ENVIRONMENTAL ASSESSMENT

RAFFIA ROAD SOLAR PROJECT

99 - 113 RAFFIA ROAD

ENFIELD, CONNECTICUT

Prepared for:

LSE Hercules LLC
40 Tower Lane – Suite 201
Avon, Connecticut 06001

Prepared by:

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December 2022

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Appendices

1 Introduction

All-Points Technology Corporation, P.C. ("APT") prepared this Environmental Assessment ("EA") on behalf of LSE Hercules LLC (the "Petitioner") for the proposed installation and utility interconnection of a solar-based electric generating facility (collectively the "Project"), with output of approximately 4.0 megawatts[1] ("MW") located in the Town of Enfield, Connecticut ("Town"). This EA has been completed to support the Petitioner's submission to the Connecticut Siting Council ("Council") of a petition for declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the construction, maintenance, and operation of the electric generating facility.

The results of this assessment demonstrate that the proposed development will comply with the Connecticut Department of Energy and Environmental Protection's ("DEEP") air and water quality standards and will not have an adverse effect on the existing environment and ecology of the Site or the surrounding area. The Town of Enfield is not an "environmental justice community"[2] and the proposed Project is not defined as an "affecting facility"[3] under Connecticut General Statutes § 22a-20a. Therefore, the Project is not subject to the requirements of that section.

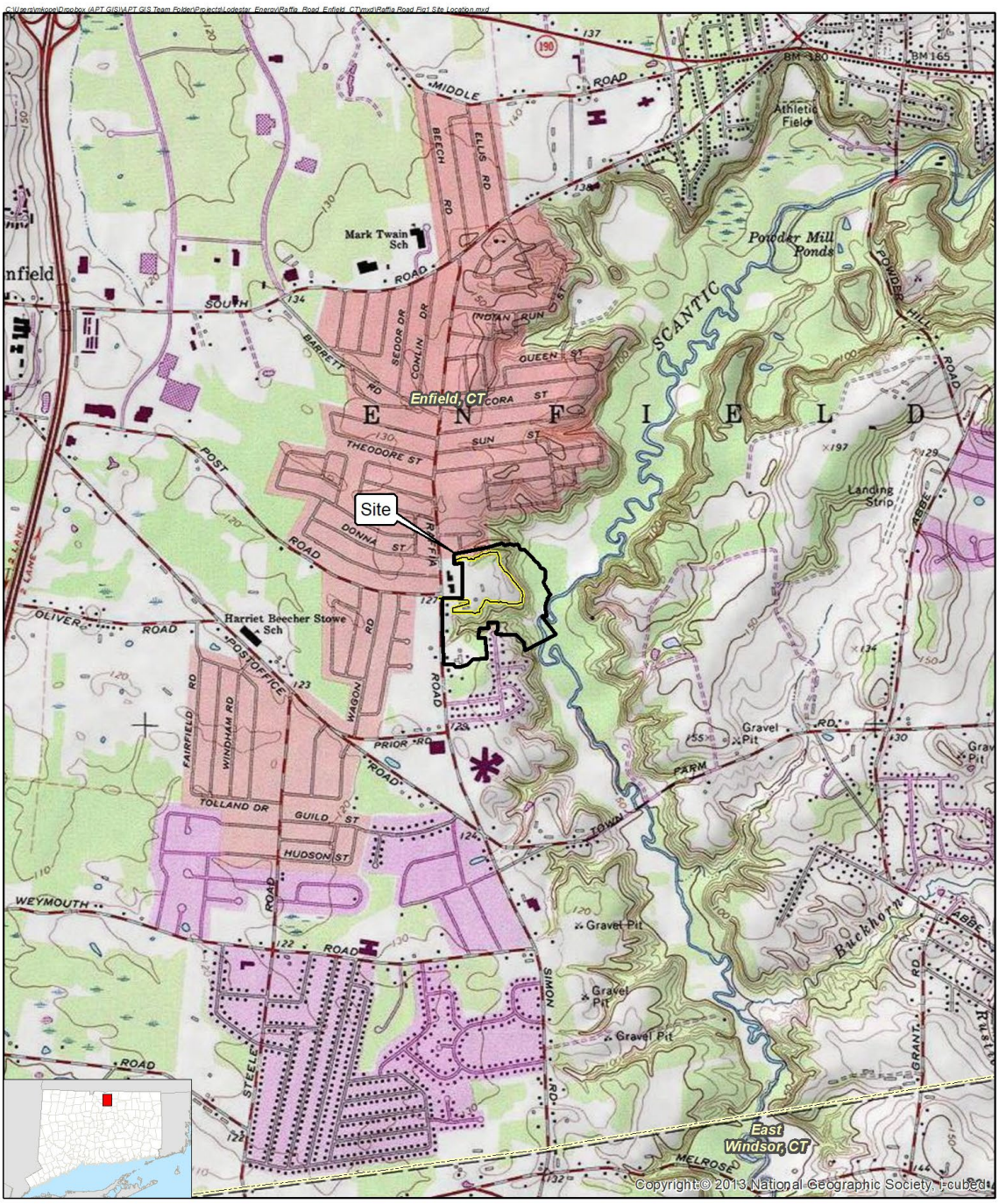
The Project will be located at 99 - 113 Raffia Road in Enfield, Connecticut (referred to herein as the "Site"). The Site consists of parcels on the east side of Raffia Road under affiliated ownership that total approximately 51 acres. The Project interconnect route will extend easterly from Raffia Road along the northern property boundary of the parcel identified as 105 Raffia Road. The southern portion of the Site is developed with farm buildings; much of the northern portion of the Site is cleared and in use for timber harvesting, processing and storage; an open field is in the northwestern portion; the eastern and southeastern portions contain undeveloped wooded areas.

[1] The output referenced is Alternating Current (AC).

[2] "Environmental justice community" means (A) a United States census block group, as determined in accordance with the most recent United States census, for which thirty per cent or more of the population consists of low income persons who are not institutionalized and have an income below two hundred per cent of the federal poverty level, or (B) a distressed municipality, as defined in subsection (b) of Connecticut General Statutes § 32-9p.

[3] "Affecting facility" is defined, in part, as any electric generating facility with a capacity of more than ten megawatts.

Figure 1, *Site Location Map*, depicts the location of the Site and the immediate surrounding area.



Legend

- Site
- Project Area
- Municipal Boundary

Map Notes:
Base Map Source: USGS 7.5 Minute Topographic Quadrangle Maps, Broad Brook, CT (1984)
Map Scale: 1 inch = 2,000 feet
Map Date: December 2022

N

2,000 1,000 0 2,000 Feet

Figure 1
Site Location Map

Proposed Solar Energy Facility
Raffia Road
Enfield, Connecticut

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2 Proposed Project

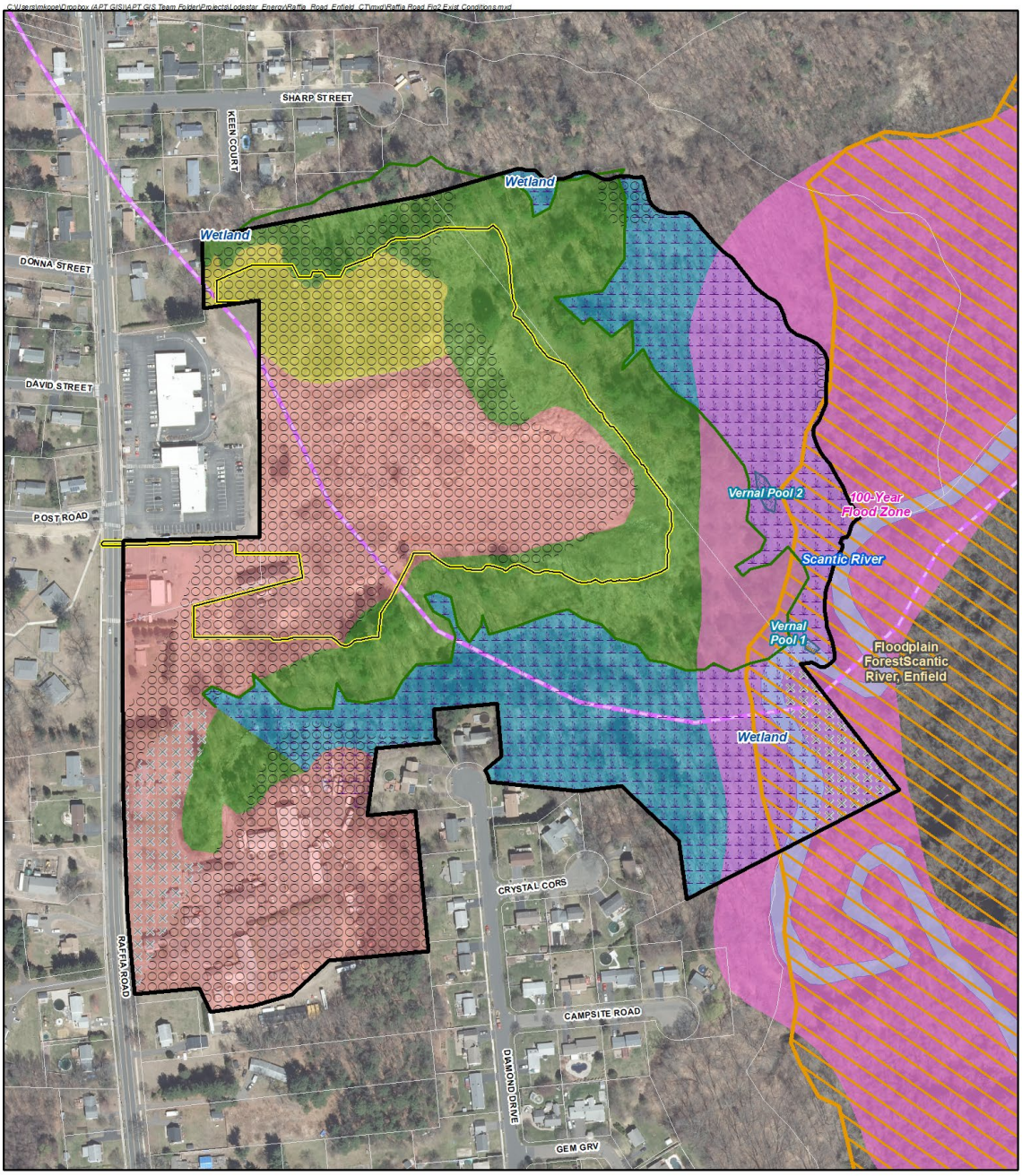
2.1 Project Setting

The Project will occupy ±14.28 acres in the north central portion of the Site (the "Project Area"). The electrical service interconnection line will extend to Raffia Road at the southwestern corner of the Project Area. Access from Raffia Road will be over existing access south of the interconnection line.

The Site's existing topography ranges from approximately 50 feet above mean sea level ("AMSL") to 140 feet AMSL. Grades within the Project Area generally slope downward from the north and west to the south and east, with ground elevations ranging from approximately 116 feet AMSL to 54 feet AMSL.

Figure 2, *Existing Conditions*, depicts current conditions on the Site.

The surrounding area includes residential and commercial development, with wooded areas to the east.



Legend

- Site
- Project Area
- Approximate Parcel Boundary
- Delineated Wetland Boundary
- Wetland Area
- Vernal Pool

Farmland Soils

- Prime Farmland Soils
- Statewide Important Farmland Soils

Habitat

- Developed
- Edge Forest
- Open Field
- Riparian
- Critical Habitat (CTDEEP, Oct 2019)
- Aquifer Protection Area (Avery APA; CTDEEP, Jan 2021)
- 100-Year Flood Zone
- Open Water (CTDEEP)

N

300 150 0 300 Feet

Map Notes:
Base Map Source: 2019 Aerial Photograph (CTECO)
Map Scale: 1 inch = 300 feet
Map Date: December 2022

Figure 2
Existing Conditions

Proposed Solar Energy Facility
Raffia Road
Enfield, Connecticut

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2.2 Project Development and Operation.

Upon its completion, the solar electric energy generating facility (the "Facility") will consist of one (1) array with a total of 9,852 photovoltaic modules ("panels") and associated equipment. A ground-mounted racking system will be used to secure the panels. The Facility will be surrounded by a six (6)-foot tall chain link fence.

The Project will also require one (1) electrical service interconnection that will extend from the existing Eversource distribution system along the west side of Raffia Road. The interconnection route will extend into the southwest corner of the Facility and utilize a series of six (6) new utility poles, one (1) each on the west and east sides of Raffia Road, and four (4) within the western portion of the Site. From there, connections will extend underground to the fence and into the Facility. Once complete, the entire fenced Facility will occupy approximately 13.28 acres of the Site with an additional ±1.00 acre of improvements beyond the fenced limits, for a total Project Area of ±14.28 acres.

Proposed development drawings are provided in Appendix A, *Project Plans*.

The leading edge of the panels will be at least 24" above the existing ground surface, which will provide adequate room for any accumulating snow to "sheet" off. Any production degradation due to snow build-up has already been modeled into the annual system output and performance calculations. The Petitioner does not envision requiring any "snow removal" operations; rather, the snow will be allowed to melt or slide off.

Construction activities associated with the Project will include the following:

- installing erosion and sedimentation control measures;
- grading associated with drainage and stormwater management;
- installing racking and modules;
- trenching for electrical service and interconnection;
- installing four (4) utility poles (on-Site) for interconnection to the existing electrical distribution system along Raffia Road; and
- stabilizing the Project Area.

Earthwork is required to allow the Project development to comply with DEEP's *Appendix I, Stormwater Management at Solar Array Construction Projects*. ("Appendix I") to the *General*

Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities ("General Permit").

The Facility is unstaffed; after construction is complete and the Facility is operable, traffic at the Site will be minimal. It is anticipated that the Facility will require routine maintenance of the electrical equipment one (1) time per year. Annual maintenance will typically involve two (2) technicians for a day. Repairs will be made on an as-needed basis. It is expected that mowing would occur, at a minimum, one (1) time per year to suppress woody growth. Depending on site-specific conditions, additional mowings (2 to 3 times annually) may be required.

2.2.1 Access

The Facility will be accessed across an existing paved and gravel route that extends from Raffia Road to the southwestern corner of the Facility.

2.2.2 Public Health and Safety

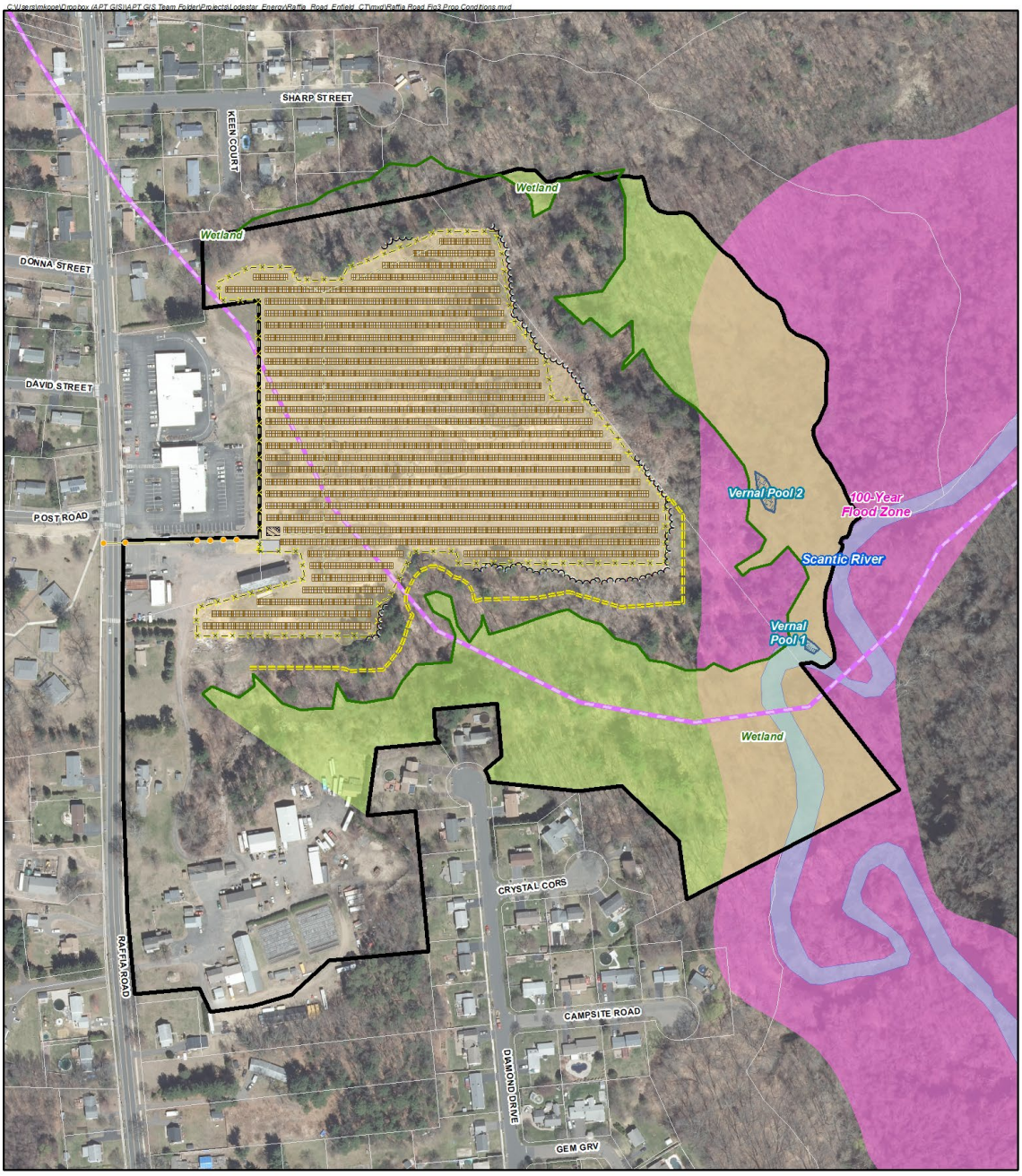
The Project will meet applicable local, state, national and industry health and safety standards and requirements related to electric power generation. The Facility will not consume any raw materials, will not produce any by-products and will be unstaffed during normal operating conditions.

