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**Kathleen M. Shanley**Manager – Transmission Siting
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December 22, 2022

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

Re: Gravel Pit Solar – Transmission Interconnection 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 Eversource's proposed modifications to its existing 115-kilovolt ("kV") 1200 Line needed to interconnect the Gravel Pit Solar Project to Eversource's transmission system in East Windsor, Connecticut ("Petition").

Prior to submitting this Petition, Eversource representatives briefed municipal officials concerning the Project and provided written notice to all abutters about both the proposed work and the filing of this Petition with the Connecticut Siting Council ("Council"). Maps of the Project area, as well as line lists identifying the notified property owners, are provided in the Petition as Attachment A: Gravel Pit Solar Transmission Interconnection Project – Aerial Maps.

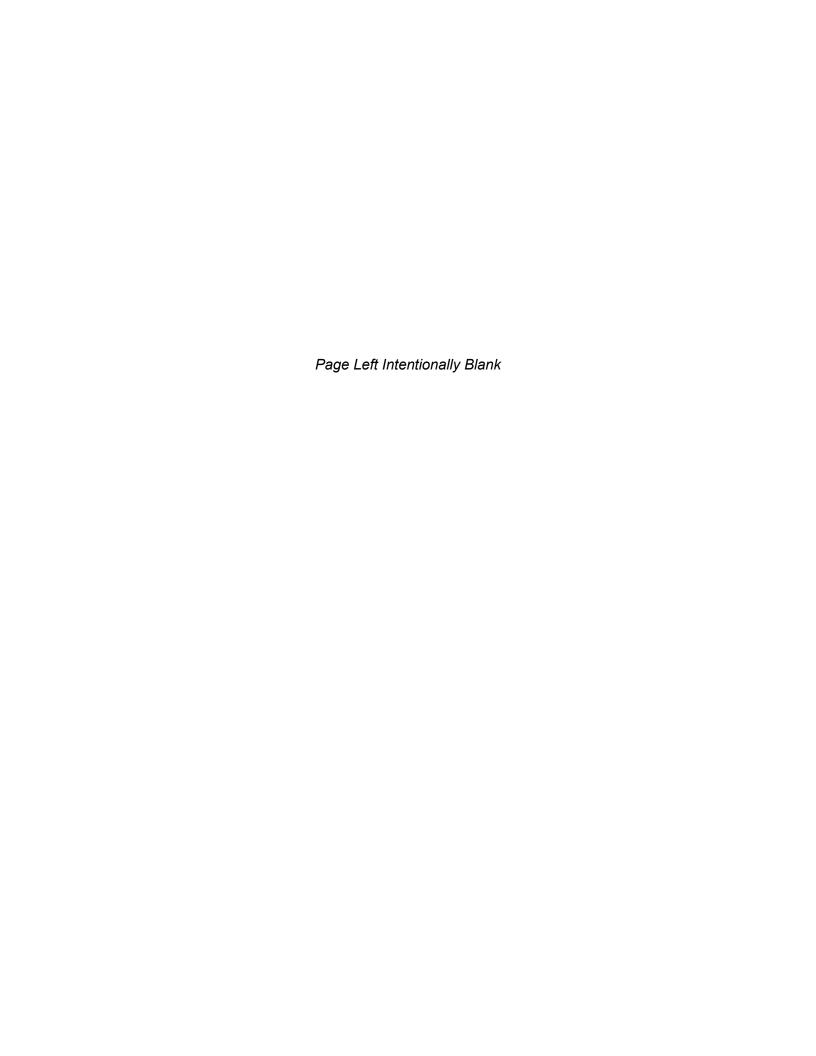
Eversource is submitting this filing electronically and will be providing one hard copy original and 15 copies to the Council, along with the requisite \$625 filing fee.

Sincerely,

Kathleen M. Shanley

**Enclosure** 

cc: First Selectman Jason E. Bowsza, Town of East Windsor



#### 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 GRAVEL PIT SOLAR TRANSMISSION INTERCONNECTION
PROJECT
IN THE TOWN OF EAST WINDSOR, CONNECTICUT

#### 1. Introduction

The Connecticut Light and Power Company doing business as Eversource Energy ("Eversource" or "Company") 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 proposed modifications to Eversource's 115-kV transmission line (1200 Line) and associated transmission line interconnection to the Gravel Pit Solar Project in the Town of East Windsor ("Town"), Connecticut, collectively referred to herein as the Gravel Pit Solar Transmission Interconnection Project ("Project"). Eversource submits that a Certificate is not required because the proposed modifications would not have a substantial adverse environmental effect.

#### 2. Background

On March 1, 2021 the Connecticut Siting Council (the "Council") issued a Decision and Order in Docket No. 492 approving an application by Gravel Pit Solar ("GPS") for a Certificate of Environmental Compatibility and Public Need ("Application") for the construction, operation and maintenance of a 120-megawatt ("MW") alternating current ("AC") solar photovoltaic electric generating facility project located east of a railroad line, near Apothecaries Road; Plantation Road; Wapping Road; and Windsorville Road in East Windsor, Connecticut.<sup>1</sup>

The Gravel Pit Solar Project site encompasses approximately 737 acres, of which 485 acres will be occupied by solar panels, a substation, and a switchyard. The site is currently, or has

<sup>&</sup>lt;sup>1</sup> The railroad is owned by the Connecticut Department of Transportation and is used by Central New England Railroad for freight operations.

been, used primarily for sand and gravel mining, as well as for tobacco farming and other crops. An Eversource transmission right-of-way ("ROW") crosses the northeastern portion of the GPS site. The ROW is occupied by two 115-kilovolt (kV) lines (the 1100 Line and the 1200 Line), which are supported on double-circuit weathering steel H-frame structures.

The GPS project will entail site preparation, development and improvement of access roads, installation of photovoltaic solar panels and related equipment and appurtenances, as described more fully in GPS's Application. In addition to the solar panel components of the project, GPS will construct a substation ("GPS Substation") and a switchyard ("Eversource Switchyard") to facilitate the interconnection to the transmission system.

