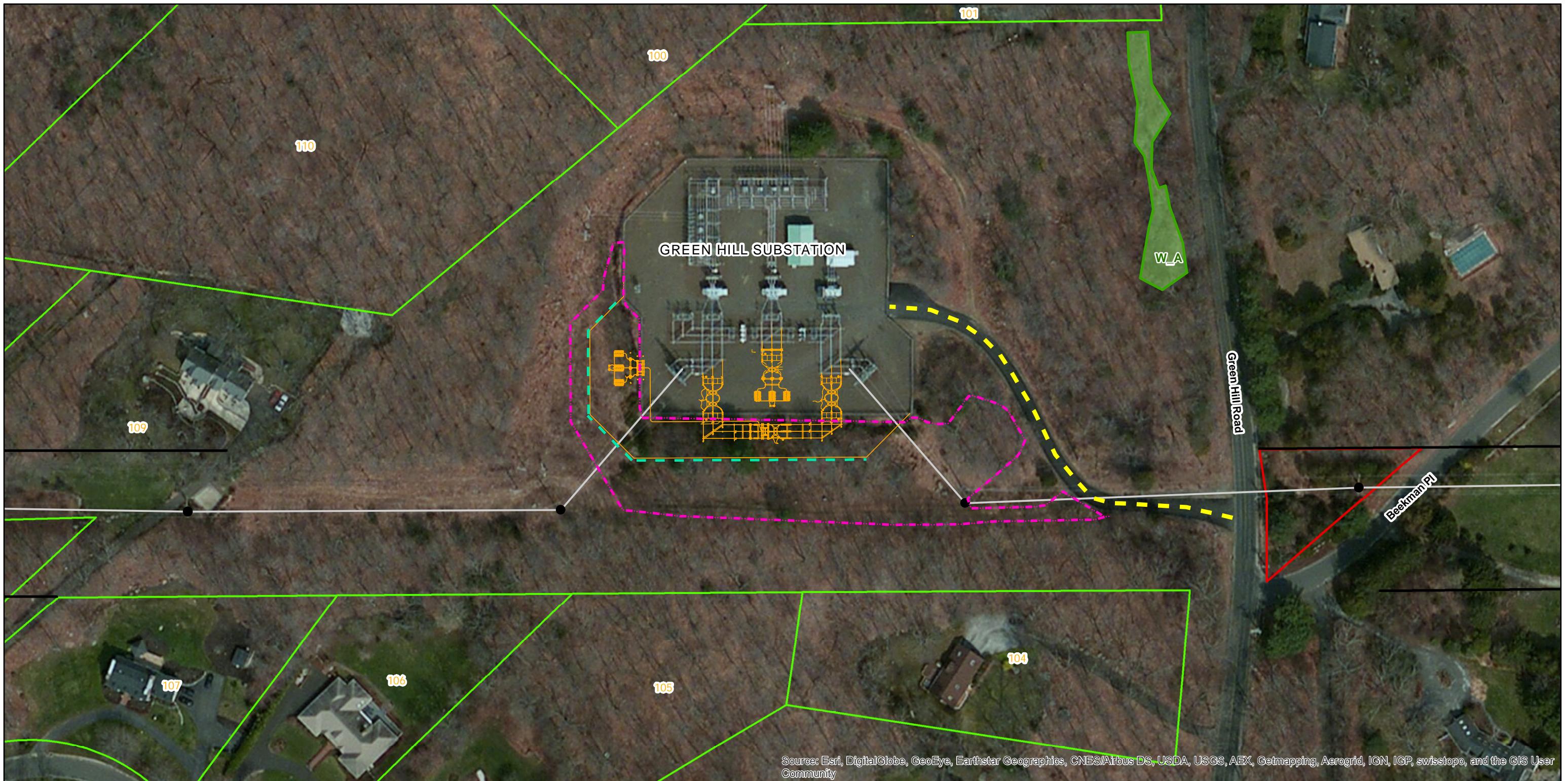
1" = 3'





## ATTACHMENT B





- CL&P dba Eversource Owned Property
- Parcel Boundary
- Clearing Limits
- Retaining Wall

**Map Labels**

100 Line List ID  
W\_00 Wetland ID



**EVERSOURCE**  
ENERGY

**GZA** GeoEnvironmental, Inc.  
Engineers and Scientists  
[www.gza.com](http://www.gza.com)

GREEN HILL SUBSTATION PROJECT  
PETITION MAPPING

EVERSOURCE ENERGY

Sheet 1 of 1

Line List	Owners Name, First	Owners Name, Last	Site Address	City
LL100	NEIL S & JOAN P	ZIMMERMAN	42 GROUSE LN	MADISON
LL101	FREDERICK W & CAROL B TRUSTEES, HARTUNG FAMILY TRUST	HARTUNG	789 GREEN HILL RD	MADISON
LL104	ROGER A	FORTIER	761 GREEN HILL RD	MADISON
LL105	TERRY & ROSEANNE	STYSLY	66 STRAWBERRY HILL RD	MADISON
LL106	PAUL E & ISABELLE M	DAVIS	72 STRAWBERRY HILL RD	MADISON
LL107	DAVID & SALLY	SULLIVAN	78 STRAWBERRY HILL RD	MADISON
LL109	GEORGE & GIFTY	ARTHUR	43 WHITE BIRCH RD	MADISON
LL110		MADISON LAND CONSERVATION TRUST INC	WHITE BIRCH RD	MADISON

## ATTACHMENT C





56 Prospect Street  
Hartford, CT 06103

February 3, 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 substation upgrade project in your area.

The upgrade, called the Green Hill Substation Project ("Project"), includes expanding the existing substation fence line approximately 50 feet to the south and west, installing a retaining wall to support the new fence, installing new equipment and modifying existing equipment within the Substation.

Pending CSC approval of this proposed work, construction is expected to begin in the second quarter of 2017 and restoration of any affected areas is anticipated by the end of 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,

*Ken Roberts*

Ken Roberts  
Eversource Project Manager

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 ("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 Tom Banisch  
First Selectman  
Madison Town Hall  
8 Campus Drive  
Madison, CT 06443

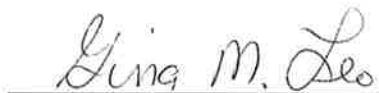
I also certify that I caused notice of the proposed modifications to be served by mail or courier upon eight owners of the abutting properties that are depicted on the map in Attachment B to the Petition.



Kenneth Roberts  
Lead Project Manager

On this the 8<sup>th</sup> day of February, 2017, before me, the undersigned representative, personally appeared, Kenneth Roberts, known to me (or satisfactorily proven) to be the person whose name is subscribed to the foregoing instrument and acknowledged that he executed the same for the purposes therein contained.

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



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Notary Public  
My Commission expires:

**GINA M. LEO**  
**NOTARY PUBLIC**  
MY COMMISSION EXPIRES FEB. 28, 2021