The Facility will be enclosed by a six (6)-foot tall chain link fence. The entrance to the Facility will be gated, limiting access to authorized personnel only. All Town emergency response personnel will be provided access via a Knox padlock. The Facility will be remotely monitored and will have the ability to remotely de-energize in the case of an emergency.

3 Environmental Conditions

This section provides an overview of the current conditions at the Site and an evaluation of the Project's potential impacts on the environment. The results of this assessment demonstrate that the Project will comply with the DEEP air and water quality standards and will not have an undue adverse effect on the existing environment and ecology.

Please refer to Figure 3, *Proposed Conditions* for a depiction of the Project and its relationship with the resources discussed herein.



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- Aquifer Protection Area (Avery APA; Jan 2021)
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- Perimeter Fence
- Tree Topping Limits
- Interconnection Path
- Underground Electrical Utility
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- Concrete Equipment Pad
- Gravel Access Drive
- Limit of Disturbance
- 100-Year Flood Zone
- Open Water (CTDEEP)

Map Notes:
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Map Date: December 2022

N

300 150 0 300 Feet

Figure 3
Proposed Conditions

Proposed Solar Energy Facility
Raffia Road
Enfield, Connecticut

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3.1 Air Quality

Due to the nature of a solar energy generating facility, no air emissions will be generated during operations. Therefore, the operation of the Facility will have no adverse effects on air quality and no permit is required.

Temporary, potential, construction-related mobile source emissions will include those associated with construction vehicles and equipment. Any potential air quality impacts related to construction activities can be considered de minimis. Such emissions will be mitigated using available measures, including limiting idling times of equipment; proper maintenance of all vehicles and equipment; and watering/spraying to minimize dust and particulate releases. In addition, all on-site and off-road equipment will meet the latest standards for diesel emissions, as prescribed by the United States Environmental Protection Agency.

3.2 Water Resources

3.2.1 Wetlands and Watercourses

APT Registered Soil Scientists identified portions of one (1) wetland on the Site during field inspections and wetland delineations completed on May 5, 2022. The results of the field delineation are summarized below. The location of this resource is depicted on Figure 2, *Existing Conditions*.

The wetland is characterized by two (2) narrow seep wetland systems confined between steep escarpment slopes that drain into interior intermittent watercourses forming headwater areas to the Scantic River. The two (2) seep features are generally located to the north and south of the Project Area in a forested setting dominated by white oak, red and Norway maples. The Scantic River and associated floodplain wetlands are to the east, primarily on adjoining parcels. Upon convergence with the Scantic River floodplain swamp, the wetland transitions to a scrub-shrub transitional zone dominated by silky dogwood and high bush blueberry. Carpets of skunk cabbage and a dominance of jewelweed were also present throughout the floodplain wetland understory. Two (2) cryptic vernal pools supporting wood frog and spotted salamander breeding were identified to the southeast within backwater channels of the Scantic River floodplain.

3.2.2 Vernal Pool

The Department of the Army, Regional General Permits for the State of Connecticut define vernal pools as depressional wetland basins that typically go dry in most years and may contain inlets or outlets, typically of intermittent flow. Vernal pools range in both size and depth depending upon landscape position and parent material(s). Several species of amphibians depend on vernal pools for reproduction and development. These species are referred to as obligate, or indicator, vernal pool species and their presence in a wetland during the breeding season helps to identify that area as a vernal pool. In most years, vernal pools support one or more of the following obligate species: wood frog, spotted salamander, blue-spotted salamander, marbled salamander, Jefferson's salamander, and fairy shrimp. Vernal pools should preclude sustainable populations of predatory fish.

Vernal pool physical characteristics can vary widely. "Classic" vernal pools are natural depressions in a wooded upland with no hydrologic connection to other wetland systems. Often, they are depressions or impoundments within larger wetland systems. These vernal pool habitats are commonly referred to as "cryptic" vernal pools. "Anthropogenic" vernal pools are man-made depressions, created either intentionally or unintentionally, that support successful breeding by obligate species.

Two cryptic style vernal pools were identified and documented during the May 5, 2022 wetland investigation within diffuse interconnected depressional pockets along the Scantic River floodplain. Both pools are located to the east of the Project Area. These pools were confirmed with documented presence of obligate vernal pool species breeding activity. Survey methods employed included audial surveys of chorusing adults, a cover search for any adult migration and/or breeding within or adjacent to the pools, a visual survey of egg masses and larvae, and dip-netting within accessible areas to identify species within the water column and benthic material. Egg mass searches were conducted by slowly and methodically wading along the perimeter of accessible open water areas using polarized sunglasses under generally sunny skies. Due to the early-May inspection time, egg masses would not be expected to be present; rather, tadpoles and/or larvae would typically be present that late in the vernal pool breeding season.

Vernal Pool 1 ("VP1") contained 10-12 inches of water with evidence of permanent to semi-permanent inundation supported by hydrophytic vegetation including marsh marigold, pickerelweed, and parrot's feather. These plants are classified as obligate and prefer areas of permanent saturation or active long-duration hydrology. An abundance of wood frog larvae was observed within the pool during the investigation. Wood frog generally occurs statewide across all ecoregions and is one of the most common vernal pool indicator species. The relatively shallow pool bottom consisted of thick accumulated detritus and organics with minimal attachment sites for amphibian species that attach egg masses to roots and fallen woody debris.

Spotted salamander larvae were identified within Vernal Pool 2 ("VP2") along with juvenile green frog and pickerel frog. A moderate duff layer from accumulated detritus and several attachment sites along with tussock sedges provide habitat structure for a number of amphibian species. Duckweed, a floating aquatic plant, was also present within VP2, indicating permanent to semi-permanent inundation. Areas that sustain permanent inundation have the potential to support breeding of predatory frog species and finfish that prey on egg masses and larvae of obligate vernal pool species.

Construction and operation of the Facility would not result in a direct physical impact to the vernal pools. It is widely documented that vernal pool dependent amphibians are not solely reliant upon the actual vernal pool habitat for breeding (i.e., egg and larval development) but do require surrounding upland forest habitat for most of their adult lives. Accepted studies recommend protection of adjacent habitat up to 750 feet from the vernal pool edge for obligate pool-breeding amphibians (Calhoun, Klemens, 2002; "BDP").[4] The Facility will be located within developed, open field and edge forest habitats, generally considered suboptimal for species such as wood frog and spotted salamander, which prefer forested terrestrial habitat.

Vernal Pool Analysis

In order to evaluate potential impacts to the vernal pools and their surrounding upland habitat, the resources were assessed using the BDPs methodology developed by Calhoun and Klemens

[4] Calhoun, A.J.K. and M.W. Klemens. 2002. Best Development Practices (BDPs): Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States. WCS/MCA Technical Paper No. 5.

(2002) in combination with the US Army Corps of Engineers New England District's *Vernal Pool Best Management Practices* ("BMPs") (Calhoun, 2015)[5]. Collectively, these methodologies assess vernal pool ecological significance based on two (2) parameters: 1) biological value of the vernal pool (e.g., presence of state-listed species and the abundance and diversity of vernal pool indicator species); and 2) conditions of the critical terrestrial habitat.

The terrestrial habitat is assessed based on the integrity of the vernal pools' two conservation zones: vernal pool envelope ("VPE" - within 100 feet of the pool's edge) and the critical terrestrial habitat ("CTH" - within 100 to 750 feet of the pool's edge). The higher the species diversity and abundance coupled with an undeveloped and intact forested landscape surrounding the pool (obligate vernal pool amphibians require forested habitats), the higher the tier rating. Tier 1 pools are considered the highest quality pools representing pools of highest conversation priority, while Tier 3 are the lowest. Based on field observations and relative intactness of the VPE/CTH in the existing condition, both vernal pools appear to meet the biological criteria for Tier 1.

The landscape condition of the vernal pools was then evaluated to determine the existing and proposed quality of the terrestrial (non-breeding) habitat. When assessing potential impacts on a vernal pool's CTH, one goal relying on the BDPs is to maintain a percentage of 25% or less development (including site clearing, grading and construction). The BMPs guidance relies on preserving principal migratory vectors that link the vernal pool, forested aquatic habitats and forested terrestrial uplands that provide breeding, foraging, cover, and hibernation habitats for vernal pool indicator species.

The results of this combined landscape analysis show that the Project would comply with both the BDPs and BMPs by avoiding degradation of the vernal pools' existing tier rating and their terrestrial habitat integrity. The Project will avoid impacts to the VPE of both pools. At the closest point, the Project is ±352 feet east of VP1 and ±205 feet southeast of VP2. The entirety of the Facility would be located in upland habitat consisting of existing maintained open field, developed areas currently utilized for material storage, and edge forest bordering the developed areas. Developed and open field terrestrial habitats are considered sub-optimal for vernal pool indicator species due to the lack of mature forest cover and thick duff layer. The edge forest

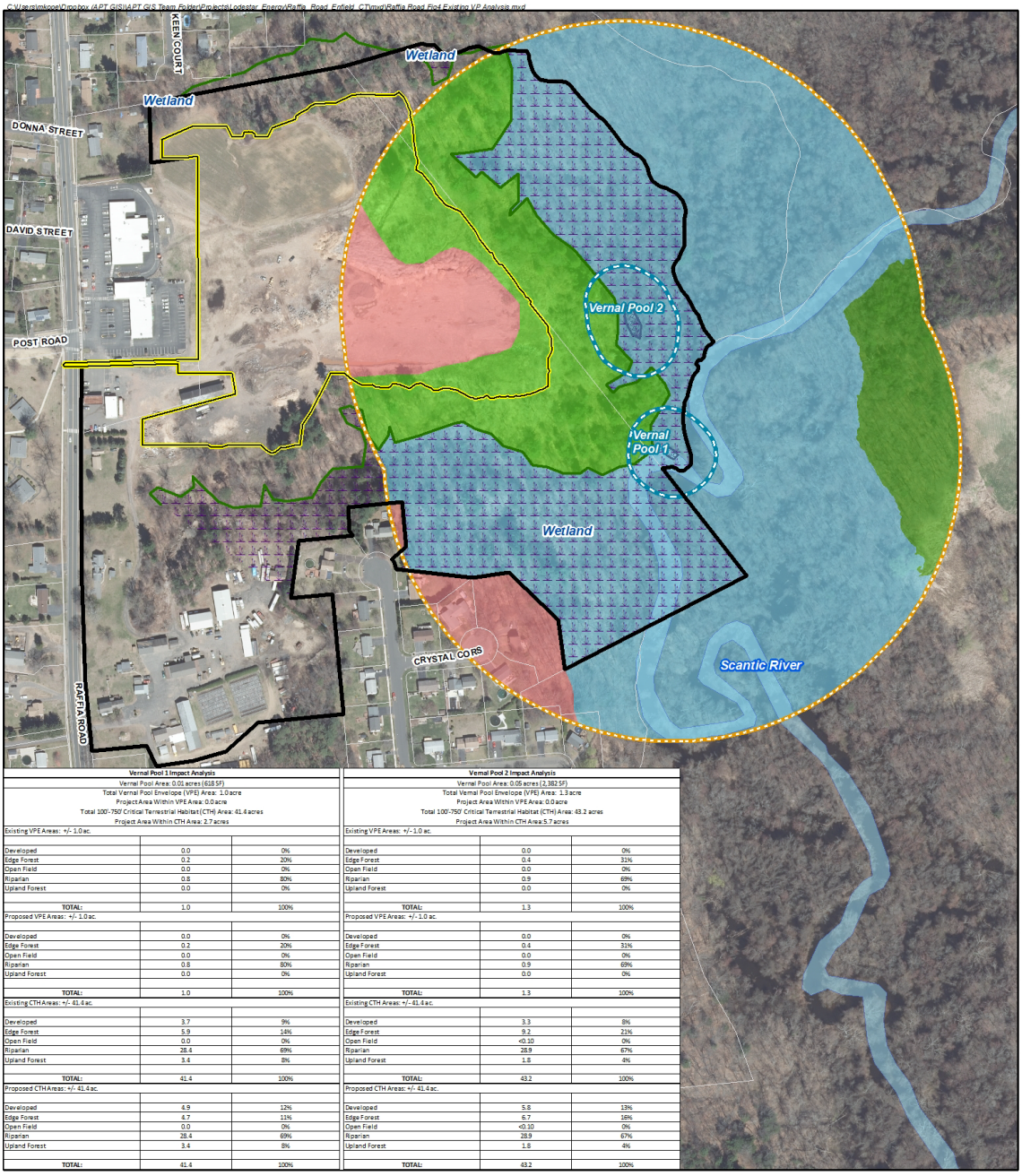
[5] https://www.nae.usace.army.mil/Portals/74/docs/regulatory/VernalPools/VPBMPsJan2015.pdf

impacted by the Project includes existing disturbed transitional areas between the developed interface and areas of historic disturbance from prior Site use, which currently provide diminished habitat quality for vernal pool species. In addition, the Facility footprint in the post-construction condition would not exceed the 25% development threshold within the CTH. Increases in developed CTH from the Facility include ±2.70 acres for VP1 and ±5.7 acres for VP2, resulting in de minimis increases of 3% and 5%, respectively; maintaining a percentage of development well below the 25% guidance threshold level. Further, the Project footprint does not interrupt the principal vernal pool migratory vectors that link VP1 and VP2 to adjacent optimal forested wetland and terrestrial habitats to the north, east and south. Therefore, the Project would not have a likely adverse impact on vernal pool resources or on the population of vernal pool indicator species that utilize these habitats.

Although no long-term impacts to VP1 or VP2 are anticipated from development of the Facility, short-term impacts could occur during construction activities if vernal pool indicator species wander into the construction zone. As a precaution to avoid possible incidental injury or mortality to these species, the Petitioner proposes to implement a Resource Protection Program[6].

Figures 4 and 5, *Vernal Pool Analysis – Existing and Proposed*, respectively, depict the Project's development relative to the vernal pool.

[6] See Appendix A, *Project Plans,* Environmental Notes – Resource Protection Measures, Sheet GN-2.



Vernal Pool 1 Impact Analysis		
Vernal Pool Area: 0.01 acres (618 SF)		
Total Vernal Pool Envelope (VPE) Area: 1.0 acre		
Project Area Within VPE Area: 0.0 acre		
Total 100'-750' Critical Terrestrial Habitat (CTH) Area: 41.4 acres		
Project Area Within CTH Area: 2.7 acres		
Existing VPE Areas: +/- 1.0 ac.		
Developed	0.0	0%
Edge Forest	0.2	20%
Open Field	0.0	0%
Riparian	0.8	80%
Upland Forest	0.0	0%
TOTAL:	1.0	100%
Proposed VPE Areas: +/- 1.0 ac.		
Developed	0.0	0%
Edge Forest	0.2	20%
Open Field	0.0	0%
Riparian	0.8	80%
Upland Forest	0.0	0%
TOTAL:	1.0	100%
Existing CTH Areas: +/- 41.4 ac.		
Developed	3.7	9%
Edge Forest	5.9	14%
Open Field	0.0	0%
Riparian	28.4	69%
Upland Forest	3.4	8%
TOTAL:	41.4	100%
Proposed CTH Areas: +/- 41.4 ac.		
Developed	4.9	12%
Edge Forest	4.7	11%
Open Field	0.0	0%
Riparian	28.4	69%
Upland Forest	3.4	8%
TOTAL:	41.4	100%

Vernal Pool 2 Impact Analysis		
Vernal Pool Area: 0.05 acres (2,382 SF)		
Total Vernal Pool Envelope (VPE) Area: 1.3 acre		
Project Area Within VPE Area: 0.0 acre		
Total 100'-750' Critical Terrestrial Habitat (CTH) Area: 43.2 acres		
Project Area Within CTH Area: 5.7 acres		
Existing VPE Areas: +/- 1.0 ac.		
Developed	0.0	0%
Edge Forest	0.4	31%
Open Field	0.0	0%
Riparian	0.9	69%
Upland Forest	0.0	0%
TOTAL:	1.3	100%
Proposed VPE Areas: +/- 1.0 ac.		
Developed	0.0	0%
Edge Forest	0.4	31%
Open Field	0.0	0%
Riparian	0.9	69%
Upland Forest	0.0	0%
TOTAL:	1.3	100%
Existing CTH Areas: +/- 41.4 ac.		
Developed	3.3	8%
Edge Forest	9.2	21%
Open Field	<0.10	0%
Riparian	28.9	67%
Upland Forest	1.8	4%
TOTAL:	43.2	100%
Proposed CTH Areas: +/- 41.4 ac.		
Developed	5.8	13%
Edge Forest	6.7	16%
Open Field	<0.10	0%
Riparian	28.9	67%
Upland Forest	1.8	4%
TOTAL:	43.2	100%

Legend

- Site
- Project Area
- Approximate Parcel Boundary
- Delineated Wetland Boundary
- Vernal Pool
- 100' Vernal Pool Envelope (VPE)
- 100'-750' Critical Terrestrial Habitat (CTH)

Habitat

- Developed
- Edge Forest
- Open Field
- Riparian
- Upland Forest

- Wetland Area
- Open Water (CTDEEP)