The Council's Findings of Fact in Docket No. 492 include the following regarding the GPS Substation:

- 131. The proposed GPS Substation would be located east of the railroad line and south of the Eversource ROW. (Applicant I, Tab A, Project Layout Map)
- 132. GPS Substation would be approximately 250 feet by 250 feet (or about 1.43-acres in area). The base of the substation would consist of a mix of concrete pads, rip rap and gravel. (Applicant I, Tab G, Visibility Assessment, p. 7; Tr. I, p. 54)
- 133. GPS Substation would include the 34.5-kV to 115-kV main power transformer. GPS Substation would also include circuit breakers, disconnect switches, electrical bus and conductors, steel structures and foundations for equipment support, masts for lightning protection and lighting, and an equipment enclosure containing protective relaying and monitoring systems. (Applicant I, p. 13)
- 134. The tallest equipment within GPS Substation would be the 50-foot-tall lightning masts. (Applicant I, Tab G, Visibility Assessment, GPS p. 7)
- 135. GPS Substation would have an eight-foot-tall chain link fence with barbed wire on top. There would not be a wildlife gap at the bottom of the fence. (Applicant I, p. 12; Tr. I. pp. 44, 53)
- 136. The point of change of ownership (from GPS to Eversource) is anticipated between the circuit breakers from the 115-kV side of the [GPS] Collector Substation to the Eversource Switchyard. (Applicant 6, response 35)

Also, from the Council's Findings of Fact are the following regarding the Eversource Switchyard:

- 137. The project includes a new switchyard ("Eversource Switchyard) that would be constructed by GPS and later transferred to Eversource at commissioning so that it could be maintained and operated by Eversource. Thus, the Eversource Switchyard is considered part of the Application. (Tr. I, p. 55; Applicant I, Tab G, Visibility Assessment. p. 7)
- 138. The Eversource Switchyard would be located east of the railroad line and south of the Eversource ROW. It would be installed directly next to and northwest of the GPS Substation. (Applicant I; Tab A, Project Layout Map).
- 139. The dimensions of the Eversource Switchyard would be approximately 350 feet by 350 feet (or about 2.81-acres in area). The base of the substation would [be] a mix of concrete pads, rip rap and gravel. (Applicant I, Tab G, Visibility Assessment, p. 7; Tr. I, p. 55)
- 140. The Eversource Switchyard would contain circuit breakers, disconnect switches, metering equipment, electrical bus, and conductors; steel structures and concrete foundations for equipment support masts for lightning protection and lighting; and an equipment enclosure containing protective relaying and monitoring systems. (Applicant I, p. 13)
- 141. The tallest equipment within the Eversource Switchyard would be the 50-foot-tall lightning masts. (Applicant I, Tab G, Visibility Assessment, p. 7).
- 142. The Eversource Switchyard would have an eight-foot-tall chain link fence with barbed wire on top. There would not be a wildlife gap at the bottom of the fence. (Applicant I, p. 12; Tr. I, p. 44).

Also, from the Council's Findings of Fact are the following regarding the Eversource electrical interconnection to the Eversource Switchyard

143. The existing Eversource electric transmission line ROW contains two 115-kV transmission lines: #1100 Line and the #1200 Line. (Applicant I, p. 11)

144. The Eversource Switchyard would connect to the #1200 Line. A line loop and at least one new pole may be necessary to facilitate this connection. Eversource would file with the Council a Petition for a Declaratory Ruling for the interconnection of the Eversource Switchyard with the existing electric transmission line. (Applicant 2, Report on Electric and Magnetic Fields, p. 9; Tr. I, p. 55)

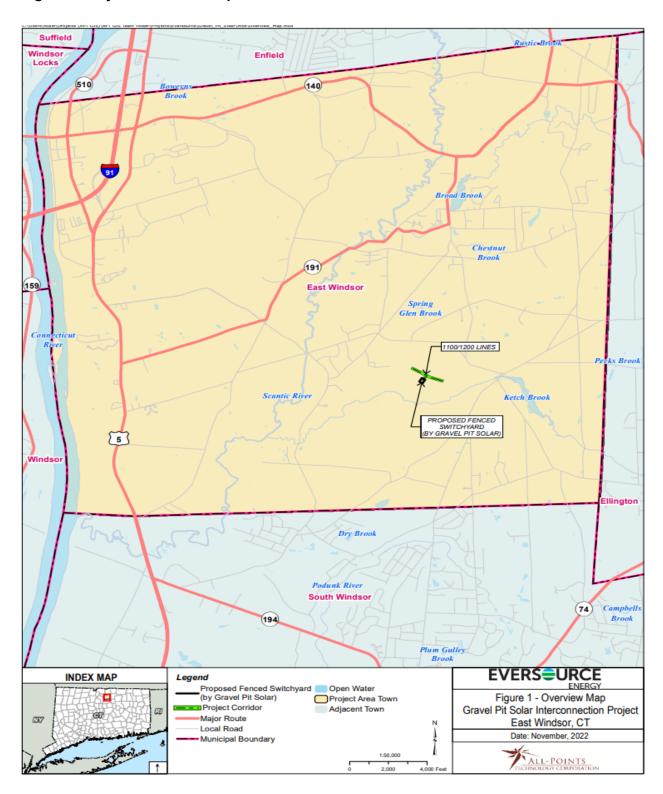
145. On July 11, 2019, GPS submitted an interconnection request to ISO-NE for 50 MW to be connected to the # I200 Line. A second interconnection request to allow for an additional 25 MW was submitted to ISO-NE on November 28, 2019. On May 26, 2020, the third and fourth interconnection requests were submitted to ISO-NE to bring the total request to 120 MW. A thermal and steady state analysis was performed that confirmed that the # 1200 Line could support at least 120 MW of new generation. (Applicant I, p. 14)

#### 3. Purpose of the Project

The purpose of the Eversource Project subject of this Petition is to comply with the terms and conditions of the Large Generator Interconnection Agreement between GPS and Eversource, dated April 19, 2021. The Project will interconnect the GPS Project to the Eversource transmission grid by sectionalizing the existing 1200 Line with a tap into and out of the Eversource Switchyard. As described above, the Eversource Switchyard will be constructed by GPS and then transferred to Eversource to own and operate it.

4

Figure1: Project Overview Map



### 4. Project Description

As mentioned above, the Project will consist of sectionalizing the 1200 Line and a transmission line tap running into and out of the Eversource Switchyard. The 1200 Line and the 1100 Line occupy an approximately 175 feet wide ROW between Barbour Hill Substation in South Windsor and Warehouse Point Junction in East Windsor. From Warehouse Point Junction, the 1200 Line runs west to Windsor Locks Substation in Windsor Locks and the 1100 Line runs north to Enfield Substation in Enfield. The 1100 Line is located on the north side of the ROW and the 1200 Line is located on the south side. At the Project location, the 1200 Line is approximately 250 feet from the site for the Eversource Switchyard. The 1200 Line will be segmented at Structure 6168, which is a double-circuit weathering steel H-frame structure supporting the 1200 and 1100 lines. The existing approximately 65 feet tall structure would be modified by removing one of the three H-frame poles and maintain the remaining H-frame structure to support the 1100 line. Two new weathering steel monopole structures (to be designated as 6168N and 6168S) would be installed to support the segmented 1200 Line and the two transmission line taps to the Eversource Switchyard.<sup>2</sup> The new structures would be approximately 75 feet tall. The conductors for the transmission line taps would be 1272 kcmil aluminum conductor steel supported and would connect to the Eversource Switchyard at the terminal structures inside the switchyard. In addition, two spans of fiber optic ground wire ("OPGW") will be installed between the two structures and the switchyard. The new conductor and OPGW would be pulled from a pull pad located adjacent to Structure 6170 and from within the Eversource Switchyard.