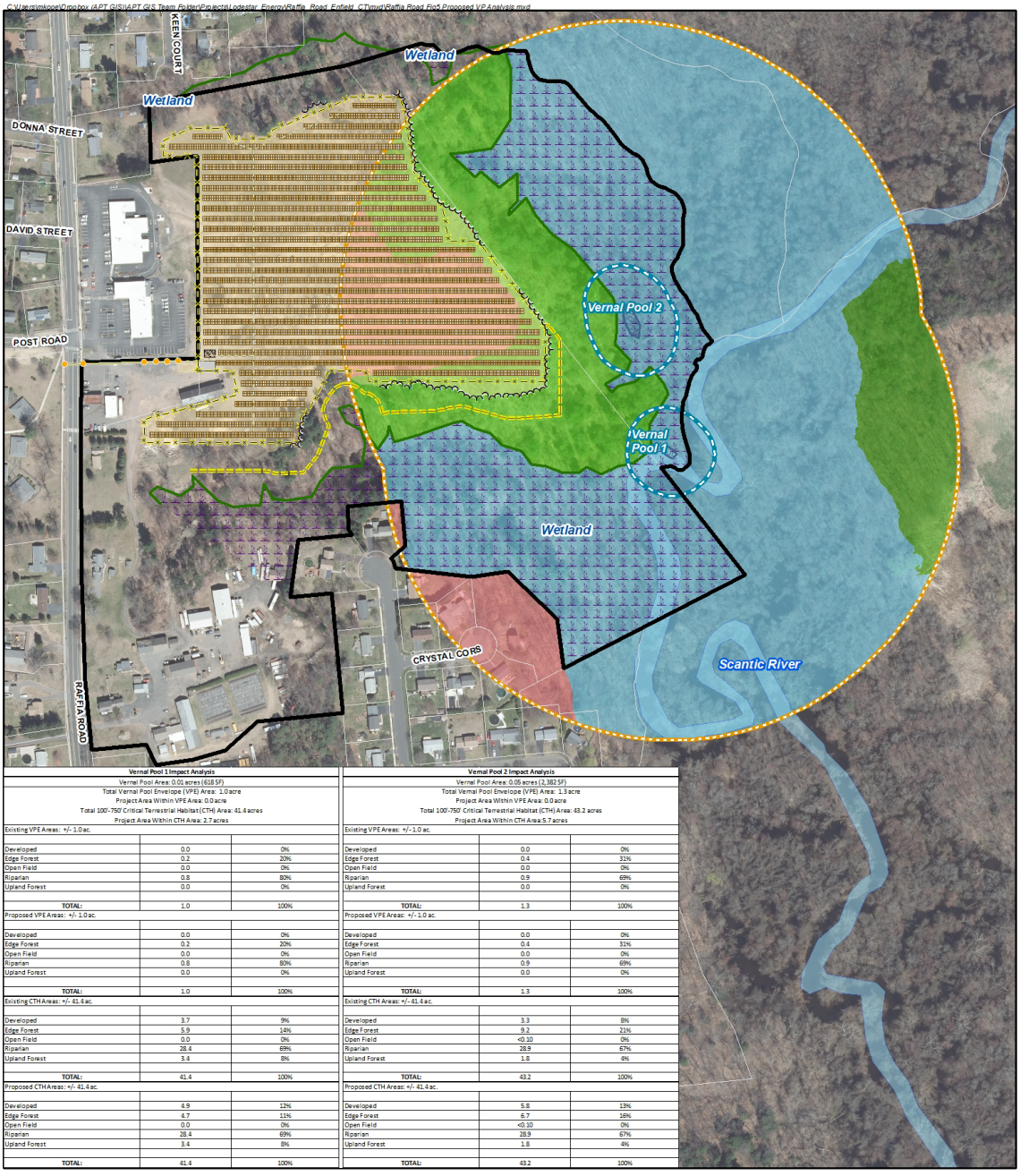
Map Notes:
Base Map Source: 2019 Aerial Photograph (CTECO)
Map Scale: 1 inch = 350 feet
Map Date: December 2022

N

350 175 0 350 Feet

Figure 4
Vernal Pool Analysis - Existing

Proposed Solar Energy Facility
Raffia Road
Enfield, Connecticut



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Map Date: December 2022

N

350 175 0 350 Feet

Figure 5
Vernal Pool Analysis - Proposed

Proposed Solar Energy Facility
Raffia Road
Enfield, Connecticut

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3.2.3 Wetland Impacts

The Facility will occupy the northwestern portion of the Site and will not include the previously developed southern extents of the property, wetland systems including the Scantic River riparian corridor, and a majority of the upland forest. There are no direct wetland impacts associated with the Project. Ground disturbing work for installation of perimeter fencing will occur within 66 feet of the delineated wetland. Tree clearing will be limited to areas along the forest edge, avoiding impacts to mature forested areas. There will be no tree clearing within 100 feet of the delineated wetland limits. However, in order to minimize shading impacts along the southern side of the Facility, an area of select tree topping (removing tree tops more than 30 feet in height) north of the southern wetland area is proposed. The closest point to wetlands will be ±15 feet at the far western end of the tree topping area, with ±40-50 feet generally maintained. Most of this tree topping area is on relatively steep slopes; therefore, cutting would be done with machine support (e.g., crane, grapple saw) from level areas to avoid soil disturbance on the slopes. Due to the proximity of work activities to wetland resources, the Petitioner will implement a Resource Protection Program, which prescribes routine monitoring of sensitive areas, contractor awareness training, and environmental sensitivity signage.

Construction activities would not be expected to result in an adverse impact to the Site's wetland resources based on the proposed protection measures outlined herein and in Appendix A, *Project Plans*, Sheet GN-2.

3.3 Water Quality

As discussed in this section, the Project will comply with DEEP's water quality standards. Once operative, the Facility will be unstaffed, and no potable water uses or sanitary discharges are planned. No liquid fuels are associated with the operation of the Facility. Stormwater generated by the proposed development will be properly handled and treated in accordance with the 2004 *Connecticut Stormwater Quality Manual* and Appendix I.

3.3.1 Groundwater

Groundwater underlying the Site is classified by publicly available DEEP mapping as "GA". This classification indicates groundwater within the area is presumed to be suitable for human consumption without treatment. Designated uses in GA-classified areas include existing private

and potential public or private supplies or drinking water and base flow for hydraulically-connected surface water bodies.

Based on a review of available DEEP mapping, northern and eastern portions of the Site, including portions of the Facility, are located within the "Avery A 80" Aquifer Protection Area. Connecticut Department of Public Health mapping indicates that the Site is within the Hazardville Water Company service area. The Resource Protection Program includes aquifer protection measures and procedures.

The Project will have no adverse environmental effect on ground water quality.

3.3.2 Surface Water

The Project will have no adverse environmental effect on surface water quality. Based upon DEEP mapping, the Site is located in Major Drainage Basin 4 (Connecticut River), Regional Drainage Basin 42 (Scantic River), Subregional Drainage Basin 4200 (Scantic River), and Local Drainage Basin 4200-00 (Scantic River).

DEEP mapping indicates that the nearest mapped waterbody to the Site is the Scantic River, which lies adjacent to portions of the eastern Site boundary before flowing through the southeastern portion of the Site. The closest portion of the Scantic River is located downgradient and approximately 270 feet southeast of the limits of disturbance associated with the Project. DEEP classifies the Scantic River as a Class B surface waterbody.[7]

During construction, erosion and sediment ("E&S") controls will be installed and maintained in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control. Once operative, stormwater will be managed in accordance with the 2004 Connecticut Stormwater Quality Manual. Based on the distance of the Facility from the Scantic River and implementation of these measures, the Project will have no effect on this surface waterbody.

3.3.3 Stormwater Management

In addition to the 2004 Connecticut Stormwater Quality Manual and 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, the Project has been designed to meet the

[7]Designated uses for Class B surface water bodies include habitat for fish and other aquatic life and wildlife; recreation; navigation; and water supply for industry and agriculture.

requirements of DEEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities ("GP"), Appendix I. Combined, these address three (3) main concerns: stormwater runoff peak attenuation, water quality volume treatment, and E&S control during construction. The Petitioner will apply for a General Permit from DEEP. Technical details, mapping, and HydroCAD modeling results are detailed in a Stormwater Management Report to be provided to DEEP. A summary of the stormwater analyses results is provided below.

Stormwater Runoff Peak Attenuation

The potential for changes in runoff from the Site resulting from Project construction has been evaluated and addressed. Ground disturbances associated with the Project include construction of the proposed solar arrays, appurtenances, electrical interconnection line, and temporary erosion and sediment control measures. As the existing conditions within the Project Area currently include a mix of mulching and debris stockpiles, bare soils, and open field, substantial grading is required to shape the existing topography to conform to Appendix I maximum slope requirements. Once completed, the Facility will have a consistent, vegetated meadow cover type, resulting in a decrease in stormwater peak runoff. This change in cover type reduces post-development peak discharges to the waters of the State of Connecticut for the 2-, 25-, 50- and 100- year storm events compared to the pre-development peak discharges. These calculations include a modeled decrease in Hydrologic Soil Group (HSG) as required by Appendix I. There is thus no need for additional stormwater management best management practices.

Overall, the Project is anticipated to enhance the hydrological conditions of the Project Area while maintaining existing drainage watersheds to the extent practicable. Therefore, the Project is not anticipated to result in any adverse impacts to the surrounding areas and properties.

Water Quality Volume Treatment

The only proposed impervious cover within the Project Area is a concrete equipment pad and a gravel access entrance and turnaround. Because the proposed conditions will replace existing gravel within the Project Area, the proposed Project reduces the area of overall impervious cover. As such, no additional water quality volume treatment is needed.

Erosion and Sediment Control During Construction

To safeguard water resources from potential impacts during construction, the Petitioner is committed to implementing protective measures in the form of a Stormwater Pollution Control Plan ("SWPCP"), to be finalized and submitted to the Council, subject to approval by DEEP. The SWPCP will include monitoring of established E&S controls that are to be installed and maintained in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control. The Petitioner will also apply for a GP.

Development of the Project requires significant grading to conform to Appendix I requirements for slopes to be less than 15% within the Facility limits. Despite the required grading, the finalized stabilized conditions are anticipated to be more secure than existing conditions, a large portion of which includes a mix of debris piles and exposed soils. To facilitate proper stabilization of the Site during construction, the Petitioner proposes a phased erosion control plan. Phasing will be based on the timing needed for stabilization of specific Project areas that will be cleared and graded. Graded/disturbed areas within each proposed Project phase will be seeded and allowed to stabilize prior to construction moving on to the next phase. Proposed erosion and sedimentation controls consist of perimeter compost filter socks to manage drainage areas less than one (1) acre. Any disturbed areas of the Site will be seeded with permanent Ernst Solar Farm Seed Mix. The phased erosion control plan and details are provided in Appendix A, *Project Plans,* Sheets EC-1 through EC-6.

With the incorporation of these protective measures, stormwater runoff from Project development is not anticipated to result in an adverse impact to water quality associated with nearby surface water bodies.

3.4 Habitat and Wildlife

Four (4) distinct habitat types (vegetative communities), separated by transitional ecotones, are located on the Site, three (3) of which are within the Project Area. These habitats were assessed using remote sensing and publicly available datasets and physically inspected during a May 5, 2022 field evaluation.

The habitats occupying the Site are as follows:

- Open Field
- Edge Forest;
- Riparian; and
- Developed.

3.4.1 Habitat Types

Open Field

An open field encompasses the northwestern portion of the Site, including a portion of the Project Area. This habitat consists of a regularly mowed/maintained lawn dominated by cool season grasses and typical forbs like red clover. It is bordered by developed areas to the south and west. Routine maintenance of the field suppresses other herbaceous and shrub species. Between the edge of the Open Field and surrounding Edge Forest to the north and east, transitional field habitat dominated by golden rod, mugwort and multiflora rose is present where less frequent mowing occurs.

Nearly all the Open Field habitat is within the Project area; ±2.40 acres out of ±2.60 acres will be occupied by the Facility. The existing Open Field habitat is highly disturbed from historic property use and routine vegetative maintenance. Once completed, the Project Area will be undersown and established with a meadow cover type.

Edge Forest

Edge Forest habitat occupies northern, eastern and southern borders of the Project Area and serves as transitional areas between open field/developed habitats and wetland forest to the east. The Edge Forest habitat is characterized by a multi-age hardwood forest intermixed with eastern white pine and red pine, forming a forested block with adjacent forest land. The Edge Forest occurs entirely within well-drained upland areas; dominant species within the Edge Forest habitat include red oak, red maple, and sugar maple, with areas of codominant and/or suppressed black cherry, yellow birch, and American elm. A moderately dense understory dominated by invasive species, including bush honeysuckle, winged euonymus, multiflora rose, and Asiatic bittersweet, occurs in complex with hayscented fern.

Limited clearing of Edge Forest is proposed along the interface with Developed and Open Field habitats; approximately 3.50 acres of trees within the 14.70-acre habitat area will be removed. Selective tree topping to minimize shading will take place within an additional ±1.35-acre area along the southern side of the Facility and its southeastern corner. Any potential secondary short-term impacts during development of the Project will be minimized by proper stabilization of soils during construction through strict adherence to the 2002 *Connecticut Guidelines for Soil Erosion and Sediment Control* and the Resource Protection Program.

Riparian

Riparian (i.e., wetland) habitat occurs in the northern, eastern and southern portions of the Site. As discussed in Section 3.2.3, no permanent direct impacts to Riparian habitat are anticipated from the development of the Project, which will generally maintain a minimum 66-foot setback from wetlands to the Facility's fenced limits. Tree clearing is isolated to upland areas and generally borders Developed and Open Field habitat areas. Erosion and sediment control measures will be installed and maintained as part of the Project to avoid potential secondary impacts to the adjacent forested wetland.

Developed

Developed areas are located in the southwestern and central portions of the Site, and consist of residential and commercial structures, parking lots, equipment storage, and an active timber and wood chip storage and processing area. Project impacts will mostly be within the Developed habitat with a total area of disturbance of ±8.40 acres. Developed habitat provides little ecological value due to its highly disturbed nature, human activity, ongoing site work, and lack of vegetation.

Table 1, *Habitat Areas* provides the total acreages of each habitat type located on the Site and within the Project Area.

Table 1: Habitat Areas

Habitat Areas		
Habitat Type	Total Area On-Site (+/- ac.)	Area Occupied by Project (+/- ac.)
Developed	18.40	8.40
Edge Forest	14.70	3.50
Riparian	15.40	0.00
Open Field	2.60	2.40

3.4.2 Wildlife

Development of the Project will occur within portions of three (3) of the Site's four (4) habitats: Developed, Open Field, and Edge Forest. Open Field and Developed habitat areas currently provide limited value from a wildlife utilization standpoint as a result of ongoing routine management and disturbances. Project-related impacts within these habitats are limited and not anticipated to adversely affect wildlife. Portions of Edge Forest habitat abutting the Developed and Open Field habitats will also be occupied by the Project. This area has historically been disturbed from prior Site uses as evidenced by the dominance of invasive species and abandoned stockpile areas. Generalist and edge tolerant wildlife species, including several song birds and mammals such as raccoon, striped skunk, grey squirrel, Virginia opossum, white-tailed deer, and eastern chipmunk, could be expected to use this area. Due to the relatively small area proposed for development of the Facility within the Edge Forest habitat, and given the abundance of similar habitat adjacent to the Site, the Project is not anticipated to result in a significant long-term impact to wildlife. Possible short-term impacts associated with construction activities (e.g., increased human activity, noise) would be mitigated by wildlife's ability to disperse into surrounding habitats to the north, south, and east of the Project Area.

The Project Area will not encroach into the southern, eastern and northern Riparian habitats. As a result, wildlife utilization within the aquatic habitats is expected to continue relatively uninterrupted. Noise and associated human activities during construction may result in limited, temporary disruption to wildlife using nearby Riparian habitat. Any possible temporarily displaced wildlife are expected to relocate deeper into existing adjacent wetland habitat of similar character to the north, south, and east. Post-construction, operation of the Facility will

not result in a likely adverse effect to wildlife using these habitats because the Facility will be unoccupied and does not generate any significant noise or traffic.

3.4.3 Core Forest Determination

In accordance with Connecticut General Statutes §16-50k(a), and based on the size of the proposed Facility (>2.0 MW), the Petitioner sent email correspondence to the DEEP Bureau of Natural Resources on November 14, 2022 documenting that the Project will not materially affect core forest. The Petitioner received a letter from DEEP dated November 18, 2022 concurring that the Project will not materially affect the status of the Site as core forest. See Appendix C, DEEP and DOA correspondence.

As such, no significant impact is expected to result to core forested habitat associated with the Project.

3.5 Rare Species

APT reviewed publicly available information to determine the potential presence of state/federally listed species and critical habitat on or proximate to the Site. A discussion is provided in the following sections.

3.5.1 Natural Diversity Data Base

The DEEP Natural Diversity Data Base ("NDDB") program performs hundreds of environmental reviews each year to determine the impact of proposed development projects on state-listed species and to help landowners conserve the state's biodiversity. In furtherance of this endeavor, the DEEP also developed maps to serve as a pre-screening tool to help determine if there is the potential for project-related impact to state-listed species.

The NDDB maps represent approximate locations of (i) endangered, threatened and special concern species and, (ii) significant natural communities in Connecticut. The locations of species and natural communities depicted on the maps are based on data collected over the years by DEEP staff, scientists, conservation groups, and landowners. In some cases, an occurrence represents a location derived from literature, museum records and/or specimens. These data are compiled and maintained in the NDDB. The general locations of species and communities are symbolized as shaded (or cross-hatched) polygons on the maps. Exact locations have been

masked to protect sensitive species from collection and disturbance and to protect landowner's rights whenever species occur on private property.

APT reviewed the most recent DEEP NDDB mapping (December 2022), which revealed that no NDDB polygon exists partially or entirely on Site, with the nearest NDDB polygon located ±0.78 mile to the south. Because no state-listed species or communities are documented on the Site, consultation with NDDB is not required.

3.5.2 USFWS Consultation

Federal consultation was completed in accordance with Section 7 of the Endangered Species Act through the U.S. Fish and Wildlife Service's ("USFWS") Information, Planning, and Conservation System ("IPaC"). Based on the results of the IPaC review, one federally-listed[8] threatened species, northern long-eared bat ("NLEB"), is known to occur in the vicinity of the Site. The NLEB's range encompasses the entire State of Connecticut and suitable NLEB roost habitat includes trees (live, dying, dead, or snag) with a diameter at breast height of three (3) inches or greater.

APT reviewed the DEEP's publicly available *Northern long-eared bat areas of concern in Connecticut to assist with Federal Endangered Species Act Compliance* map (February 1, 2016) to determine the locations of any known maternity roost trees or hibernaculum in the state. This map reveals that there are currently no known NLEB maternity roost trees in Connecticut. The nearest NLEB habitat resource to the Site is located in East Granby, approximately 8.0 miles to the west.

APT completed a determination of compliance with Section 7 of the Endangered Species Act of 1973 for the Project. In compliance with the USFWS criteria for assessing NLEB, the Project will not likely result in an adverse effect or incidental take[9] of NLEB and does not require a permit from USFWS. A USFWS letter dated September 22, 2022 confirmed compliance at that time. However, on November 30, 2022, the USFWS published reclassification of the NLEB as endangered under the Endangered Species Act, effective January 30, 2023. It is anticipated

[8] Listing under the federal Endangered Species Act

[9] "Incidental take" is defined by the Endangered Species Act as take that is "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." For example, harvesting trees can kill bats that are roosting in the trees, but the purpose of the activity is not to kill bats.

that a revised consultation process will be implemented, and that additional review for the Project will be required.