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<sup>&</sup>lt;sup>2</sup> Upon completion of the interconnection, the portion of the 1200 Line from Structure 6186S to Barbour Hill Substation would be designated as the 1455 Line and the portion from Structure 6186N to Windsor Locks Substation would be designated as the 1527 Line.

Project details are provided in the following attachments:

- Attachment A contains maps that depict the locations of existing and proposed structures and lines, existing access roads, and pull pads to be used for the Project, as well as environmental resources, other ROW features, and Project elements.
- Attachment B includes typical cross-sections of the existing and proposed transmission line structures and the limits of the ROW.

#### 5. Existing Environment, Environmental Effects, and Mitigation

The Project would be generally constructed within Eversource's ROW between structures 6170 and 6167 along the 1100/1200 Lines in East Windsor. A new easement would be required for the transmission line taps between the relocated 1200 line and the Eversource Switchyard (to be built by Gravel Pit Solar and transferred to Eversource), approximately 220 feet south of the ROW near structure 6168. The Project ROW and the switchyard parcel are located within areas previously subject to gravel mining operations that have been reclaimed and stabilized with upland meadow vegetation. Work activities will be conducted in accordance with Eversource's April 2022 Construction & Maintenance Environmental Requirements, Best Management Practices Manual for Massachusetts, and Connecticut ("BMPs") and comply with any Project permits and approvals.

The Project would not have a substantial adverse environmental effect for the reasons explained below.

#### Land Use

Land use surrounding Project area includes agricultural land, residential development, solar development, and sand and gravel mining operations. Notable features within the Project area are a Connecticut Department of Transportation (CT DOT) freight railway ROW to the west,

the East Windsor Sportsman's Club west of the freight railway ROW, and Ketch Brook to the south.

Project construction activities would occur primarily in Eversource's existing ROW, which has been dedicated to long term use as an electric transmission corridor. Other Project construction activities, such as the installation of the transmission line taps, will occur outside of Eversource's existing ROW, but within an area that was most recently used for mining sand and gravel. As such, the Project will not result in adverse impacts to existing land uses.

#### Tree and Vegetation Removal

The Project ROW is approximately 175 feet wide and traverses through a recently closed gravel mining operation. Due to the recent cessation of active sand and gravel mining, aside from some grasses and forbs, the indigenous species of plants have not yet recolonized the area and trees and shrubs are largely absent. Accordingly, no trees or vegetation would need to be removed to accommodate the Project construction activities.

#### **Vegetation Management Methods**

As a result of past clearing and earth moving activities associated with the previous gravel mining operations within and proximate to the Project area, little if any vegetation management is required to accomplish the Project activities. In addition, since no wetlands or watercourse resources occupy the Project area, no low impact clearing methods (e.g., BMPs to minimize soil disturbance, construction mats, etc.) are required.

After construction is completed, Eversource would perform ROW restoration in accordance with the protocols specified in the BMPs and based on consultations with GPS.

#### Scenic, Recreational and Cultural Resources

The Project is not anticipated to have a substantial adverse effect to scenic, recreational, and cultural resources. The Project is not located near a designated state scenic roadway.<sup>3</sup> The nearest state scenic roadway is State Route 74 located in Tolland approximately 7 miles southeast of the Project. Therefore, adverse effects to this resource are not anticipated.

A desktop review of the Connecticut Department of Energy and Environmental Protection's ("CT DEEP") GIS and field investigations data was conducted to determine whether the Project area is within or proximate to public open space property or trails. No open space property or trails are located within the Project area. The nearest open space property is the East Windsor Sportsman's Club located approximately 450 feet to the west, across the freight railway corridor. The Project will not affect public use of this nearby resource.

The Project area neither crosses nor is in proximity to any Connecticut Blue-blazed hiking trails. The nearest Connecticut Blue-blazed hiking trail, the Shenipsit Trail, is located approximately 6.7 miles to the east of the Project in Tolland.

Due to the widely disturbed landscape associated with the former gravel mining operations that encompass the Project, no archaeological or historic resources are located within or proximate to the Project area.

<sup>3</sup> Connecticut Department of Transportation (CTDOT), October 1, 2019, Connecticut State Scenic Roads. Accessed June 29, 2022. Available URL: https://portal.ct.gov/DOT/Programs/Connecticut-Scenic-Roads. The Town of East Windsor does not have any listed scenic roads in proximity to the Project.

#### Wetlands, Watercourses, Waterbodies and Flood Zones

No wetlands or water resources were identified or delineated within or proximate to the Project area based on an investigation performed on June 10, 2022. This conclusion is consistent with documentation provided in the Gravel Pit Solar filing with the Connecticut Siting Council (Docket No. 492). Based on that filing and as confirmed during a June 10, 2022, field inspection, the nearest wetland and water resource are wetlands proximate and bordering on Ketch Brook located approximately 950 feet south of the Project area; Ketch Brook is located approximately 1,200 feet to the south. No vernal pools or Federal Emergency Management Agency ("FEMA") Flood Zones are located within or proximate to the Project area. Details regarding each of these resource areas are summarized below.

#### Wetlands and Watercourses

An investigation of wetlands in the Project area was performed in accordance with industry standard methodology resulting in no wetlands or water resources being identified within or proximate to the Project area. The nearest wetland/water resource is Ketch Brook and its bordering forested wetlands, located approximately 950 feet from the Project area at its closest location. The southern limits of the former gravel mining operation separate the Project ROW from the Ketch Brook riparian corridor. Therefore, the Project will not result in a direct or indirect impact to wetland resources or Ketch Brook.

#### Vernal Pools

No vernal pool habitat was identified within or proximate to the Project area. A review of vernal pool data from the Gravel Pit Solar project revealed the nearest vernal pool (identified as VP-2) to the Project is located approximately 3,800 feet to the southwest across Ketch Brook. Therefore, the Project would not result in any impact to vernal pool resources.

#### FEMA Flood Zones

The Project area is located within a FEMA-designated unshaded Zone X, identified as areas of minimal flooding beyond 100- and 500-year flood zones. The nearest 100-year flood zone, classified as Zone A, is located approximately 1,600 feet south of the Project associated with Ketch Brook. Therefore, the Project would not impact any flood hazard zones or affect downstream resources.

#### Water Supply

Based on Aquifer Protection Areas ("APA") mapping maintained by CT DEEP, there are no APAs located within the Project area. The nearest APA, The Hunt Level A Regulated APA, is located approximately 250 feet northwest of structure 6169, encompassing structure 6170 (not part of Project).

The Project area is not located within or proximate to a Public Water Supply Watershed. The nearest Public Water Supply Watershed is the Connecticut Water Company Northern Regional Western System located approximately 5.6 miles to the east in Ellington.

There are no public water supply wells located within the Project area and no private water supply wells were observed within the Project area during field investigation activities.

Eversource would require its contractors to employ best management practices ("BMPs") for the proper storage, secondary containment, and handling of diesel fuel, motor oil, grease, and other lubricants, to protect water quality proximate to the Project area. Construction activities would conform to the BMPs, as well as to the requirements of Project-specific plans (e.g., Stormwater Pollution Control Plan; Spill Prevention and Control Plan), which would be prepared prior to the commencement of construction. As a result, the Project will not adversely impact the nearby APA or public water supply resources.

#### Wildlife and Habitat

The Project ROW provides potential habitat for a variety of early successional dependent species that utilize dry meadow type habitat that exists within and adjacent to the ROW due to reclamation of the former gravel mining operations. This early successional habitat is important to a wide range of species, most of which are declining as early successional habitats decline across the State due to habitat loss associated with land development as well as the loss of farmland. The ROW also functions to a degree as a linear wildlife corridor, allowing movement of animals through developed areas. The Gravel Pit Solar development that will surround the Project area will affect wildlife utilization of the ROW, potentially placing greater importance to the ROW wildlife corridor as solar panels will be located to both the north and south associated with the Gravel Pit Solar development. The Project activities are not anticipated to have a substantial adverse environmental effect on wildlife habitat.

The Project is not located within a Natural Diversity Database ("NDDB") buffer area, so no consultation is required with CT DEEP in accordance with its review policy. NDDB buffer areas are located nearby to the south and east (associated with Ketch Brook). A review of NDDB correspondence for Docket No. 492 revealed that perimeter isolation fencing will be installed and maintained during construction of the solar facility primarily to protect wood turtles (*Glyptemys insculpta*), a State-listed Special Concern Species, known to occur along Ketch Brook. The June 10, 2022, inspection of the Project area confirmed that the isolation fencing had already been installed and was being maintained by biologists under the direction of GPS. As a result of the existing protection measures for wood turtles, this species would not be anticipated to be encountered during Project work activities. Eversource will implement standard BMP contractor awareness turtle training so that the contractor understands the remote possibility of encountering wood turtles and what procedures to follow should a turtle be encountered. Therefore, the Project will not impact wood turtle or its habitat.

Eversource consulted with the U.S. Fish & Wildlife Service's ("USFWS") Information, Planning, and Consultation ("IPaC") service regarding federal-listed species that may be present within the Project area. The IPaC report indicated one federal-listed species; the Northern Long-eared Bat ("NLEB"; *Myotis septentrionalis*) may potentially occur in proximity to the Project area.

NLEB roosts in certain trees in the warmer months of the year and at other times hibernates in caves and mines (bat "hibernacula"). However, according to the CT DEEP NLEB Areas of Concern in Connecticut map (dated February 2016), there are no known roost trees within 150 feet of the Project area, while the nearest hibernacula is approximately 33 miles away to the southwest in Litchfield. No work is proposed that would affect any known hibernacula and no tree clearing would occur; therefore, no impact to this species is anticipated.

#### Visual Effects

The Project would result in minimal change to the visual character of the line and Eversource does not believe that the change would result in a substantial difference. The heights of the existing structures are approximately 65 feet above ground level. The proposed height of the new interconnection structures height would be approximately 75 feet above ground level.

While slightly taller than the existing structure, the new weathering steel monopoles would be located close to the location of the existing structures. The weathering steel used for the new structures is comparable with the weathering steel structures located in the ROW within and proximate to the Project area. As a result, the Project would not result in a detrimental change to the existing visual character of the line.

### Sound Levels along the Transmission Right of Way

The Project construction would result in short-term and localized noise, as is typical of any similar construction project, from the operation of equipment and other vehicles. Once in service, the new structures on the 115-kV line would not result in any changes to noise levels.

### Air Quality

Short-term, localized effects from the Project construction on air quality may result, primarily from fugitive dust and equipment emissions. To minimize the amount of dust generated by construction activities, the extent of exposed/disturbed areas at any one time would be minimized. Vehicle emissions would be limited by requiring contractors to properly maintain construction equipment and vehicles, and by minimizing the idling time of equipment and vehicles, including diesel construction equipment, in accordance with Connecticut regulatory requirements<sup>4</sup>. The potential for tracking dirt onto local paved roads will be monitored by the Project personnel. Any such tracking will be promptly swept and removed. To further minimize dust, water may be used to wet down disturbed soils or work areas with heavy tracking as needed.

#### Radio and Television Interference; Sound

There would be no increase in radio interference or audible noise from the operation of the new interconnection facilities.

<sup>&</sup>lt;sup>4</sup> Regulations of Connecticut State Agencies (RCSA) Section 22a-174-18(b)(3)(C) generally prohibits the idling of motor vehicles for more than three consecutive minutes when not in motion

### 6. Traffic Management

Construction vehicles and equipment associated with the work would include, but are not limited to, pickup trucks, bucket trucks, flat-bed trucks, excavators, concrete trucks, drill rigs, front loaders, reel trailers, bulldozers, forklifts, side booms, dump trucks and cranes. Pullers and tensioners will be used for the line work.

Construction-related vehicular and equipment movements would utilize public roads in the Project area to access the ROW and the Eversource Switchyard. However, the Project-related traffic is generally expected to be temporary and highly localized in the vicinity of the Project access point. Due to the short duration of the Project construction work, Project-related traffic movements are not expected to significantly affect transportation patterns or levels of service on public roads.

To safely move construction vehicles and equipment onto and off the ROW while minimizing disruptions to vehicular traffic along public roads, Eversource or its Project contractor would work with the Town, as appropriate, to develop and implement traffic management procedures, as needed. The construction contractor is typically responsible for posting and maintaining construction warning signs along public roads near work sites and for coordinating the use of flaggers or police personnel to direct traffic, as necessary.

#### 7. Construction Sequence

Project construction would include the following activities:

#### Staging / Laydown Area

To support Project construction, Eversource proposes to use the ROW as a staging/laydown yard.

The staging area would be used for surface storage of construction materials, equipment, tools, and supplies (including conductors, cable reels, insulators, hardware, poles, and construction

mats) for the Project. An office trailer and Conex storage containers may be located at the staging area.

Existing transmission line components removed during the work (structures, conductor, hardware, and insulators) may be accumulated and temporarily stored at the staging area prior to removal off-site for salvage and/or disposal. The staging area may also be used by construction crews for parking personal vehicles as well as for construction vehicles and equipment storage, and for performing minor maintenance, when needed, on construction equipment. Appropriate erosion and sedimentation ("E&S") controls would be installed and maintained until completion of the work in accordance with Project permits and the BMPs.

Eversource also will use available space within the ROW for staging the equipment and components for the new structures and transmission line taps.

#### Soil Erosion and Sediment Control Installation

Project construction would conform to best management practices for E&S control, including those provided in the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control ("Connecticut Guidelines") and the BMPs. Typical E&S control measures include, but are not limited to, straw blankets, hay bales, silt fencing, gravel anti-tracking pads, soil and slope protection, water bars, check dams, berms, swales, plunge pools, and sediment basins. Silt fence would be installed as needed prior to construction to intercept and retain sediment and/or construction materials from disturbed areas and prevent such materials from discharging to water resources or off ROW.