See Appendix B, *USFWS & NDDB Compliance Memo*.

3.6 Soils and Geology

Existing stockpiles and debris within the Project Area will be removed prior to construction, following all applicable regulations. Suitable soils will be reused on-Site as part of the proposed grading plan. Topsoil will be segregated from underlying soil, stockpiled, and spread over disturbed areas being seeded. See Appendix A*, Project Plans.*

All exposed soils resulting from construction activities will be properly and promptly treated in accordance with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*.

Surficial materials on the western portion of the Site are identified as sand overlying fines overlying sand and gravel. Surficial materials on the eastern portion of the Site adjacent to the Scantic River are identified as alluvium overlying fines overlying sand and gravel. Bedrock beneath the Site is identified as Portland Arkose, which is described as a reddish-brown to maroon micaceous arkose and siltstone and red to black fissile silty shale. The formation grades eastward into coarse conglomerate (fanglomerate).[10] The Petitioner does not anticipate encountering bedrock during Project development.

3.6.1 Prime Farmland Soils

In accordance with the Code of Federal Regulations, CFR Title 7, part 657, farmland soils include land that is defined as prime, unique, or farmlands of statewide or local importance based on soil type. They represent the most suitable land for producing food, feed, fiber, forage, and oilseed crops.

According to the Connecticut Environmental Conditions Online Resource Guide[11], prime farmland soils are mapped in the southwest corner of the Site, in an area remote from the

[10] Connecticut Natural Resources Atlas Series: Bedrock Geological map, cteco.uconn.edu/maps/state/Bedrock_Geologic_Map_of_Connecticut.pdf

[11] Connecticut Environmental Conditions Online (CTECO) Resource Guide, www.cteco.uconn.edu

Project Area. Statewide important farmland soils are mapped throughout the majority of the Project Area, within the Open Field and Disturbed habitats.

In accordance with Connecticut General Statutes §16-50k(a), the Petitioner initiated consultation with the Connecticut Department of Agriculture ("DOA") on November 14, 2022 requesting the DOA's concurrence with the Petitioner's findings. The DOA responded by email on December 13, 2022, stating that "there will be no further material impact, beyond the existing impact" from the Project. See Appendix C, *DEEP and DOA Correspondence*.

3.7 Historic and Archaeological Resources

At the request of APT, and on behalf of the Petitioner, Heritage Consultants LLC ("Heritage") reviewed relevant historic and archaeological information to determine whether the Site holds potential historic or cultural resource significance. Their review of historic maps and aerial images of the Site, examination of files maintained by the Connecticut State Historic Preservation Office ("SHPO"), and a pedestrian survey of the Site revealed that one (1) National Register of Historic Places ("NRHP"), two (2) State Register of Historic Places properties and one (1) previously recorded archaeological site are located within one (1) mile of the Project Area. In terms of archaeological potential, Heritage determined that the northwestern corner of the Project Area retains a moderate to high potential to contain intact archaeological deposits in the subsoil.

That information was presented to the SHPO in a Phase 1A Cultural Resources Assessment Survey. The SHPO requested that a Phase 1B investigation be performed prior to construction in the area identified as possessing moderate to high potential to contain intact archaeological deposits. That effort is in progress, and the results will be presented to the SHPO upon completion.

See Appendix D, *SHPO Consultation*.

3.8 Scenic and Recreational Areas

No state or local designated scenic roads or scenic areas are located near the Site and therefore none will be physically or visually impacted by development of the Project. The nearest scenic

road is a portion of State Route 318, located approximately 20 miles southwest of the Project Area.

There are no Connecticut Blue Blaze Hiking Trails located proximate to the Site. The Scantic River State Park is located approximately 0.22 mile to the northeast at its nearest point. The Project will have no direct or indirect effects on any of these resources.

See Figure 6, *Surrounding Features Map,* for these and other resources located within one mile of the Project Area.

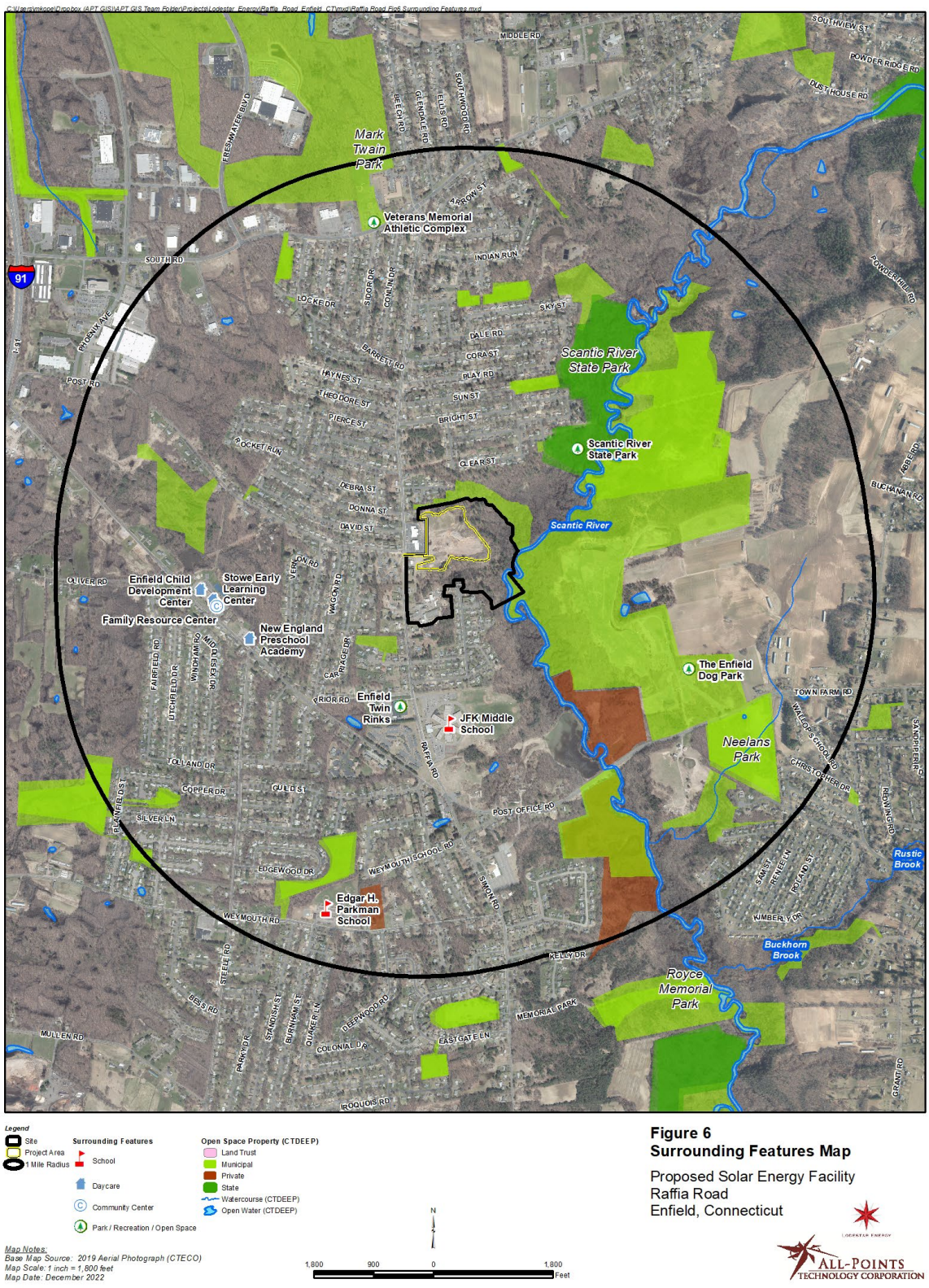


Figure 6
Surrounding Features Map

Proposed Solar Energy Facility
Raffia Road
Enfield, Connecticut

ALL-POINTS TECHNOLOGY CORPORATION

3.9 Noise

The Site contains cleared areas, commercial structures and wooded land. Noise associated with significant human activities is currently generated on and near the Site.

Construction noise is exempted under State of Connecticut regulations for the control of noise, RCSA 22a-69-1.8(h) and the Town's noise ordinance. During construction of the Facility, the temporary increase in noise would likely raise localized ambient sound levels immediately surrounding the Project Area. Standard types of construction equipment would be used for the Project. In general, the highest noise level from this type of equipment (e.g., backhoe, bulldozer, crane, trucks, etc.) is approximately 88 dBA at the source.

The Petitioner has completed a noise analysis, the results of which confirm that the Project will comply with State Noise Regulations.[12] The Facility would, conservatively, be considered a Class C (Industrial) noise emitter. Nearby properties are either Class B or Class A Noise receptors, with noise standards of 66 dBA (Class B) and 61 dBA - daytime and 51 dBA - at night (Class A). As demonstrated in the noise analysis, all off-Site receptors are of sufficient distances from the proposed Project-related equipment that noise levels during Facility operation will meet applicable State noise standards. See Appendix E, *Noise Analysis.*

3.10 Lighting

No exterior lighting is planned for the Project. There will be some small, non-intrusive lighting fixtures within the equipment to aid in maintenance.

3.11 FAA Determination

The Petitioner submitted relevant Project information to the Federal Aviation Administration ("FAA") for an aeronautical study to evaluate potential hazards to air navigation. The nearest airport is the Laurie Field-CT19 private airfield located in Enfield approximately 1.0 mile northwest of the Site. The FAA provided Determinations of No Hazard to Air Navigation on December 7, 2022. See Appendix F, *FAA Determinations.* Based on this determination, there is no need to conduct a glare analysis.

[12] RCSA 22a-69-3.5. Noise Zone Standards

4 Conclusion

As demonstrated in this Environmental Assessment, the Project will comply with the DEEP air and water quality standards. Further, it will not have an undue adverse effect on the existing environment and ecology; nor will it affect the scenic, historic and recreational resources in the vicinity of the Project.

Once operative, the Facility will be unstaffed and generate minimal traffic.

The Project Area is mostly cleared land and actively used for material processing and storage. Development of the Project will have no significant impact on existing habitats and wildlife.

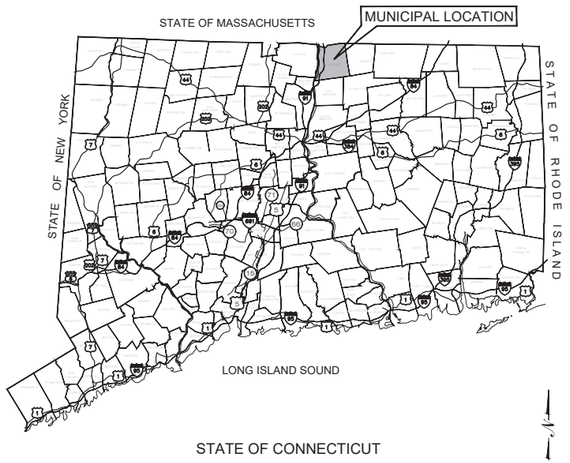
The Project Area does not contain Prime Farmland Soils. The Petitioner will seed all disturbed areas with a pollinator-friendly seed mix. Once the Facility has reached the end of its useful life, the panels and equipment will be removed and the Project Area restored.

There are no impacts, direct or indirect, to wetlands or vernal pools on the Site. The nearest wetland boundary to the Facility is ±66 feet away. E&S controls will be installed and maintained throughout construction in accordance with the Project's Resource Protection Program. The distance from the main areas of disturbance within the fenced Facility to wetlands and implementation of protective management techniques will mitigate potential impacts to these resources during construction.

Overall, the Project's design decreases impervious surfaces and the post-construction condition will improve the hydrologic condition of the Site. The Project has been designed to adequately handle water volume, in accordance with the DEEP's *General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities* as well as Appendix I. The Petitioner will implement a SWPCP, in accordance with the 2002 *Connecticut Guidelines for Soil Erosion and Sediment Control*, that will include provisions for monitoring of development activities and the establishment of E&S controls to be installed and maintained throughout construction.

APPENDIX A

PROJECT PLANS



LSE HERCULES LLC

"RAFFIA RD SOLAR"

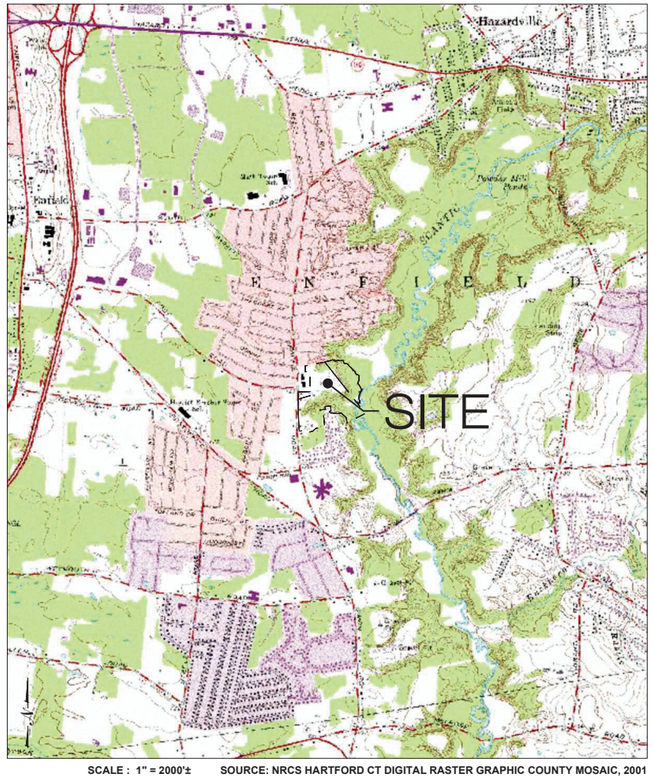
99 & 105 & 113 RAFFIA RD ENFIELD, CT

LIST OF DRAWINGS

SITE INFORMATION

SITE NAME:	"RAFFIA RD SOLAR"
LOCATION:	99 & 105 & 113 RAFFIA RD ENFIELD, CT
SITE TYPE/DESCRIPTION:	ADD (1) GROUND MOUNTED SOLAR PANEL ARRAY W/ ASSOCIATED EQUIPMENT, GRAVEL ACCESS ROAD. 9,852 540W MODULES FOR APPROX. 5.32 MW DC.
PROPERTY OWNER:	RAFFIA FARMS INC & RAFFIA GEORGE + SONS INC 113 RAFFIA RD ENFIELD, CT 06082
APPLICANT:	LSE HERCULES LLC 40 TOWER LANE, SUITE 145 AVON, CT 06001
ENGINEER CONTACT:	KEVIN A. MCCAFFERY, P.E. (860) 663-1697 x228
LATITUDE:	41.965146°
LONGITUDE:	-72.563855°
MBLU:	067-0424 & 067-0003 & 067-0426
ZONE:	B-L, R-33, R-88
TOTAL SITE ACREAGE:	51.05± AC.
TOTAL DISTURBED AREA:	14.28± AC.
APPROX. VOLUME OF CUT:	25,308± CY
APPROX. VOLUME OF FILL:	16,131± CY
APPROX. NET VOLUME:	9,177± CY OF CUT

USGS TOPOGRAPHIC MAP



SCALE : 1" = 2000'± SOURCE: NRCS HARTFORD CT DIGITAL RASTER GRAPHIC COUNTY MOSAIC, 2001

LSE HERCULES LLC
40 TOWER LANE, SUITE 145
AVON, CT 06001

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	12/20/22	FOR REVIEW: KAM
1		
2		
3		
4		
5		
6		

DESIGN PROFESSIONAL OF RECORD

PROF: KEVIN A. MCCAFFERY, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: RAFFIA FARMS INC & RAFFIA GEORGE + SONS INC
ADDRESS: 113 RAFFIA RD ENFIELD, CT 06082

RAFFIA RD SOLAR

SITE ADDRESS: 99 & 105 & 113 RAFFIA RD ENFIELD, CT

APT FILING NUMBER: CT606160

DRAWN BY: JT

DATE: 12/20/22 CHECKED BY: KAM

SHEET TITLE:

TITLE SHEET & INDEX

SHEET NUMBER:

T-1

STATE OF CONNECTICUT KEVIN A. MCCAFFERY 25917 LICENSED PROFESSIONAL ENGINEER

NOTES:

1. FIELD SURVEY BY RTK GPS & RTK DRONE IN AUGUST 2022.

2. THE HORIZONTAL DATUM IS NAD83. THE VERTICAL DATUM IS NAVD88. BOTH WERE DERIVED FROM RTK GPS OBSERVATIONS TAKEN ON SITE.

3. THE LOCATIONS OF UTILITIES SHOWN HEREON ARE THE RESULT OF SURFACE EVIDENCE AS LOCATED BY SURFACE EVIDENCE ONLY. THIS PLAN DOES NOT NECESSARILY DEPICT THE EXACT LOCATION OF THESE UTILITIES AND MAY NOT SHOW ALL OF THE UTILITIES WHICH EXIST WITHIN THE PREMISES SURVEYED. CONTACT DIG-SAFE AT 1-888-344-7233 BEFORE EXCAVATION.

4. THE LOCUS PARCELS ARE LOCATED IN THE TOWN OF ENFIELD R-33, R-88, BL AND BG ZONING DISTRICTS.

5. ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY MAPS, THE PROPOSED IMPROVEMENTS ARE LOCATED IN AN AREAS DESIGNATED AS "ZONE X" (UNSHADED), AREAS OF MINIMAL FLOODING. COMMUNITY PANEL NO. 09003C 0229 F & 09003C 0233 F, EFFECTIVE ON 9/26/2008.

6. WETLANDS SHOWN HEREON WERE DELINEATED BY ALL-POINTS TECHNOLOGY, INC.

7. ALL CONTOURS SHOWN HEREON WERE GENERATED IN QGIS FROM DIGITAL ELEVATION MODELS OF THE 2016 CRCOG LIDAR DATA, DISTRIBUTED BY NOAA.

THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300B-1 THROUGH 20-300B-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS INC. ON SEPTEMBER 26, 1997.