Temporary E&S control measures would be maintained and inspected throughout the Project to ensure their integrity and effectiveness and for conformance to BMPs. After the installation of the Project facilities, seeding and mulching would be used to permanently stabilize the areas of the ROW disturbed by the work. Areas disturbed by Project construction would be stabilized with

gravel as necessary. Temporary E&S control measures would remain in place until the Project work is complete and all disturbed areas have been deemed stabilized.

#### Access Roads and Work Pad

Access to the switchyard will be via an existing access road off of Windsorville Road. Access to each of the proposed transmission structures to be modified or installed will be required during Project construction. As a result of the past and ongoing construction activities in the Project area, access roads are largely already established and Eversource will utilize these existing access roads to the extent practicable. One new permanent access road will be required between Structures 6168 and 6170 for the construction of a pull pad and for future access within the ROW. The access roads expected to be used for the proposed Project are illustrated on the maps in Attachment A. E&S controls would be installed as necessary along access roads.

At Structure 6168, an existing work pad will be enlarged to stage material for final on-site assembly and/or removal of structures, to pull conductors and to provide a safe, level work base for the construction equipment. A work pad will be built adjacent to Structure 6170 where machinery would be needed for pulling conductors. To facilitate future transmission line maintenance, access roads and structure work pads in uplands would be left in place (refer to Attachment A). No new permanent access roads or work pads are proposed in water resource areas.

The approximate locations and configuration of Project work pads, as determined based on the environmental field studies and constructability reviews, are shown on the Attachment A maps.

### Foundation Installation

The proposed structures will have either drilled (caisson) foundations or direct embed foundations. Foundation installation work would require the use of equipment such as drill rigs,

pneumatic hammers, augers, dump trucks, concrete trucks, grapple trucks and light duty trucks. If groundwater is encountered, pumping (vacuum) trucks or other suitable equipment would be used to remove water from the excavated areas as the shaft is being drilled or as the structure is being set. The water would then be discharged in accordance with applicable local, state, and federal requirements.

Excavated soils that are generated during construction activities would be stored or spread in an upland area within the ROW, to the extent practicable. Materials that cannot be utilized as backfill would be disposed in accordance with applicable regulations.

As needed, counterpoise may also be installed at this time. In addition, depending on site-specific soil conductivity, supplemental grounding will be installed. A quad "ditch-witch" plow-cable trencher (or equivalent) would be used to install the counterpoise.

#### Structure Assembly/Installation

Structure sections, structure components, and hardware would be delivered to the structure location using flat-bed trucks and assembled on-site using a crane and bucket trucks. After assembly, the area around direct embed foundations would be backfilled with processed gravel.

#### Conductor and OPGW Installation

The new conductors and OPGW would be installed after the new structures are erected. The equipment required for these activities would include cable reels, pulling and tensioning rigs, and bucket trucks.

#### Restoration

Once the new structures are erected, the lines are re-energized and the existing structures have been removed, ROW restoration activities would commence. Restoration activities would include the removal of construction debris, signage, flagging, temporary fencing, and construction mats. Areas affected by construction would be re-graded (if needed and as practical) and stabilized using revegetation or other measures before removing temporary E&S controls. Eversource would perform ROW restoration in accordance with the protocols specified in the BMPs and in consultation with affected property owners.

#### Waste Management

Waste materials, such as structure components (e.g., materials from the removed structures, conductor, static wire, associated hardware) and any other construction debris would be disposed of in accordance with the BMPs, applicable regulations or recycled consistent with applicable rules and regulations and Eversource policies. As described above, excess soils would be managed in accordance with the BMPs, applicable regulations, and disposal facility policies. Dewatering during construction activities would be conducted in accordance with the *Connecticut Guidelines*, the BMPs, and applicable regulations.

#### 8. Construction Schedule and Work Hours

Eversource proposes to begin construction in 2023. Normal construction hours would be Monday through Saturday from 7:00 AM to 7:00 PM. Workers may arrive for and leave work outside of these times for meetings but will not perform any noisy construction activities before or after the designated work hours.

Sunday work hours or evening work hours past 7:00 PM may be necessary due to delays caused by unforeseen circumstances, inclement weather, and/or outage constraints. In the event that evening, or Sunday work shifts are necessary, Eversource will provide notice to the Council, Town, and abutters.

### 9. Electric and Magnetic Fields

Eversource prepared calculations of the Electric and Magnetic fields ("EMF") projected to occur after Project modifications are completed and the 1200 Line re-energized. The calculations were based on annual average loading because these are most representative of typical operating conditions. The calculations apply at one meter (3.28 feet) above grade and assume that the lowest conductor for each 115-kV circuit is 30 feet above grade.

The existing approximately 65 feet tall structure (Structure 6168) would be modified by removing one of the three H-frame poles and maintain the remaining H-frame structure to support the 1100 line. Two new weathering steel monopole structures (to be designated as 6168N and 6168S) would be installed to support the segmented 1200 Line and the two transmission line taps to the Eversource Switchyard. Maximum magnetic field levels are calculated to be approximately 14.2 milligauss ("mG") within the ROW. Magnetic fields at the edges of the ROW are calculated to be approximately 2.1 mG.

Maximum electric field levels in the ROW are calculated to be approximately 0.88 kilovolts/meter ("kV/m"). Electric fields at and beyond the edges of the ROW will be essentially unchanged.

Table 1 summarizes the calculated electric and magnetic fields at the ROW edges after the Project modifications.

**Table 1- Summary of Calculated Electric and Magnetic Fields** 

Gravel Pit Solar Interconnect (Average Loads)	North ROW Edge	Max in ROW	South ROW Edge
Magnetic Field (mG)	2.11	14.18	2.09
Electric Fields (kV/m)	0.02	0.88	0.02

The primary source of electric and magnetic fields are the transmission lines. The electric and magnetic fields in the vicinity of the proposed Eversource Switchyard would increase in the area beneath where the lines enter and interconnect to the station, which is on the South of the existing transmission line corridor and the North of the Eversource switchyard. Away from the point of the interconnection, the changes to the fields would be negligible.

#### Comparison of Calculated Fields to International Guidelines

The anticipated fields from the proposed transmission line taps are well below the internationally established exposure limits for 60-Hz electric and magnetic fields. Specifically, these fields are below the limits identified by the International Council on Electromagnetic Safety ("ICES") and the International Council on Non-Ionizing Radiation Protection ("ICNIRP"). These standards are summarized below in Table 2.