TYPE OF SURVEY: IMPROVEMENT LOCATION SURVEY

BOUNDARY SURVEY CATEGORY: RESURVEY

CLASS OF ACCURACY: HORIZONTAL CLASS A-2
VERTICAL CLASS V-2
TOPOGRAPHIC CLASS T-2

PURPOSE OF SURVEY: PROPOSED SOLAR FACILITY

THIS DOCUMENT AND COPIES THEREOF ARE VALID ONLY IF THEY BEAR THE LIVE SIGNATURE AND EMBOSSED SEAL OF THE DESIGNATED PROFESSIONAL. UNAUTHORIZED ALTERATIONS RENDER ANY DECLARATION NULL AND VOID.

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

CHARLES G. GIDMAN, P.L.S. #70103

STATE OF CONNECTICUT CHARLES G. GIDMAN #70103 LICENSED LAND SURVEYOR

NORTHEAST SURVEY CONSULTANTS
3 FERRY STREET
STUDIO 1 EAST
EASTHAMPTON, MA 01027
(413) 203-5144

BOUNDARY SURVEY & LIDAR CONTOURS

SURVEYOR:	CGG	ENGINEER:	–
DRAFTING:	JDG	DESIGN:	–
FIELD WORK:	MAK CRC NAE	HORZ. SCALE:	1"=60'
PROJECT NUMBER:	22-141	VERT. SCALE:	–
DRAWING NAME:	22-141.DWG	DATE:	8-26-2022

PLAN OF LAND IN ENFIELD, CT

PREPARED FOR

ALL-POINTS TECHNOLOGY CORPORATION

SHEET NO. 1 OF 1

GENERAL NOTES

1. ALL CONSTRUCTION SHALL COMPLY WITH PROJECT DEVELOPER STANDARDS, TOWN OF ENFIELD STANDARDS, CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS IN THE ABOVE REFERENCED INCREASING HIERARCHY. IF SPECIFICATIONS ARE IN CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL APPLY.
2. IF NO PROJECT CONSTRUCTION SPECIFICATION PACKAGE IS PROVIDED BY THE PROJECT DEVELOPER OR THEIR REPRESENTATIVE, THE CONTRACTOR SHALL COMPLY WITH THE MANUFACTURER, TOWN OF ENFIELD, OR CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, AND BE IN ACCORDANCE WITH ALL APPLICABLE OSHA, FEDERAL, STATE AND LOCAL REGULATIONS.
3. THE PROJECT DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY ZONING AND STORMWATER PERMITS REQUIRED BY GOVERNMENT AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN ALL TOWN OF ENFIELD CONSTRUCTION PERMITS. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK.
4. REFER TO PLANS, DETAILS AND REPORTS PREPARED BY ALL-POINTS TECHNOLOGY CORPORATION FOR ADDITIONAL INFORMATION. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS IN THE FIELD AND CONTACT THE PROJECT DEVELOPER IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO BIDDING/CONSTRUCTION. ANY CONFLICT BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE CONFIRMED WITH THE PROJECT DEVELOPERS CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, MATERIALS PER PLANS, AND SPECIFICATIONS TO THE PROJECT DEVELOPER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.
6. SHOULD ANY UNKNOWN OR INCORRECTLY LOCATED EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE PROJECT DEVELOPER IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH WORK IN THIS AREA.
7. DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE PROJECT DEVELOPER OR OTHERS DURING OCCUPIED HOURS, EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE PROJECT DEVELOPER AND THE LOCAL MUNICIPALITY. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY SERVICE HAS BEEN PROVIDED.
8. THE CONTRACT LIMIT IS THE PROPERTY LINE UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE CONTRACT DRAWINGS.
9. THE CONTRACTOR SHALL ABIDE BY ALL OSHA, FEDERAL, STATE AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN CLOSE PROXIMITY TO OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS. ANY UTILITY COMPANY FEES SHALL BE PAID FOR BY THE CONTRACTOR.
10. THE CONTRACTOR SHALL COMPLY WITH OSHA CFR 29 PART 1926 FOR EXCAVATION TRENCHING AND TRENCH PROTECTION REQUIREMENTS.
11. THE ENGINEER IS NOT RESPONSIBLE FOR SITE SAFETY MEASURES TO BE EMPLOYED DURING CONSTRUCTION. THE ENGINEER HAS NO CONTRACTUAL DUTY TO CONTROL THE SAFEST METHODS OR MEANS OF THE WORK, JOB SITE RESPONSIBILITIES, SUPERVISION OF PERSONNEL OR TO SUPERVISE SAFETY AND DO NOT VOLUNTARILY ASSUME ANY SUCH DUTY OR RESPONSIBILITY.
12. THE CONTRACTOR SHALL RESTORE ANY DRAINAGE STRUCTURE, PIPE, CONDUIT, PAVEMENT, CURBING, SIDEWALKS, LANDSCAPED AREAS OR SIGNAGE DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AS APPROVED BY THE PROJECT DEVELOPER OR TOWN OF ENFIELD.
13. THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE PROJECT DEVELOPER AT THE END OF CONSTRUCTION.
14. ALTERNATIVE METHODS AND PRODUCTS, OTHER THAN THOSE SPECIFIED, MAY BE USED IF REVIEWED AND APPROVED BY THE PROJECT DEVELOPER, ENGINEER, AND APPROPRIATE REGULATORY AGENCY PRIOR TO INSTALLATION DURING THE BIDDING/CONSTRUCTION PROCESS.
15. INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE SYSTEMS HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY PROVIDER AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE SYSTEMS ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE SYSTEMS INCLUDING SERVICES. PRIOR TO DEMOLITION OR CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" 72 HOURS BEFORE COMMENCEMENT OF WORK AT "811" AND VERIFY ALL UTILITY AND STORM DRAINAGE SYSTEM LOCATIONS.
16. NO CONSTRUCTION OR DEMOLITION SHALL BEGIN UNTIL APPROVAL OF THE FINAL PLANS AND PERMITS ARE GRANTED BY ALL GOVERNING AND REGULATORY AGENCIES.

SITE PLAN NOTES

1. THE SURVEY WAS PROVIDED BY NORTHEAST SURVEY CONSULTANTS DATED AUGUST 26, 2022.
2. THERE ARE BORDERING VEGETATED WETLANDS (BVW/S) LOCATED ON THE SITE AS INDICATED ON THE PLANS. BVW BOUNDARIES WERE FLAGGED AND LOCATED BY ALL-POINTS TECHNOLOGY CORPORATION, IN MAY 2022.
3. THERE WILL BE MINIMAL GRADING ON SITE IN THE AREAS OF THE MINOR CLEARING, TO ENSURE THAT PROPER DRAINAGE IS MAINTAINED.
4. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDED SEQUENCE OF CONSTRUCTION NOTES PROVIDED ON THE EROSION CONTROL PLAN OR SUBMIT AN ALTERNATE PLAN FOR APPROVAL BY THE ENGINEER AND/OR PERMITTING AGENCIES PRIOR TO THE START CONSTRUCTION. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.
5. PROPER CONSTRUCTION PROCEDURES SHALL BE FOLLOWED ON ALL IMPROVEMENTS WITHIN THIS PARCEL SO AS TO PREVENT THE SILTING OF ANY WATERCOURSE OR BVWS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. IN ADDITION, THE CONTRACTOR SHALL ADHERE TO THE "EROSION CONTROL PLAN" CONTAINED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE TO POST ALL BONDS AS REQUIRED BY GOVERNMENT AGENCIES WHICH WOULD GUARANTEE THE PROPER IMPLEMENTATION OF THE PLAN.
6. ALL SITE WORK, MATERIALS OF CONSTRUCTION, AND CONSTRUCTION METHODS FOR EARTHWORK AND STORM DRAINAGE WORK, SHALL CONFORM TO THE SPECIFICATIONS AND DETAILS AND APPLICABLE SECTIONS OF THE PROJECT SPECIFICATIONS MANUAL. OTHERWISE THIS WORK SHALL CONFORM TO THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION AND PROJECT GEOTECHNICAL REPORT IF THERE IS NO PROJECT SPECIFICATIONS MANUAL. ALL FILL MATERIAL UNDER STRUCTURES AND PAVED AREAS SHALL BE PER THE ABOVE STATED APPLICABLE SPECIFICATIONS, AND/OR PROJECT GEOTECHNICAL REPORT, AND SHALL BE PLACED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL ENGINEER. MATERIAL SHALL BE COMPACTED IN 8" LIFTS TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557 AT 95% PERCENT OF OPTIMUM MOISTURE CONTENT.
7. ALL DISTURBANCE INCURRED TO PUBLIC, MUNICIPAL, COUNTY, STATE PROPERTY DUE TO CONSTRUCTION SHALL BE RESTORED TO ITS PREVIOUS CONDITION OR BETTER, TO THE SATISFACTION OF THE TOWN OF ENFIELD AND STATE OF CONNECTICUT.
8. IF IMPACTED OR CONTAMINATED SOIL IS ENCOUNTERED BY THE CONTRACTOR, THE CONTRACTOR SHALL SUSPEND EXCAVATION WORK OF IMPACTED SOIL AND NOTIFY THE PROJECT DEVELOPER AND/OR PROJECT DEVELOPER'S ENVIRONMENTAL CONSULTANT PRIOR TO PROCEEDING WITH FURTHER WORK IN THE IMPACTED SOIL LOCATION UNTIL FURTHER INSTRUCTED BY THE PROJECT DEVELOPER AND/OR PROJECT DEVELOPER'S ENVIRONMENTAL CONSULTANT.

UTILITY NOTES

1. CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE TOWN OF ENFIELD TO SECURE CONSTRUCTION PERMITS AND FOR PAYMENT OF FEES FOR STREET CUTS AND CONNECTIONS TO EXISTING UTILITIES.
2. REFER TO DRAWINGS BY PROJECT DEVELOPER FOR THE ONSITE ELECTRICAL DRAWINGS AND INTERCONNECTION TO EXISTING ELECTRICAL GRID. SITE CONTRACTOR SHALL SUPPLY AND INSTALL PIPE ADAPTERS AS NECESSARY AT BUILDING CONNECTION POINT OR AT EXISTING UTILITY OR PIPE CONNECTION POINT. THESE DETAILS ARE NOT INCLUDED IN THESE PLANS.
3. UTILITY LOCATIONS AND PENETRATIONS ARE SHOWN FOR THE CONTRACTOR'S INFORMATION AND SHALL BE VERIFIED WITH THE ELECTRICAL ENGINEER AND THE PROJECT DEVELOPER'S CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
4. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. TEST PITS SHALL BE DUG AT ALL LOCATIONS WHERE PROP. SANITARY SEWERS AND WHERE PROP. STORM PIPING WILL CROSS EXISTING UTILITIES, AND THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES SHALL BE DETERMINED. THE CONTRACTOR SHALL CONTACT THE PROJECT DEVELOPER IN THE EVENT OF ANY DISCOVERED OR UNFORESEEN CONFLICTS BETWEEN EXISTING AND PROPOSED SANITARY SEWERS, STORM PIPING AND UTILITIES SO THAT AN APPROPRIATE MODIFICATION MAY BE MADE.
5. UTILITY CONNECTION DESIGN AS REFLECTED ON THE PLAN MAY CHANGE SUBJECT TO UTILITY PROVIDER AND GOVERNING AUTHORITY STAFF REVIEW.
6. THE CONTRACTOR SHALL ENSURE THAT ALL UTILITY PROVIDERS AND GOVERNING AUTHORITY STANDARDS FOR MATERIALS AND CONSTRUCTION METHODS ARE MET. THE CONTRACTOR SHALL PERFORM PROPER COORDINATION WITH THE RESPECTIVE UTILITY PROVIDER.
7. THE CONTRACTOR SHALL ARRANGE FOR AND COORDINATE WITH THE RESPECTIVE UTILITY PROVIDERS FOR SERVICE INSTALLATIONS AND CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WORK TO BE PERFORMED BY THE VARIOUS UTILITY PROVIDERS AND SHALL PAY ALL FEES FOR CONNECTIONS, DISCONNECTIONS, RELOCATIONS, INSPECTIONS, AND DEMOLITION UNLESS OTHERWISE STATED IN THE PROJECT SPECIFICATIONS MANUAL AND/OR GENERAL CONDITIONS OF THE CONTRACT.
8. ALL EXISTING PAVEMENT WHERE UTILITY PIPING IS TO BE INSTALLED SHALL BE SAW CUT. AFTER UTILITY INSTALLATION IS COMPLETED, THE CONTRACTOR SHALL INSTALL TEMPORARY AND/OR PERMANENT PAVEMENT REPAIR AS DETAILED ON THE DRAWINGS OR AS REQUIRED BY THE TOWN OF ENFIELD.
9. ALL PIPES SHALL BE LAID ON STRAIGHT ALIGNMENTS AND EVEN GRADES USING A PIPE LASER OR OTHER ACCURATE METHOD.
10. RELOCATION OF UTILITY PROVIDER FACILITIES, SUCH AS POLES, SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY PROVIDER.
11. THE CONTRACTOR SHALL COMPACT PIPE BACKFILL IN 8" LIFTS ACCORDING TO THE PIPE BEDDING DETAILS. TRENCH BOTTOM SHALL BE STABLE IN HIGH GROUNDWATER AREAS. A PIPE FOUNDATION SHALL BE USED PER THE TRENCH DETAILS AND IN AREAS OF ROCK EXCAVATION.
12. CONTRACTOR TO PROVIDE STEEL SLEEVES AND ANNULAR SPACE SAND FILL FOR UTILITY PIPE AND CONDUIT CONNECTIONS UNDER FOOTINGS.
13. ALL UTILITY CONSTRUCTION IS SUBJECT TO INSPECTION FOR APPROVAL PRIOR TO BACKFILLING, IN ACCORDANCE WITH THE APPROPRIATE UTILITY PROVIDER REQUIREMENTS.
14. A ONE-FOOT MINIMUM VERTICAL CLEARANCE BETWEEN WATER, GAS, ELECTRICAL, AND TELEPHONE LINES AND STORM PIPING SHALL BE PROVIDED. A SIX-INCH MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN STORM PIPING AND SANITARY SEWER. A 6-INCH TO 18-INCH VERTICAL CLEARANCE BETWEEN SANITARY SEWER PIPING AND STORM PIPING SHALL REQUIRE CONCRETE ENCASEMENT OF THE SANITARY PIPING.
15. THE CONTRACTOR SHALL RESTORE ANY UTILITY STRUCTURE, PIPE, CONDUIT, PAVEMENT, CURBING, SIDEWALKS, DRAINAGE STRUCTURE, SWALE OR LANDSCAPED AREAS DISTURBED DURING CONSTRUCTION, TO THEIR ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE PROJECT DEVELOPER AND TOWN OF ENFIELD.
16. INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY PROVIDER AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY, AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE INCLUDING SERVICES. CONTACT "CALL BEFORE YOU DIG" AT 811 72 HOURS PRIOR TO CONSTRUCTION AND VERIFY ALL UNDERGROUND AND OVERHEAD UTILITY AND STORM DRAINAGE LOCATIONS. THE CONTRACTOR SHALL EMPLOY THE USE OF A UTILITY LOCATING COMPANY TO PROVIDE SUBSURFACE UTILITY ENGINEERING CONSISTING OF DESIGNATING UTILITIES AND STORM PIPING ON PRIVATE PROPERTY WITHIN THE CONTRACT LIMIT AND CONSISTING OF DESIGNATING AND LOCATING WHERE PROP. UTILITIES AND STORM PIPING CROSS EXISTING UTILITIES AND STORM PIPING WITHIN THE CONTRACT LIMITS.
17. THE CONTRACTOR SHALL ARRANGE AND COORDINATE WITH UTILITY PROVIDERS FOR WORK TO BE PERFORMED BY UTILITY PROVIDERS. THE CONTRACTOR SHALL PAY ALL UTILITY FEES UNLESS OTHERWISE STATED IN THE PROJECT SPECIFICATION MANUAL AND GENERAL CONDITIONS, AND REPAIR PAVEMENTS AS NECESSARY.
18. ELECTRIC DRAWINGS AND REQUIREMENTS ARE NOT INCLUDED AS PART OF THIS DRAWING SET AND SHOULD BE OBTAINED FROM THE PROJECT DEVELOPER.
19. ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE PROJECT DEVELOPER, ENGINEER, AND APPROPRIATE REGULATORY AGENCIES PRIOR TO INSTALLATION.
20. THE CONTRACTOR SHALL MAINTAIN ALL FLOWS AND UTILITY CONNECTIONS TO EXISTING BUILDINGS WITHOUT INTERRUPTION UNLESS/UNTIL AUTHORIZED TO DISCONNECT BY THE PROJECT DEVELOPER, TOWN OF ENFIELD, UTILITY PROVIDERS AND GOVERNING AUTHORITIES.

GENERAL LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
BUILDING SETBACK		
SOLAR SETBACK		
EASEMENT		
TREE LINE		
WETLAND	V V V	
WETLAND BUFFER		
VERNAL POOL		
VERNAL POOL BUFFER		
WATERCOURSE		
WATERCOURSE BUFFER		
MAJOR CONTOUR		
MINOR CONTOUR		
UNDERGROUND ELECTRIC		E E
OVERHEAD ELECTRIC		OH OH
GAS LINE		
WATER LINE		W W
BASIN		
SWALE		
FENCE		X X X
LIMIT OF DISTURBANCE		LOD
LIMIT OF CLEARING AND GRUBBING		LCG
FILTER SOCK		FS FS
SILT FENCE		SF SF
BAFFLE		

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CSC PERMIT SET

NO	DATE	REVISION
0	12/20/22	FOR REVIEW: KAM
1		
2		
3		
4		
5		
6		

DESIGN PROFESSIONAL OF RECORD

PROF: KEVIN A. MCCAFFERY, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: RAFFIA FARMS INC & RAFFIA GEORGE + SONS INC
ADDRESS: 113 RAFFIA RD ENFIELD, CT 06082

RAFFIA RD SOLAR

SITE ADDRESS: 99 & 105 & 113 RAFFIA RD ENFIELD, CT

APT FILING NUMBER: CT606160

DRAWN BY: JT
DATE: 12/20/22
CHECKED BY: KAM

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

GN-1

STATE OF CONNECTICUT · KEVIN A. MCCAFFERY · 25977 · LICENSED PROFESSIONAL ENGINEER

ENVIRONMENTAL NOTES RESOURCE PROTECTION MEASURES

RESOURCE PROTECTION PROGRAM

AS A RESULT OF THE FACILITY'S LOCATION IN THE VICINITY OF SENSITIVE WETLAND AND VERNAL POOL HABITAT AND WITHIN AN AQUIFER PROTECTION AREA, THE FOLLOWING PROTECTION PROGRAM SHALL BE IMPLEMENTED BY THE CONTRACTOR TO AVOID UNINTENTIONAL IMPACTS TO THESE RESOURCES INCLUDING PROXIMATE WETLAND RESOURCES OR MORTALITY TO VERNAL POOL HERPETOFAUNA (I.E., WOOD FROG, SALAMANDERS, TURTLES, ETC.) DURING CONSTRUCTION ACTIVITIES. THE VERNAL POOL SPECIFIC PROTECTION MEASURES SHALL BE IMPLEMENTED SHOULD CONSTRUCTION ACTIVITIES OCCUR DURING PEAK AMPHIBIAN MOVEMENT PERIODS (EARLY SPRING BREEDING [MARCH 1ST TO MAY 15TH] AND LATE SUMMER DISPERSAL [JULY 15TH TO SEPTEMBER 15TH]). PROTECTION MEASURES ASSOCIATED WITH WETLANDS SHALL BE IMPLEMENTED REGARDLESS OF THE TIME OF YEAR.