**Table 2 - International Guidelines for EMF Exposure** 

	Magnetic Field (mG)	Electric Field (kV/m)
ICNIRP	2000	4.2
ICES	9040	5 (in General)
ICES	9040	10 (on ROW)

#### 10. **Municipal and Property Owner Outreach**

In October and November 2022, Eversource consulted with the municipal officials of the Town of East Windsor, briefing them on the proposed Project. Additionally, Eversource provided representatives of the Town with written notice of the Petition filing. Throughout the development of the Project, Eversource has been in close contact with GPS, which currently owns all of the parcels abutting the Project area. Eversource representatives will continue communications with GPS to provide advance notice of Project phases. Refer to Attachment D for Project outreach information.

#### 11. Conclusion

Based on the foregoing, Eversource respectfully submits that the proposed modifications would not result in a substantial adverse effect on the environment, 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.

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

### **List of Attachments**

Attachment A: Aerial Maps
Attachment B: Cross-sections

Attachment C: EMF Graphs and Tabulated Field Calculations
Attachment D: Letter to Abutters and Affidavit of Notice of Service

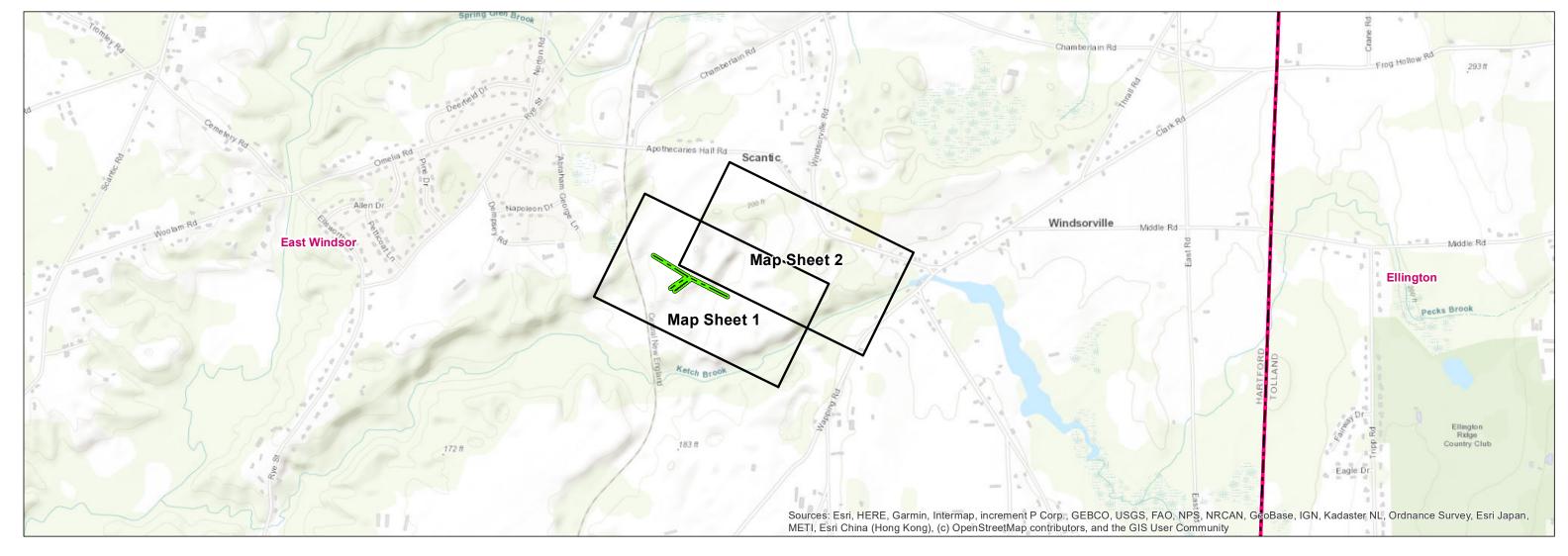
## Attachment A

## Aerial Maps

## **Gravel Pit Solar Interconnection Project**

East Windsor, CT Aerial Maps

Date: December 20, 2022



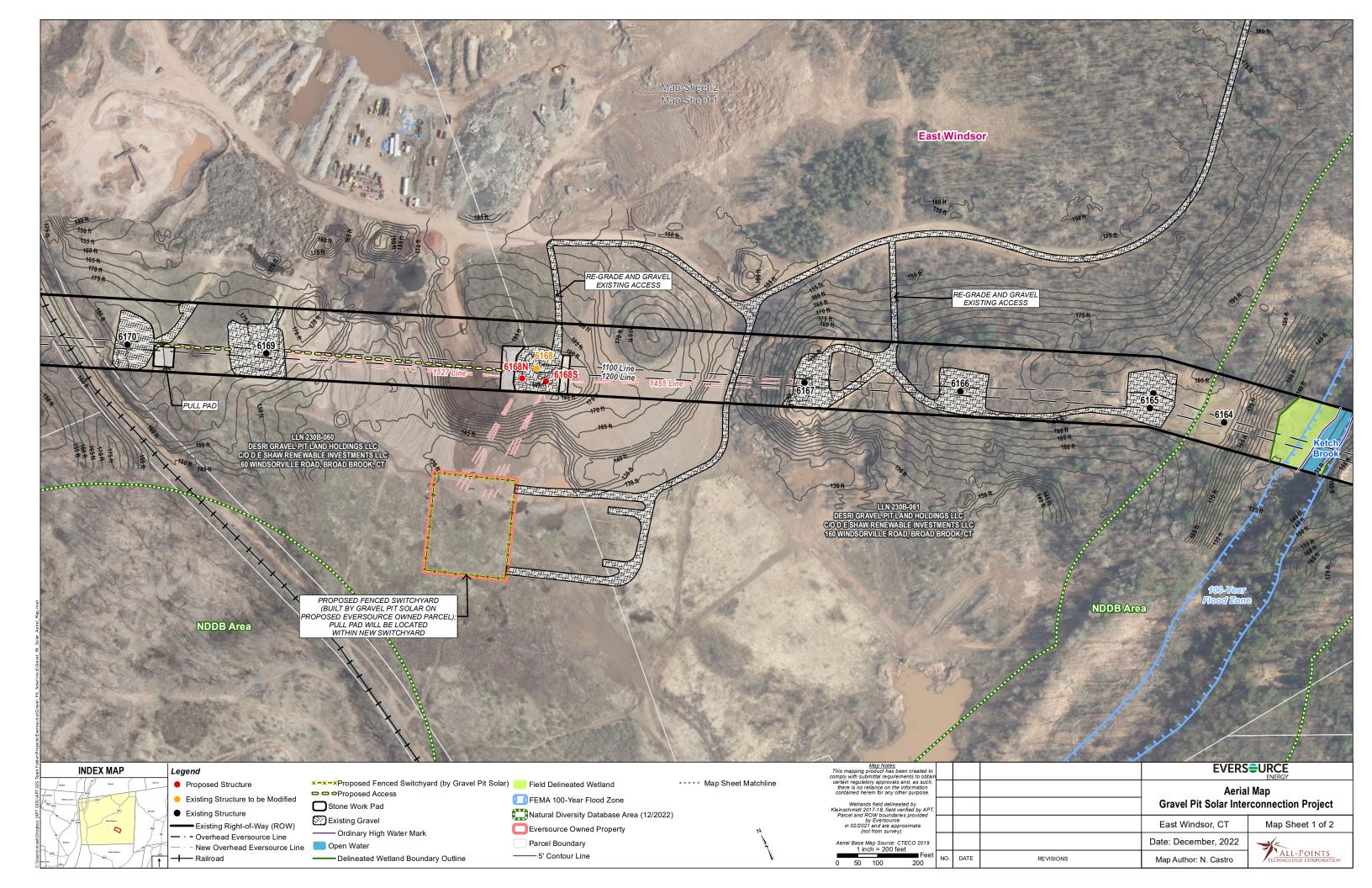


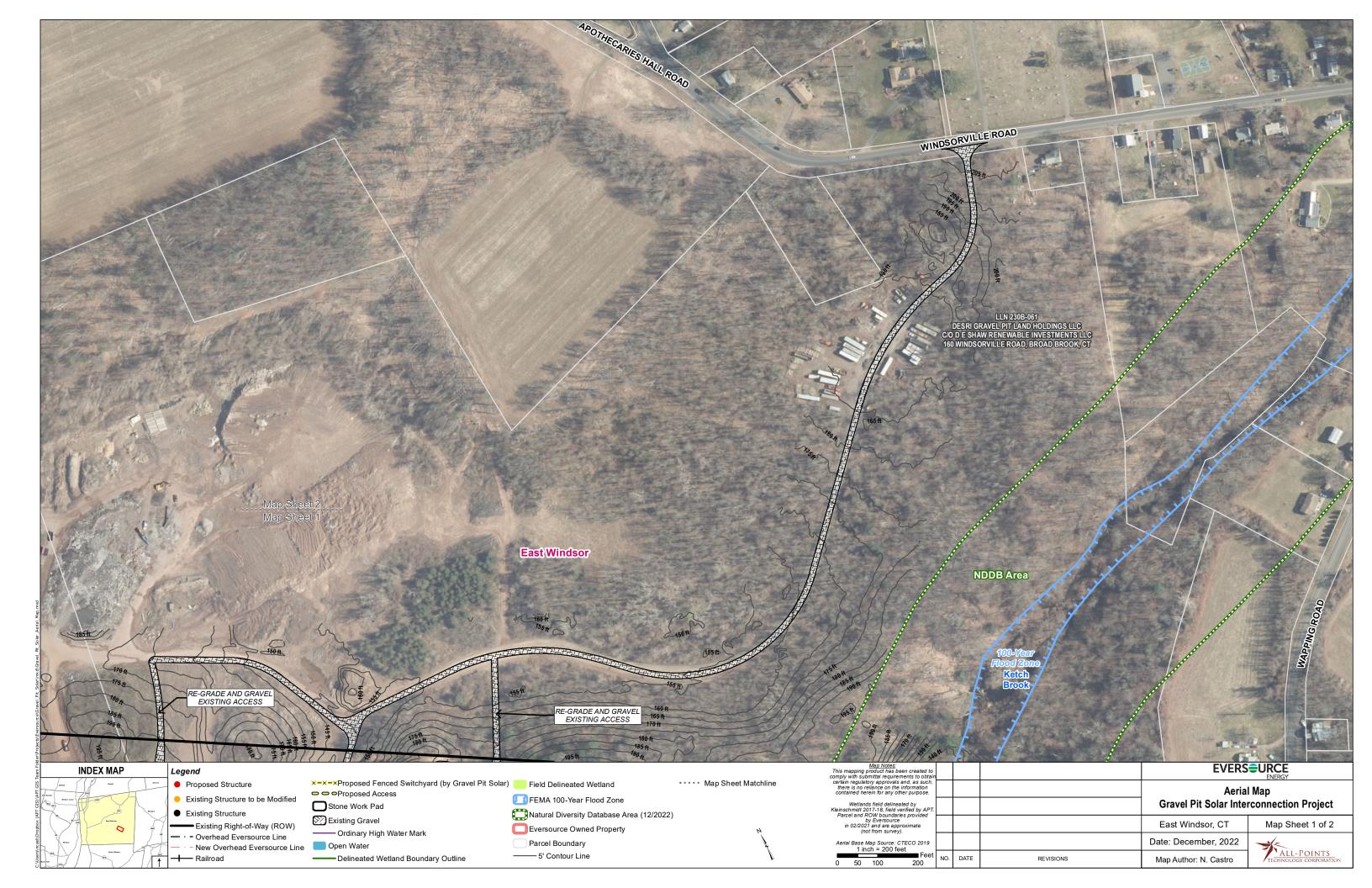
PREPARED FOR:



INDEX OF FIGURES
Title Sheet / Index Map
Map Sheets 1-2

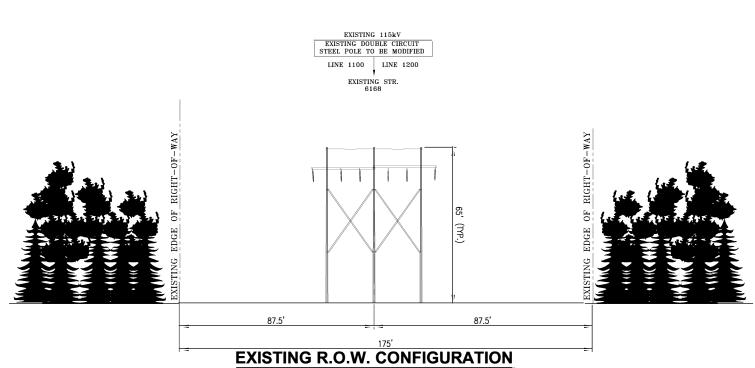




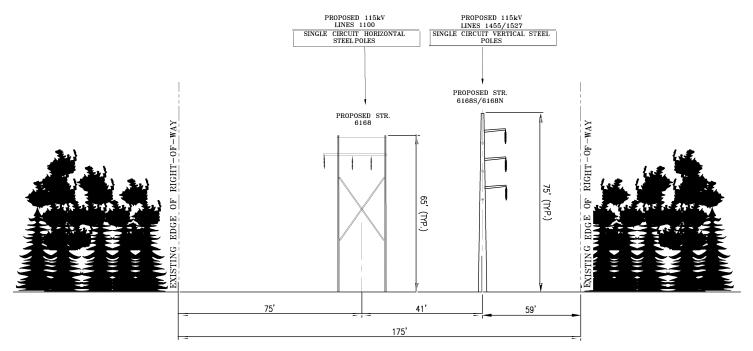


## Attachment B

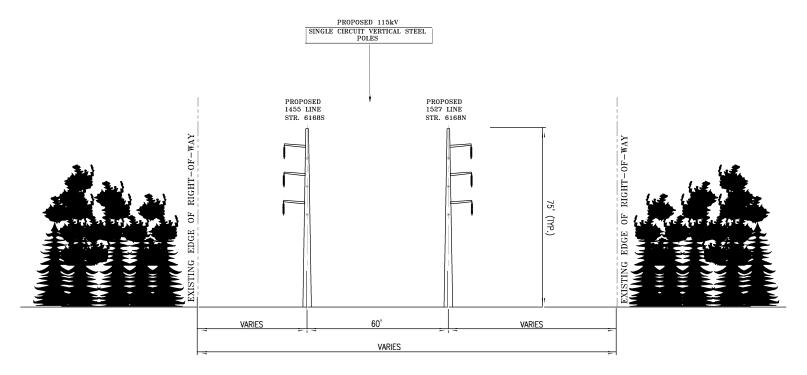
**Cross-sections** 



# LOOKING SOUTH FROM WINDSOR LOCKS SUBSTATION TO BARBOR HILL SUBSTATION



# PROPOSED R.O.W. CONFIGURATION LOOKING SOUTH FROM WINDSOR LOCKS SUBSTATION TO BARBOR HILL SUBSTATION

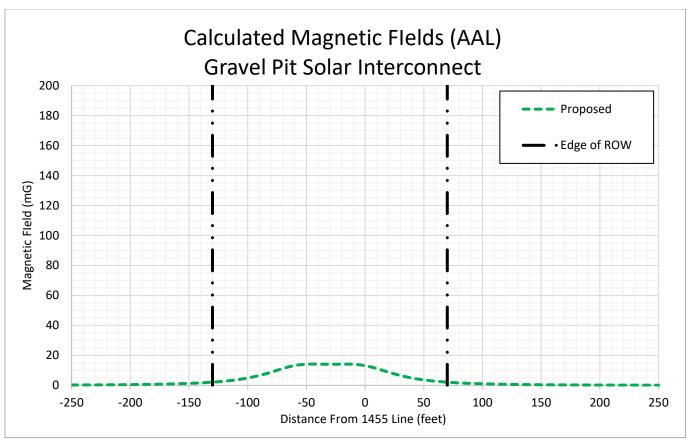


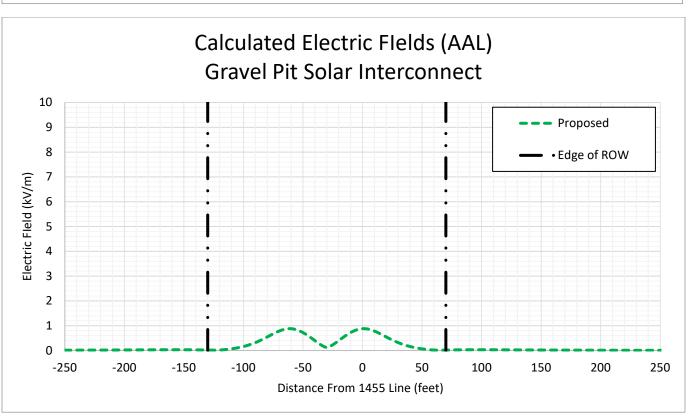
PROPOSED R.O.W. CONFIGURATION
LOOKING WEST TO GRAVEL PIT SOLAR SUBSTATION

REVISIONS DURING CONSTRUCTION						
0			KLB	CJS	GEL	
1  12/15/22   RE-ISSUED FOR CONS	STRUCTION W	0 #40496905	KLB	CJS	GEL	
<b>EVERS</b>	<b>&gt;</b> =	ιJΚ				
	_					
		EN	IERGY			
MUNDOOD LOOKO O/O ODOO/O DADDOUD LIILL O/O						
WINDSOR LOCKS S/S - GPS S/S - BARBOUR HILL S/S						
115-kV TRANSMISSION LINE						
RIGHT OF WAY CROSS SECTION						
EAST WINDSOR, CT						
KLB CHKO CJS	APP	GEL	APP			
OTE 2/23/22 DATE 2/23/22	DATE	2/23/22	DATE			
-SCALE N.T.S. SIZE D	FELD BO	OK & PAGES				
-SCALE N.T.S. V.S.	R.E. DWG					
E PROJ. NUMBER 4049690	DWG NO.		01051 9	5004.		
E PRIOL NUMBER 40496905 PMC NO. 01051-85004 p001				וטע		

## Attachment C

## EMF Graphs and Tabulated Field Calculations





## Attachment D

Letter to Abutters and Affidavit of Notice of Service



56 Prospect Street Hartford, CT 06103 (860) 728-4527

Kathleen M. Shanley Manager- Transmission Siting

December 22, 2022

Dear Neighbor,

At Eversource, we're always working to serve you better. We are submitting a Petition to the Connecticut Siting Council (CSC) for proposed modifications to its existing 115-kilovolt ("kV") 1200 Line needed to interconnect the Gravel Pit Solar Project to Eversource's existing transmission system in East Windsor, Connecticut.

#### **Proposed Project Information**

The Gravel Pit Solar Transmission Interconnection Project ("Project") will interconnect the Gravel Pit Solar Project ("GPS") to the transmission grid by sectionalizing the existing 1200 Line with a tap into and out of the Eversource Switchyard. The Eversource Switchyard will be constructed by GPS and then transferred to Eversource to own and operate.

To make this interconnection, one existing structure will be replaced with a single circuit steel H-frame structure to support the 1100 Line. The replacement structure will be the same height as the existing structure, which is approximately 65 feet tall. In addition, two new weathering steel monopole structures (to be designated as 6168N and 6168S) will be installed to support the segmented 1200 Line and the two taps to the Eversource Switchyard. The new structures will be approximately 75 feet tall. Finally, new communication wire, called fiber optic ground wire ("OPGW"), and new conductor will be installed between the two new structures and the switchyard.

#### **What You Can Expect**

Pending receipt of the necessary approvals, construction is expected to begin in the second quarter of 2023. We anticipate construction will be complete, including restoration of affected areas, by the end of 2023. This schedule is approximate and subject to change based on weather and other unforeseen circumstances.

#### **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 projects hotline at 1-800-793-2202 or send an email to <a href="mailto:ProjectInfo@eversource.com">ProjectInfo@eversource.com</a>.

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.

Thank you.

Sincerely,

Joel Canela-Burgos

Joel Canela-Burgos

Eversource Project Manager - Transmission

#### 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 the petition for a declaratory ruling of The Connecticut Light and Power Company doing business as Eversource Energy to be served by mail or courier upon the following municipal officials:

Jason Bowsza
 First Selectman
 First Selectman's Office
 11 Rye Street
 Broad Brook, CT 06016

I also certify that I caused notice of the proposed modifications to be served by mail or courier upon owners of abutting properties shown in Attachment D to the Petition.

John Ortegon
Project Manager

On this the <u>22</u>d day of December 2022, before me, the undersigned representative, personally appeared, John Ortegon, 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.

Notary Public/My Commission expires:_			
Officer of the Superior Court/ Juris No.:*	andre W.	Lol	413393