THE AQUIFER PROTECTION AREA PROTECTION MEASURES INCLUDED HEREIN SATISFY TYPICAL CONCERNS AND RECOMMENDATIONS BY THE DRINKING WATER SECTION OF THE CONNECTICUT DEPARTMENT OF PUBLIC HEALTH. THIS PROJECT IS CONTAINED WITHIN THE HAZARDVILLE WATER COMPANY'S AVERY AQUIFER PROTECTION AREA. THE HAZARDVILLE WATER COMPANY WILL BE CONTACTED AT LEAST 3 BUSINESS DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING WITH AN INVITATION TO ATTEND THE PRE-CONSTRUCTION MEETING. THE HAZARDVILLE WATER COMPANY PERSONNEL WILL ALSO BE ALLOWED TO PERIODICALLY INSPECT THIS PROJECT DURING CONSTRUCTION TO ENSURE THAT DRINKING WATER QUALITY IS NOT ADVERSELY IMPACTED.

IT IS OF THE UTMOST IMPORTANCE THAT THE CONTRACTOR COMPLIES WITH THE REQUIREMENT FOR THE INSTALLATION OF PROTECTIVE MEASURES AND THE EDUCATION OF ITS EMPLOYEES AND SUBCONTRACTORS PERFORMING WORK ON THE PROJECT SITE. ALL-POINTS TECHNOLOGY CORPORATION, P.C. ("APT") WILL SERVE AS THE ENVIRONMENTAL MONITOR FOR THIS PROJECT TO ENSURE THAT THESE PROTECTION MEASURES ARE IMPLEMENTED PROPERLY AND WILL PROVIDE AN EDUCATION SESSION ON THE PROJECT'S PROXIMITY TO SENSITIVE WETLAND RESOURCES AND ASSOCIATED VERNAL POOL HERPETOFAUNA PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CONTACT MATT GUSTAFSON, WETLAND SCIENTIST AT APT, AT LEAST 5 BUSINESS DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING. MR. GUSTAFSON CAN BE REACHED BY PHONE AT (860) 617-0613 OR VIA EMAIL AT MGUSTAFSON@ALLPOINTSTECH.COM.

THE PROPOSED WETLAND AND VERNAL POOL PROTECTION PROGRAM CONSISTS OF SEVERAL COMPONENTS INCLUDING: EDUCATION OF ALL CONTRACTORS AND SUB-CONTRACTORS PRIOR TO INITIATION OF WORK ON THE SITE; INSTALLATION OF EROSION CONTROLS; PETROLEUM MATERIALS STORAGE AND SPILL PREVENTION; PROTECTIVE MEASURES; HERBICIDE AND PESTICIDE; AND SALT RESTRICTIONS; AND, REPORTING.

1. CONTRACTOR EDUCATION:

A. PRIOR TO WORK ON SITE AND INITIAL DEPLOYMENT/MOBILIZATION OF EQUIPMENT AND MATERIALS, THE CONTRACTOR SHALL ATTEND AN EDUCATIONAL SESSION AT THE PRE-CONSTRUCTION MEETING WITH APT. THIS ORIENTATION AND EDUCATIONAL SESSION WILL CONSIST OF INFORMATION SUCH AS, BUT NOT LIMITED TO: IDENTIFICATION OF WETLAND RESOURCES PROXIMATE TO WORK AREAS, REPRESENTATIVE PHOTOGRAPHS OF TYPICAL HERPETOFAUNA THAT MAY BE ENCOUNTERED, CONNECTICUT AND FEDERAL LISTING STATUS OF SPECIES THAT COULD BE ENCOUNTERED, TYPICAL SPECIES BEHAVIOR, AND PROPER PROCEDURES IF SPECIES ARE ENCOUNTERED. THE MEETING WILL FURTHER EMPHASIZE THE NON-AGGRESSIVE NATURE OF THESE SPECIES, THE ABSENCE OF NEED TO DESTROY SUCH ANIMALS AND THE NEED TO FOLLOW PROTECTIVE MEASURES AS DESCRIBED IN FOLLOWING SECTIONS. THE CONTRACTOR WILL DESIGNATE ONE OF ITS WORKERS AS THE "PROJECT MONITOR", WHO WILL RECEIVE MORE INTENSE TRAINING ON THE IDENTIFICATION AND PROTECTION OF HERPETOFAUNA.

B. THE CONTRACTOR WILL BE PROVIDED WITH PHONE (24 HOUR CONTACT) AND EMAIL FOR HAZARDVILLE WATER COMPANY PERSONNEL TO IMMEDIATELY REPORT ANY RELEASES OF SEDIMENT, FUEL OR HAZARDOUS MATERIALS.

C. THE CONTRACTOR WILL DESIGNATE A MEMBER OF ITS CREW AS THE PROJECT MONITOR TO BE RESPONSIBLE FOR THE PERIODIC "SWEEPS" FOR HERPETOFAUNA WITHIN THE CONSTRUCTION ZONE EACH MORNING AND FOR ANY GROUND DISTURBANCE WORK. THIS INDIVIDUAL WILL RECEIVE MORE INTENSE TRAINING FROM APT ON THE IDENTIFICATION AND PROTECTION OF HERPETOFAUNA IN ORDER TO PERFORM SWEEPS. ANY HERPETOFAUNA DISCOVERED WOULD BE TRANSLOCATED OUTSIDE THE WORK ZONE IN THE GENERAL DIRECTION THE ANIMAL WAS ORIENTED.

D. THE CONTRACTOR'S PROJECT MONITOR WILL BE PROVIDED WITH CELL PHONE AND EMAIL CONTACTS FOR APT PERSONNEL TO IMMEDIATELY REPORT ANY ENCOUNTERS WITH HERPETOFAUNA. EDUCATIONAL POSTER MATERIALS WILL BE PROVIDED BY APT AND DISPLAYED ON THE JOB SITE TO MAINTAIN WORKER AWARENESS AS THE PROJECT PROGRESSES.

E. APT WILL ALSO POST CAUTION SIGNS THROUGHOUT THE PROJECT SITE FOR THE DURATION OF THE CONSTRUCTION PROJECT PROVIDING NOTICE OF THE ENVIRONMENTALLY SENSITIVE NATURE OF THE WORK AREA, THE POTENTIAL FOR ENCOUNTERING VARIOUS AMPHIBIANS AND REPTILES AND PRECAUTIONS TO BE TAKEN TO AVOID INJURY TO OR MORTALITY OF THESE ANIMALS.

2. EROSION AND SEDIMENTATION CONTROLS

A. PLASTIC NETTING USED IN A VARIETY OF EROSION CONTROL PRODUCTS (I.E., EROSION CONTROL BLANKETS, FIBER ROLLS [WATTLES], REINFORCED SILT FENCE) HAS BEEN FOUND TO ENTANGLE WILDLIFE, INCLUDING REPTILES, AMPHIBIANS, BIRDS AND SMALL MAMMALS. NO PERMANENT EROSION CONTROL PRODUCTS OR REINFORCED SILT FENCE WILL BE USED ON THE PROJECT. TEMPORARY EROSION CONTROL PRODUCTS THAT WILL BE EXPOSED AT THE GROUND SURFACE AND REPRESENT A POTENTIAL FOR WILDLIFE ENTANGLEMENT WILL USE EITHER EROSION CONTROL BLANKETS AND FIBER ROLLS COMPOSED OF PROCESSED FIBERS MECHANICALLY BOUND TOGETHER TO FORM A CONTINUOUS MATRIX (NETLESS) OR NETTING COMPOSED OF PLANAR WOVEN NATURAL BIODEGRADABLE FIBER TO AVOID/MINIMIZE WILDLIFE ENTANGLEMENT.

B. THE EXTENT OF EROSION CONTROLS WILL BE AS SHOWN ON THE SITE PLANS. THE CONTRACTOR SHALL HAVE ADDITIONAL SEDIMENTATION AND EROSION CONTROLS STOCKPILED ON SITE SHOULD FIELD OR CONSTRUCTION CONDITIONS WARRANT EXTENDING DEVICES. IN ADDITION TO THE CONTRACTOR MAKING THESE DETERMINATIONS, REQUESTS FOR ADDITIONAL CONTROLS WILL ALSO BE AT THE DISCRETION OF THE ENVIRONMENTAL MONITOR.

C. INSTALLATION OF EROSION AND SEDIMENTATION CONTROLS, REQUIRED FOR EROSION CONTROL COMPLIANCE AND CREATION OF A BARRIER TOO POSSIBLE MIGRATING/DISPERSING HERPETOFAUNA (ONLY APPLICABLE DURING THE SEASONAL RESTRICTION PERIOD AND WILL BE INSTALLED AT THE DISCRETION OF THE ENVIRONMENTAL MONITOR), SHALL BE PERFORMED BY THE CONTRACTOR IF ANY SOIL DISTURBANCE OCCURS OR HEAVY MACHINERY IS ANTICIPATED TO BE USED ON SLOPES. THE ENVIRONMENTAL MONITOR WILL INSPECT THE WORK ZONE AREA PRIOR TO AND FOLLOWING EROSION CONTROL BARRIER INSTALLATION. IN ADDITION, WORK ZONES IN PROXIMITY TO VERNAL POOL RESOURCES WILL BE INSPECTED PRIOR TO AND FOLLOWING EROSION CONTROL BARRIER INSTALLATION TO ENSURE THE AREA IS FREE OF HERPETOFAUNA AND SATISFACTORILY INSTALLED. THE INTENT OF THE BARRIER IS TO SEGREGATE THE MAJORITY OF THE WORK ZONE FROM MIGRATING/DISPERSING HERPETOFAUNA. OFTENTIMES COMPLETE ISOLATION OF A WORK ZONE IS NOT FEASIBLE DUE TO ACCESSIBILITY NEEDS AND LOCATIONS OF STAGING/MATERIAL STORAGE AREAS, ETC. IN THOSE CIRCUMSTANCES, THE BARRIERS WILL BE POSITIONED TO DEFLECT MIGRATING/DISPERSAL ROUTES AWAY FROM THE WORK ZONE TO MINIMIZE POTENTIAL ENCOUNTERS WITH HERPETOFAUNA AT THE DISCRETION OF THE ENVIRONMENTAL MONITOR.

D. NO EQUIPMENT, VEHICLES, CONSTRUCTION MATERIALS, OR STAGING AREAS SHALL BE STORED/LOCATED WITHIN 100 FEET OF WETLAND RESOURCES.

E. THE CONTRACTOR IS RESPONSIBLE FOR DAILY INSPECTIONS OF THE SEDIMENTATION AND EROSION CONTROLS, INCLUDING BUT NOT LIMITED TO FOR TEARS OR BREECHES AND ACCUMULATION LEVELS OF SEDIMENT, PARTICULARLY FOLLOWING STORM EVENTS THAT GENERATE A DISCHARGE AS DEFINED BY AND IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THE CONTRACTOR SHALL NOTIFY THE ENVIRONMENTAL MONITOR WITHIN 24 HOURS OF ANY BREECHES OF THE SEDIMENTATION AND EROSION CONTROLS AND ANY SEDIMENT RELEASES BEYOND THE PERIMETER CONTROLS THAT IMPACT WETLANDS, WATERCOURSES OR WITHIN 100 FEET OF WETLANDS AND WATERCOURSES. THE ENVIRONMENTAL MONITOR WILL PROVIDE PERIODIC INSPECTIONS OF THE SEDIMENTATION AND EROSION CONTROLS THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES ONLY AS IT PERTAINS TO PROTECTION OF NEARBY WETLANDS, WHICH WILL GENERALLY OCCUR ON A MONTHLY BASIS. IF APT IS NOTIFIED BY THE CONTRACTOR OF A SEDIMENT RELEASE, AN INSPECTION WILL BE SCHEDULED SPECIFICALLY TO INVESTIGATE AND EVALUATE POSSIBLE IMPACTS TO WETLAND RESOURCES.

F. ALL SILT FENCING OR OTHER POTENTIAL BARRIERS TO SAFE HERPETOFAUNA MIGRATION SHALL BE REMOVED WITHIN 30 DAYS OF COMPLETION OF WORK AND PERMANENT STABILIZATION OF SITE SOILS SO THAT REPTILE AND AMPHIBIAN MOVEMENT BETWEEN UPLANDS AND WETLANDS IS NOT RESTRICTED. IF FIBER ROLLS/WATTLES, STRAW BALES, OR OTHER NATURAL MATERIAL EROSION CONTROL PRODUCTS ARE USED, SUCH DEVICES WILL NOT BE LEFT IN PLACE TO BIODEGRADE AND SHALL BE PROMPTLY REMOVED AFTER SOILS ARE STABLE SO AS NOT TO CREATE A BARRIER TO MIGRATING WILDLIFE. SEED FROM SEEDING OF SOILS SHOULD NOT SPREAD OVER FIBER ROLLS/WATTLES AS IT MAKES THEM HARDER TO REMOVE ONCE SOILS ARE STABILIZED BY VEGETATION.

G. THE SUBJECT PROPERTY IS IN AN EXISTING STATE OF DISTURBANCE DUE TO CURRENT USAGE. AREAS OF DISTURBANCE THAT ARE LOCATED ALONG OR JUST BEYOND THE PROPOSED DEVELOPMENT'S LIMIT OF DISTURBANCE THAT ARE NOT PERMANENTLY STABILIZED WITH VEGETATION WILL RECEIVE SUCH TREATMENT DURING THE PROJECT'S CONSTRUCTION PHASE TO ENSURE THAT NEARBY WETLAND RESOURCES ARE PROPERLY PROTECTED.

3. PETROLEUM MATERIALS STORAGE AND SPILL PREVENTION

A. CERTAIN PRECAUTIONS ARE NECESSARY TO STORE PETROLEUM MATERIALS, REFUEL AND CONTAIN AND PROPERLY CLEAN UP ANY INADVERTENT FUEL OR PETROLEUM (I.E., OIL, HYDRAULIC FLUID, ETC.) SPILL DUE TO THE PROJECT'S LOCATION IN PROXIMITY TO WETLAND RESOURCES.

B. A SPILL CONTAINMENT KIT CONSISTING OF A SUFFICIENT SUPPLY OF ABSORBENT PADS AND ABSORBENT MATERIAL WILL BE MAINTAINED BY THE CONTRACTOR AT THE CONSTRUCTION SITE THROUGHOUT THE DURATION OF THE PROJECT. IN ADDITION, A WASTE DRUM WILL BE KEPT ON SITE TO CONTAIN ANY USED ABSORBENT PADS/MATERIAL FOR PROPER AND TIMELY DISPOSAL OFF SITE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL LAWS.

C. THE FOLLOWING PETROLEUM AND HAZARDOUS MATERIALS STORAGE AND REFUELING RESTRICTIONS AND SPILL RESPONSE PROCEDURES WILL BE ADHERED TO BY THE CONTRACTOR.

I. PETROLEUM AND HAZARDOUS MATERIALS STORAGE AND REFUELING
1. REFUELING OF VEHICLES OR MACHINERY SHALL OCCUR A MINIMUM OF 100 FEET FROM WETLANDS OR WATERCOURSES AND SHALL TAKE PLACE ON AN IMPERVIOUS PAD WITH SECONDARY CONTAINMENT DESIGNED TO CONTAIN FUELS.
2. ANY FUEL OR HAZARDOUS MATERIALS THAT MUST BE KEPT ON SITE SHALL BE STORED ON AN IMPERVIOUS SURFACE UTILIZING SECONDARY CONTAINMENT A MINIMUM OF 100 FEET FROM WETLANDS OR WATERCOURSES.

II. INITIAL SPILL RESPONSE PROCEDURES
1. STOP OPERATIONS AND SHUT OFF EQUIPMENT.
2. REMOVE ANY SOURCES OF SPARK OR FLAME.
3. CONTAIN THE SOURCE OF THE SPILL.
4. DETERMINE THE APPROXIMATE VOLUME OF THE SPILL.
5. IDENTIFY THE LOCATION OF NATURAL FLOW PATHS TO PREVENT THE RELEASE OF THE SPILL TO SENSITIVE NEARBY WATERWAYS OR WETLANDS.
6. ENSURE THAT FELLOW WORKERS ARE NOTIFIED OF THE SPILL.

III. SPILL CLEAN UP & CONTAINMENT
1. OBTAIN SPILL RESPONSE MATERIALS FROM THE ON-SITE SPILL RESPONSE KIT. PLACE ABSORBENT MATERIALS DIRECTLY ON THE RELEASE AREA.
2. LIMIT THE SPREAD OF THE SPILL BY PLACING ABSORBENT MATERIALS AROUND THE PERIMETER OF THE SPILL.
3. ISOLATE AND ELIMINATE THE SPILL SOURCE.
4. CONTACT THE HAZARDVILLE WATER COMPANY ALONG WITH APPROPRIATE LOCAL, STATE AND/OR FEDERAL AGENCIES, AS NECESSARY.
5. CONTACT A DISPOSAL COMPANY TO PROPERLY DISPOSE OF CONTAMINATED MATERIALS.

IV. REPORTING
1. COMPLETE AN INCIDENT REPORT.
2. SUBMIT A COMPLETED INCIDENT REPORT TO LOCAL, STATE AND FEDERAL AGENCIES, AS NECESSARY, INCLUDING THE HAZARDVILLE WATER COMPANY AND THE CONNECTICUT SITING COUNCIL.

4. WETLAND AND VERNAL POOL PROTECTIVE MEASURES

A. A THOROUGH COVER SEARCH OF THE CONSTRUCTION AREA WILL BE PERFORMED BY APT'S ENVIRONMENTAL MONITOR FOR HERPETOFAUNA PRIOR TO AND FOLLOWING INSTALLATION OF THE SILT FENCING BARRIER TO REMOVE ANY SPECIES FROM THE WORK ZONE PRIOR TO THE INITIATION OF CONSTRUCTION ACTIVITIES. ANY HERPETOFAUNA DISCOVERED WOULD BE TRANSLOCATED OUTSIDE THE WORK ZONE IN THE GENERAL DIRECTION THE ANIMAL WAS ORIENTED. PERIODIC INSPECTIONS WILL BE PERFORMED BY APT'S ENVIRONMENTAL MONITOR THROUGHOUT THE DURATION OF THE CONSTRUCTION.

B. ANY STORMWATER MANAGEMENT FEATURES, RUTS OR ARTIFICIAL DEPRESSIONS THAT COULD HOLD WATER CREATED INTENTIONALLY OR UNINTENTIONALLY BY SITE CLEARING/CONSTRUCTION ACTIVITIES WILL BE PROPERLY FILLED IN AND PERMANENTLY STABILIZED WITH VEGETATION TO AVOID THE CREATION OF VERNAL POOL "DECOY POOLS" THAT COULD INTERCEPT AMPHIBIANS MOVING TOWARD THE VERNAL POOLS. STORMWATER MANAGEMENT FEATURES SUCH AS LEVEL SPREADERS WILL BE CAREFULLY REVIEWED IN THE FIELD TO ENSURE THAT STANDING WATER DOES NOT ENDURE FOR MORE THAN A 24-HOUR PERIOD TO AVOID CREATION OF DECOY POOLS AND MAY BE SUBJECT TO FIELD DESIGN CHANGES. ANY SUCH PROPOSED DESIGN CHANGES WILL BE REVIEWED BY THE DESIGN ENGINEER TO ENSURE STORMWATER MANAGEMENT FUNCTIONS ARE MAINTAINED.

C. EROSION CONTROL MEASURES WILL BE REMOVED NO LATER THAN 30 DAYS FOLLOWING FINAL SITE STABILIZATION SO AS NOT TO IMPEDE MIGRATION OF HERPETOFAUNA OR OTHER WILDLIFE.

5. HERBICIDE, PESTICIDE, AND SALT RESTRICTIONS

A. THE USE OF HERBICIDES AND PESTICIDES AT THE FACILITY SHALL BE AVOIDED WHEN POSSIBLE. IN THE EVENT HERBICIDES AND/OR PESTICIDES ARE REQUIRED AT THE FACILITY, THEIR USE WILL BE USED IN ACCORDANCE WITH CURRENT INTEGRATED PEST MANAGEMENT ("IPM") PRINCIPLES WITH PARTICULAR ATTENTION TO MINIMIZE APPLICATIONS WITHIN 100 FEET OF WETLAND OR WATERCOURSE RESOURCES. NO APPLICATIONS OF HERBICIDES OR PESTICIDES ARE ALLOWED WITHIN ACTUAL WETLAND OR WATERCOURSE RESOURCES.

B. MAINTENANCE OF THE FACILITY DURING THE WINTER MONTHS SHALL MINIMIZE THE APPLICATION OF CHLORIDE-BASED DEICERS SALT WITH USE OF MORE ENVIRONMENTALLY FRIENDLY ALTERNATIVES TO MINIMIZE IMPACT TO EAGLEVILLE BROOK.

6. REPORTING

A. COMPLIANCE MONITORING REPORTS (BRIEF NARRATIVE AND APPLICABLE PHOTOS) DOCUMENTING EACH APT INSPECTION WILL BE SUBMITTED BY APT TO THE PERMITTEE AND ITS CONTRACTOR FOR COMPLIANCE VERIFICATION OF THESE PROTECTION MEASURES. THESE REPORTS ARE NOT TO BE USED TO DOCUMENT COMPLIANCE WITH ANY OTHER PERMIT AGENCY APPROVAL CONDITIONS (I.E., DEEP STORMWATER PERMIT MONITORING, ETC.). ANY NON-COMPLIANCE OBSERVATIONS OF EROSION CONTROL MEASURES OR EVIDENCE OF EROSION OR SEDIMENT RELEASE WILL BE IMMEDIATELY REPORTED TO THE PERMITTEE AND ITS CONTRACTOR AND INCLUDED IN THE REPORTS ALONG WITH ANY OBSERVATIONS OF VERNAL POOL HERPETOFAUNA.

B. FOLLOWING COMPLETION OF THE CONSTRUCTION PROJECT, APT WILL PROVIDE A COMPLIANCE MONITORING SUMMARY REPORT TO THE PERMITTEE DOCUMENTING IMPLEMENTATION OF THE WETLAND AND VERNAL POOL PROTECTION PROGRAM AND MONITORING OBSERVATIONS. THE PERMITTEE IS RESPONSIBLE FOR PROVIDING A COPY OF THE COMPLIANCE MONITORING SUMMARY REPORT TO THE CONNECTICUT SITING COUNCIL FOR COMPLIANCE VERIFICATION.

C. ANY OBSERVATIONS OF RARE SPECIES WILL BE REPORTED TO CTDEEP BY APT, WITH PHOTO-DOCUMENTATION (IF POSSIBLE) AND WITH SPECIFIC INFORMATION ON THE LOCATION AND DISPOSITION OF THE ANIMAL.

LSE HERCULES LLC
40 TOWER LANE, SUITE 145
AVON, CT 06001

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	12/20/22	FOR REVIEW: KAM
1		
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3		
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DESIGN PROFESSIONAL OF RECORD

PROF: KEVIN A. MCCAFFERY, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: RAFFIA FARMS INC & RAFFIA GEORGE + SONS INC
ADDRESS: 113 RAFFIA RD ENFIELD, CT 06082

RAFFIA RD SOLAR

SITE ADDRESS: 99 & 105 & 113 RAFFIA RD ENFIELD, CT

APT FILING NUMBER: CT606160

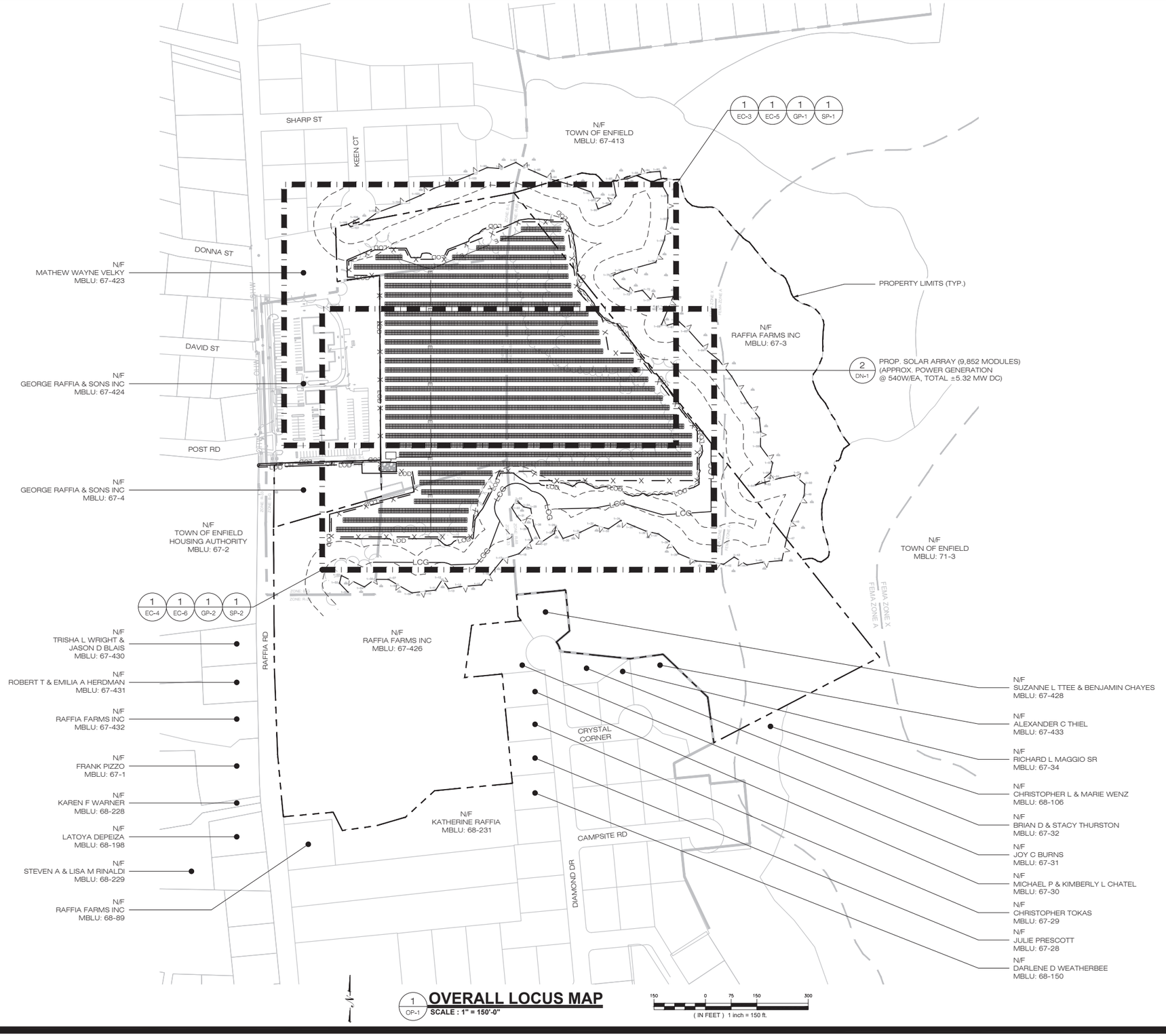
DRAWN BY: JT

DATE: 12/20/22 CHECKED BY: KAM

SHEET TITLE:
ENVIRONMENTAL NOTES RESOURCE PROTECTION MEASURES

SHEET NUMBER:
GN-2

STATE OF CONNECTICUT · KEVIN A. MCCAFFERY · 25977 · LICENSED PROFESSIONAL ENGINEER



1 OP-1 **OVERALL LOCUS MAP**
SCALE : 1" = 150'-0"

150 0 75 150 300
(IN FEET) 1 inch = 150 ft.

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SHEET TITLE:
OVERALL LOCUS MAP

SHEET NUMBER:
OP-1

STATE OF CONNECTICUT KEVIN A. MCCAFFERY 25977 LICENSED PROFESSIONAL ENGINEER

EROSION CONTROL NOTES

EROSION AND SEDIMENT CONTROL PLAN NOTES

1. THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT AND EROSION CONTROLS IN ACCORDANCE WITH THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AND AS DIRECTED BY THE TOWN OF ENFIELD, PERMITTEE, AND/OR SWPCP MONITOR. ALL PERIMETER SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CLEARING AND GRUBBING AND DEMOLITION OPERATIONS.

2. THESE DRAWINGS ARE ONLY INTENDED TO DESCRIBE THE SEDIMENT AND EROSION CONTROL MEASURES FOR THIS SITE. SEE CONSTRUCTION SEQUENCE FOR ADDITIONAL INFORMATION. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN ARE SHOWN AS REQUIRED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL EROSION CONTROL MEASURES ARE CONFIGURED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION OF SOILS AND PREVENT THE TRANSPORT OF SEDIMENTS AND OTHER POLLUTANTS TO STORM DRAINAGE SYSTEMS AND/OR WATERCOURSES. ACTUAL SITE CONDITIONS OR SEASONAL AND CLIMATIC CONDITIONS MAY WARRANT ADDITIONAL CONTROLS OR CONFIGURATIONS, AS REQUIRED, AND AS DIRECTED BY THE PERMITTEE AND/OR SWPCP MONITOR. REFER TO SITE PLAN FOR GENERAL INFORMATION AND OTHER CONTRACT PLANS FOR APPROPRIATE INFORMATION.

3. A BOND OR LETTER OF CREDIT MAY BE REQUIRED TO BE POSTED WITH THE GOVERNING AUTHORITY FOR THE EROSION CONTROL INSTALLATION AND MAINTENANCE.

4. THE CONTRACTOR SHALL APPLY THE MINIMUM EROSION & SEDIMENT CONTROL MEASURES SHOWN ON THE PLAN IN CONJUNCTION WITH CONSTRUCTION SEQUENCING, SUCH THAT ALL ACTIVE WORK ZONES ARE PROTECTED. ADDITIONAL AND/OR ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF FOUND NECESSARY BY THE CONTRACTOR, OWNER, SITE ENGINEER, MUNICIPAL OFFICIALS, OR ANY GOVERNING AGENCY. THE CONTRACTOR SHALL CONTACT THE OWNER AND APPROPRIATE GOVERNING AGENCIES FOR APPROVAL IF ALTERNATIVE CONTROLS OTHER THAN THOSE SHOWN ON THE PLANS ARE PROPOSED BY THE CONTRACTOR.

5. THE CONTRACTOR SHALL TAKE EXTREME CARE DURING CONSTRUCTION SO AS NOT TO DISTURB UNPROTECTED WETLAND AREAS OR INSTALLED SEDIMENTATION AND EROSION CONTROL MEASURES. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROLS WEEKLY AND WITHIN 24 HOURS OF A STORM WITH A RAINFALL AMOUNT OF 0.25 INCHES OR GREATER TO VERIFY THAT THE CONTROLS ARE OPERATING PROPERLY AND MAKE REPAIRS AS NECESSARY IN A TIMELY MANOR.

6. THE CONTRACTOR SHALL KEEP A SUPPLY OF EROSION CONTROL MATERIAL (SILT FENCE, COMPOST FILTER SOCK, EROSION CONTROL BLANKET, ETC.) ON-SITE FOR PERIODIC MAINTENANCE AND EMERGENCY REPAIRS.

7. ALL FILL MATERIAL PLACED ADJACENT TO ANY WETLAND AREA SHALL BE GOOD QUALITY, WITH LESS THAN 5% FINES PASSING THROUGH A #200 SIEVE (BANK RUN), SHALL BE PLACED IN MAXIMUM ONE FOOT LIFTS, AND SHALL BE COMPACTED TO 95% MAX. DRY DENSITY MODIFIED PROCTOR OR AS SPECIFIED IN THE CONTRACT SPECIFICATIONS.

8. PROTECT EXISTING TREES THAT ARE TO BE SAVED BY FENCING, ORANGE SAFETY FENCE, CONSTRUCTION TAPE, OR EQUIVALENT FENCING/TAPE. ANY LIMB TRIMMING SHOULD BE DONE AFTER CONSULTATION WITH AN ARBORIST AND BEFORE CONSTRUCTION BEGINS IN THAT AREA; FENCING SHALL BE MAINTAINED AND REPAIRED DURING CONSTRUCTION.

9. CONSTRUCTION ENTRANCES (ANTI-TRACKING PADS) SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR CONSTRUCTION ACTIVITY AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF ALL CONSTRUCTION IF REQUIRED. THE LOCATION OF THE TRACKING PADS MAY CHANGE AS VARIOUS PHASES OF CONSTRUCTION ARE COMPLETED. CONTRACTOR SHALL ENSURE THAT ALL VEHICLES EXITING THE SITE ARE PASSING OVER THE ANTI-TRACKING PADS PRIOR TO EXITING.

10. ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE LIMIT OF DISTURBANCE, WHICH SHALL BE MARKED WITH SILT FENCE, SAFETY FENCE, HAY BALES, RIBBONS, OR OTHER MEANS PRIOR TO CLEARING. CONSTRUCTION ACTIVITY SHALL REMAIN ON THE UPHILL SIDE OF THE SEDIMENT BARRIER UNLESS WORK IS SPECIFICALLY CALLED FOR ON THE DOWNHILL SIDE OF THE BARRIER.

11. NO CUT OR FILL SLOPES SHALL EXCEED 2:1 EXCEPT WHERE STABILIZED BY ROCK FACED EMBANKMENTS OR EROSION CONTROL BLANKETS. ALL SLOPES SHALL BE SEEDED AND BANKS WILL BE STABILIZED IMMEDIATELY UPON COMPLETION OF FINAL GRADING UNTIL TURF IS ESTABLISHED.

12. DIRECT ALL DEWATERING PUMP DISCHARGE TO A SEDIMENT CONTROL DEVICE CONFORMING TO THE GUIDELINES WITHIN THE APPROVED LIMIT OF DISTURBANCE IF REQUIRED. DISCHARGE TO STORM DRAINS OR SURFACE WATERS FROM SEDIMENT CONTROLS SHALL BE CLEAR AND APPROVED BY THE PERMITTEE OR MUNICIPALITY.

13. THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION SITE AND SHALL NOT ALLOW THE ACCUMULATION OF RUBBISH OR CONSTRUCTION DEBRIS ON THE SITE. PROPER SANITARY DEVICES SHALL BE MAINTAINED ON-SITE AT ALL TIMES AND SECURED APPROPRIATELY. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID THE SPILLAGE OF FUEL OR OTHER POLLUTANTS ON THE CONSTRUCTION SITE AND SHALL ADHERE TO ALL APPLICABLE POLICIES AND REGULATIONS RELATED TO SPILL PREVENTION AND RESPONSE/CONTAINMENT.

14. MINIMIZE LAND DISTURBANCES. SEED AND MULCH DISTURBED AREAS WITH TEMPORARY MIX AS SOON AS PRACTICABLE (2 WEEK MAXIMUM UNSTABILIZED PERIOD) USING PERENNIAL RYEGRASS AT 40 LBS PER ACRE. MULCH ALL CUT AND FILL SLOPES AND SWALES WITH LOOSE HAY AT A RATE OF 2 TONS PER ACRE. IF NECESSARY, REPLACE LOOSE HAY ON SLOPES WITH EROSION CONTROL BLANKETS OR JUTE CLOTH. MODERATELY GRADED AREAS, ISLANDS, AND TEMPORARY CONSTRUCTION STAGING AREAS MAY BE HYDROSEEDED WITH TACKIFIER.

15. SWEEP AFFECTED PORTIONS OF OFF SITE ROADS ONE OR MORE TIMES A DAY (OR LESS FREQUENTLY IF TRACKING IS NOT A PROBLEM) DURING CONSTRUCTION. FOR DUST CONTROL, PERIODICALLY MOISTEN EXPOSED SOIL SURFACES WITH WATER ON UNPAVED TRAVELWAYS TO KEEP THE TRAVELWAYS DAMP. CALCIUM CHLORIDE MAY ALSO BE APPLIED TO ACCESS ROADS. DUMP TRUCK LOADS EXITING THE SITE SHALL BE COVERED.

16. VEGETATIVE ESTABLISHMENT SHALL OCCUR ON ALL DISTURBED SOIL, UNLESS THE AREA IS UNDER ACTIVE CONSTRUCTION, IT IS COVERED IN STONE OR SCHEDULED FOR PAVING WITHIN 30 DAYS. TEMPORARY SEEDING OR NON-LIVING SOIL PROTECTION OF ALL EXPOSED SOILS AND SLOPES SHALL BE INITIATED WITHIN THE FIRST 7 DAYS OF SUSPENDING WORK IN AREAS TO BE LEFT LONGER THAN 30 DAYS.

17. MAINTAIN ALL PERMANENT AND TEMPORARY SEDIMENT CONTROL DEVICES IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD. UPON COMPLETION OF WORK SWEEP CONCRETE PADS, CLEAN THE STORMWATER MANAGEMENT SYSTEMS AND REMOVE ALL TEMPORARY SEDIMENT CONTROLS ONCE THE SITE IS FULLY STABILIZED AND APPROVAL HAS BEEN RECEIVED FROM PERMITTEE OR THE MUNICIPALITY.

18. THE SITE WAS DESIGNED TO COMPLY WITH FEDERAL, STATE, AND, IF APPLICABLE, LOCAL STANDARDS, PLUS CURRENT ACCEPTED PRACTICES FOR THE INDUSTRY. ADDITIONAL CONTROLS AND ACTIVITIES MAY BE DEEMED NECESSARY BY THE SWPCP MONITOR DURING CONSTRUCTION AS A RESULT OF UNFORESEEN CONDITIONS AND/OR MEANS AND METHODS. SUCH ITEMS MAY INCLUDE, BUT ARE NOT LIMITED TO: ADDITIONAL FOREBAYS, BASINS, OR UPSTREAM STRUCTURAL CONTROLS, THE USE OF FLOCCULANTS OF FLOCK LOGS TO DECREASE SEDIMENT, DISCHARGE MANAGEMENT SUCH AS ADDITIONAL ARMORING AND FILTERING MEASURES (I.E. STRAW BALES, WATTLES, ETC.), AND HYDROSEEDING WITH RAPIDLY GERMINATING SEED.

19. SEEDING MIXTURES SHALL BE NEW ENGLAND SEMI-SHADE GRASS AND FORBS MIX (SEE SITE DETAILS SHEET DN-1), OR APPROVED EQUAL BY OWNER.

CONSTRUCTION OPERATION AND MAINTENANCE PLAN - BY CONTRACTOR

E&S MEASURE	INSPECTION SCHEDULE	MAINTENANCE REQUIRED
CONSTRUCTION ENTRANCE	DAILY	PLACE ADDITIONAL STONE, EXTEND THE LENGTH OR REMOVE AND REPLACE THE STONE. CLEAN PAVED SURFACES OF TRACKED SEDIMENT.
COMPOST FILTER SOCK	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED.
SILT FENCE	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED. REMOVE SILT WHEN IT REACHES 1/2 THE HEIGHT OF THE FENCE.
TOPSOIL/BORROW STOCKPILES	DAILY	REPAIR/REPLACE SEDIMENT BARRIERS AS NECESSARY.
TEMPORARY SEDIMENT BASIN (W/ BAFFLES)	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.5"	REMOVE SEDIMENT ONCE IT HAS ACCUMULATED TO ONE HALF OF MINIMUM REQUIRED VOLUME OF THE WET STORAGE, DEWATERING AS NEEDED. RESTORE TRAP TO ORIGINAL DIMENSIONS. REPAIR/REPLACE BAFFLES WHEN FAILURE OR DETERIORATION IS OBSERVED.
TEMPORARY SEDIMENT TRAP (W/ BAFFLES)	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.5"	REMOVE SEDIMENT ONCE IT HAS ACCUMULATED TO ONE HALF OF MINIMUM REQUIRED VOLUME OF THE WET STORAGE, DEWATERING AS NEEDED. RESTORE TRAP TO ORIGINAL DIMENSIONS. REPAIR/REPLACE BAFFLES WHEN FAILURE OR DETERIORATION IS OBSERVED.
TEMPORARY SOIL PROTECTION	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR ERODED OR BARE AREAS IMMEDIATELY. RESEED AND MULCH.

SEDIMENT & EROSION CONTROL NARRATIVE

1. THE PROJECT INVOLVES THE CONSTRUCTION OF A GROUND MOUNTED SOLAR PANEL FACILITY WITH ASSOCIATED EQUIPMENT, INCLUDING THE CLEARING, GRUBBING AND GRADING OF APPROXIMATELY 14.28± ACRES OF EXISTING LOT.

THE PROPOSED PROJECT INVOLVES THE FOLLOWING CONSTRUCTION:

A. CLEARING, GRUBBING, AND GRADING OF EXISTING LOT.
B. CONSTRUCTION OF 9,582 GROUND MOUNTED SOLAR PANELS AND ASSOCIATED EQUIPMENT.
B. THE STABILIZATION OF DISTURBED AREAS WITH PERMANENT VEGETATIVE TREATMENTS.

2. FOR THIS PROJECT, THERE ARE APPROXIMATELY 14.28± ACRES OF THE SITE BEING DISTURBED WITH NEGLIGIBLE INCREASE IN THE IMPERVIOUS AREA OF THE SITE, AS ALL ACCESS THOUGH THE SITE WILL BE GRAVEL. IMPERVIOUS AREAS ARE LIMITED TO THE CONCRETE PADS FOR ELECTRICAL EQUIPMENT.

3. THE PROJECT SITE, AS MAPPED IN THE SOIL SURVEY OF STATE OF CONNECTICUT (NRCS, VERSION 22, SEP 12, 2022), CONTAINS TYPE 36B (HYDROLOGIC SOIL GROUP A), 304 AND 306 (HYDROLOGIC SOIL GROUP B), AND 12 (HYDROLOGIC SOIL GROUP C/D) SOILS. A GEOTECHNICAL ENGINEERING REPORT HAS NOT BEEN COMPLETED.

4. IT IS ANTICIPATED THAT CONSTRUCTION WILL BE COMPLETED IN APPROXIMATELY 3-4 MONTHS.

5. REFER TO THE CONSTRUCTION SEQUENCING AND EROSION AND SEDIMENTATION NOTES FOR INFORMATION REGARDING SEQUENCING OF MAJOR OPERATIONS IN THE ON-SITE CONSTRUCTION PHASES.

6. STORMWATER MANAGEMENT DESIGN CRITERIA UTILIZES THE APPLICABLE SECTIONS OF THE 2004 CONNECTICUT STORMWATER QUALITY MANUAL AND THE TOWN OF ENFIELD STANDARDS, TO THE EXTENT POSSIBLE AND PRACTICABLE FOR THIS PROJECT ON THIS SITE. EROSION AND SEDIMENTATION MEASURES ARE BASED UPON ENGINEERING PRACTICE, JUDGEMENT AND THE APPLICABLE SECTIONS OF THE CONNECTICUT EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS, LATEST EDITION.

7. DETAILS FOR THE TYPICAL STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION MEASURES ARE SHOWN ON THE PLAN SHEETS OR PROVIDED AS SEPARATE SUPPORT DOCUMENTATION FOR REVIEW IN THIS PLAN.

8. CONSERVATION PRACTICES TO BE USED DURING CONSTRUCTION:

A. STAGED CONSTRUCTION;
B. MINIMIZE THE DISTURBED AREAS TO THE EXTENT PRACTICABLE DURING CONSTRUCTION;
C. STABILIZE DISTURBED AREAS WITH TEMPORARY OR PERMANENT MEASURES AS SOON AS POSSIBLE, BUT NO LATER THAN 7-DAYS FOLLOWING DISTURBANCE;
D. MINIMIZE IMPERVIOUS AREAS;
E. UTILIZE APPROPRIATE CONSTRUCTION EROSION AND SEDIMENTATION MEASURES.

9. THE FOLLOWING SEPARATE DOCUMENTS ARE TO BE CONSIDERED A PART OF THE EROSION AND SEDIMENTATION PLAN:

A. STORMWATER MANAGEMENT REPORT DATED DECEMBER 2022.
B. SWPCP DATED DECEMBER 2022.

SUGGESTED CONSTRUCTION SEQUENCE

THE FOLLOWING SUGGESTED SEQUENCE OF CONSTRUCTION ACTIVITIES IS PROJECTED BASED UPON ENGINEERING JUDGEMENT AND BEST MANAGEMENT PRACTICES. THE CONTRACTOR MAY ELECT TO ALTER THE SEQUENCING TO BEST MEET THE CONSTRUCTION SCHEDULE, THE EXISTING SITE ACTIVITIES AND WEATHER CONDITIONS. SHOULD THE CONTRACTOR ALTER THE CONSTRUCTION SEQUENCE OR ANY EROSION AND SEDIMENTATION CONTROL MEASURES THEY SHALL MODIFY THE STORMWATER POLLUTION CONTROL PLAN ("SWPCP") AS REQUIRED BY THE GENERAL PERMIT. MAJOR CHANGES IN SEQUENCING AND/OR METHODS MAY REQUIRE REGULATORY APPROVAL PRIOR TO IMPLEMENTATION.

1. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING. PHYSICALLY FLAG THE LIMITS OF DISTURBANCE IN THE FIELD AS NECESSARY TO FACILITATE THE PRE-CONSTRUCTION MEETING.

2. CONDUCT A PRE-CONSTRUCTION MEETING TO DISCUSS THE PROPOSED WORK AND EROSION AND SEDIMENTATION CONTROL MEASURES. THE MEETING SHOULD BE ATTENDED BY THE OWNER, THE OWNER'S REPRESENTATIVE(S), THE GENERAL CONTRACTOR, DESIGNATED SUB-CONTRACTORS AND THE PERSON, OR PERSONS, RESPONSIBLE FOR THE IMPLEMENTATION, OPERATION, MONITORING AND MAINTENANCE OF THE EROSION AND SEDIMENTATION MEASURES. THE CONSTRUCTION PROCEDURES FOR THE ENTIRE PROJECT SHALL BE REVIEWED AT THIS MEETING.

3. NOTIFY CALL BEFORE YOU DIG AT 811, AS REQUIRED, PRIOR TO THE START OF CONSTRUCTION.

PHASE 1

4. REMOVE EXISTING IMPEDIMENTS AS NECESSARY AND PROVIDE MINIMAL CLEARING AND GRUBBING TO INSTALL THE REQUIRED CONSTRUCTION ENTRANCE/S.

5. CLEAR ONLY AS NEEDED TO INSTALL THE PERIMETER EROSION AND SEDIMENTATION CONTROL MEASURES AND, IF APPLICABLE, TREE PROTECTION. ALL WETLAND AREAS SHALL BE PROTECTED BEFORE MAJOR CONSTRUCTION BEGINS.

6. INSTALL PERIMETER EROSION CONTROL AS SHOWN ON PLANS, INCLUDING SILT FENCE, SILT FENCE WINGS, AND COMPOST FILTER SOCK.

PHASE 2

7. COMPLETE SITE GRADING AND IMPLEMENTATION OF STABILIZATION MEASURES SHOWN AND DESCRIBED ON THE PLAN..

8. TEMPORARILY SEED DISTURBED AREAS NOT UNDER CONSTRUCTION FOR THIRTY (30) DAYS OR MORE.

FINAL GRADING & DRAINAGE PLAN

9. INSTALL CONCRETE EQUIPMENT PAD.

10. INSTALL ELECTRICAL CONDUITS.

11. INSTALL RACKING POSTS FOR GROUND MOUNTED SOLAR PANELS.

12. INSTALL GROUND MOUNTED SOLAR PANELS AND COMPLETE ELECTRICAL INSTALLATION.

13. AFTER SUBSTANTIAL COMPLETION OF THE INSTALLATION OF THE SOLAR PANELS, COMPLETE REMAINING SITE WORK AND STABILIZE ALL DISTURBED AREAS.

14. FINE GRADE, RAKE, SEED AND MULCH ALL REMAINING DISTURBED AREAS.

15. AFTER THE SITE IS STABILIZED AND WITH THE APPROVAL OF THE PERMITTEE, REMOVE PERIMETER EROSION AND SEDIMENTATION CONTROLS AND TEMPORARY SEDIMENT TRAP. ANY AREAS DISTURBED DURING CLEAN UP SHALL BE PERMANENTLY SEEDED.

16. THE SITE SHALL BE MONITORED ONCE A MONTH FOR TWO FULL GROWING SEASONS (APRIL-OCTOBER).

17. ISSUE NOTICE OF TERMINATION UPON COMPLETION OF MONITORING REQUIRED PER CT DEEP CONSTRUCTION GP APPENDIX I.

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CSC PERMIT SET

NO	DATE	REVISION
0	12/20/22	FOR REVIEW: KAM
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DESIGN PROFESSIONAL OF RECORD

PROF: KEVIN A. MCCAFFERY, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: RAFFIA FARMS INC & RAFFIA GEORGE + SONS INC
ADDRESS: 113 RAFFIA RD ENFIELD, CT 06082

RAFFIA RD SOLAR

SITE ADDRESS: 99 & 105 & 113 RAFFIA RD ENFIELD, CT

APT FILING NUMBER: CT606160

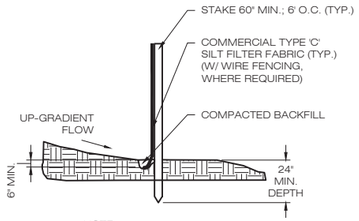
DRAWN BY: JT

DATE: 12/20/22 CHECKED BY: KAM

SHEET TITLE:
SEDIMENTATION & EROSION CONTROL NOTES

SHEET NUMBER:
EC-1

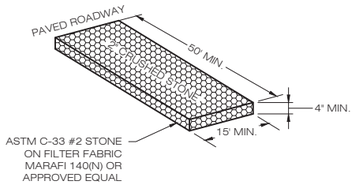
STATE OF CONNECTICUT · KEVIN A. MCCAFFERY · 25977 · LICENSED PROFESSIONAL ENGINEER



NOTE:
SILT FENCE SHALL BE LAPPED ONLY WHEN NECESSARY PER THE MANUFACTURER RECOMMENDATIONS.

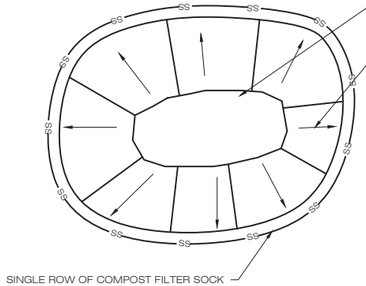
1 EC-2 SILT FENCE DETAIL

SCALE : N.T.S.



2 EC-2 CONSTRUCTION ENTRANCE DETAIL

SCALE : N.T.S.



NOTES:
1. ALL EXISTING EXCAVATED MATERIAL THAT IS NOT TO BE REUSED IN THE WORK IS TO BE IMMEDIATELY REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.

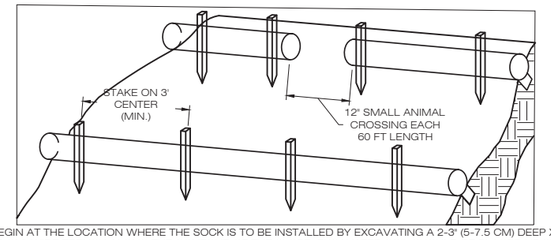
2. SOIL/AGGREGATE STOCKPILE SITES TO BE WHERE SHOWN ON THE DRAWINGS.

3. RESTORE STOCKPILE SITES TO PRE-EXISTING PROJECT CONDITION AND RESEED AS REQUIRED.

4. STOCKPILE HEIGHTS MUST NOT EXCEED 35'. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.

3 EC-2 MATERIALS STOCKPILE DETAIL

SCALE : N.T.S.



1. BEGIN AT THE LOCATION WHERE THE SOCK IS TO BE INSTALLED BY EXCAVATING A 2-3" (5-7.5 CM) DEEP X 9" (22.9 CM) WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UP SLOPE FROM THE ANCHOR TRENCH.
2. PLACE THE SOCK IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE SOCK ON THE UPHILL SIDE. SOCKS SHALL BE INSTALLED IN 60 FT CONTINUOUS LENGTHS WITH ADJACENT SOCKS TIGHTLY ABUT. EVERY 60 FT THE SOCK ROW SHALL BE SPACED 12 INCHES CLEAR, END TO END, FOR AMPHIBIAN AND REPTILE TRAVEL. THE OPEN SPACES SHALL BE STAGGERED MID LENGTH OF THE NEXT DOWN GRADIENT SOCK.
3. SECURE THE SOCK WITH 18-24" (45.7-61 CM) STAKES EVERY 3-4' (0.9 -1.2 M) AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE SOCK LEAVING AT LEAST 2-3" (5-7.5 CM) OF STAKE EXTENDING ABOVE THE SOCK. STAKES SHOULD BE DRIVEN PERPENDICULAR TO THE SLOPE FACE.

4 EC-2 COMPOST FILTER SOCK SEDIMENTATION CONTROL BARRIER

SCALE : N.T.S.

NOTES:
1. WRAP SILT FENCE AT ENDS.

2. NO JOINING FENCE SECTIONS SHALL BE INSTALLED WITHIN 30 FEET OF WING.

5 EC-2 SILT FENCE WING DETAIL

SCALE : N.T.S.

LSE HERCULES LLC
40 TOWER LANE, SUITE 145
AVON, CT 06001

ALL-POINTS TECHNOLOGY CORPORATION

567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

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DESIGN PROFESSIONAL OF RECORD

PROF: KEVIN A. MCCAFFERY, P.E.
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RAFFIA RD SOLAR

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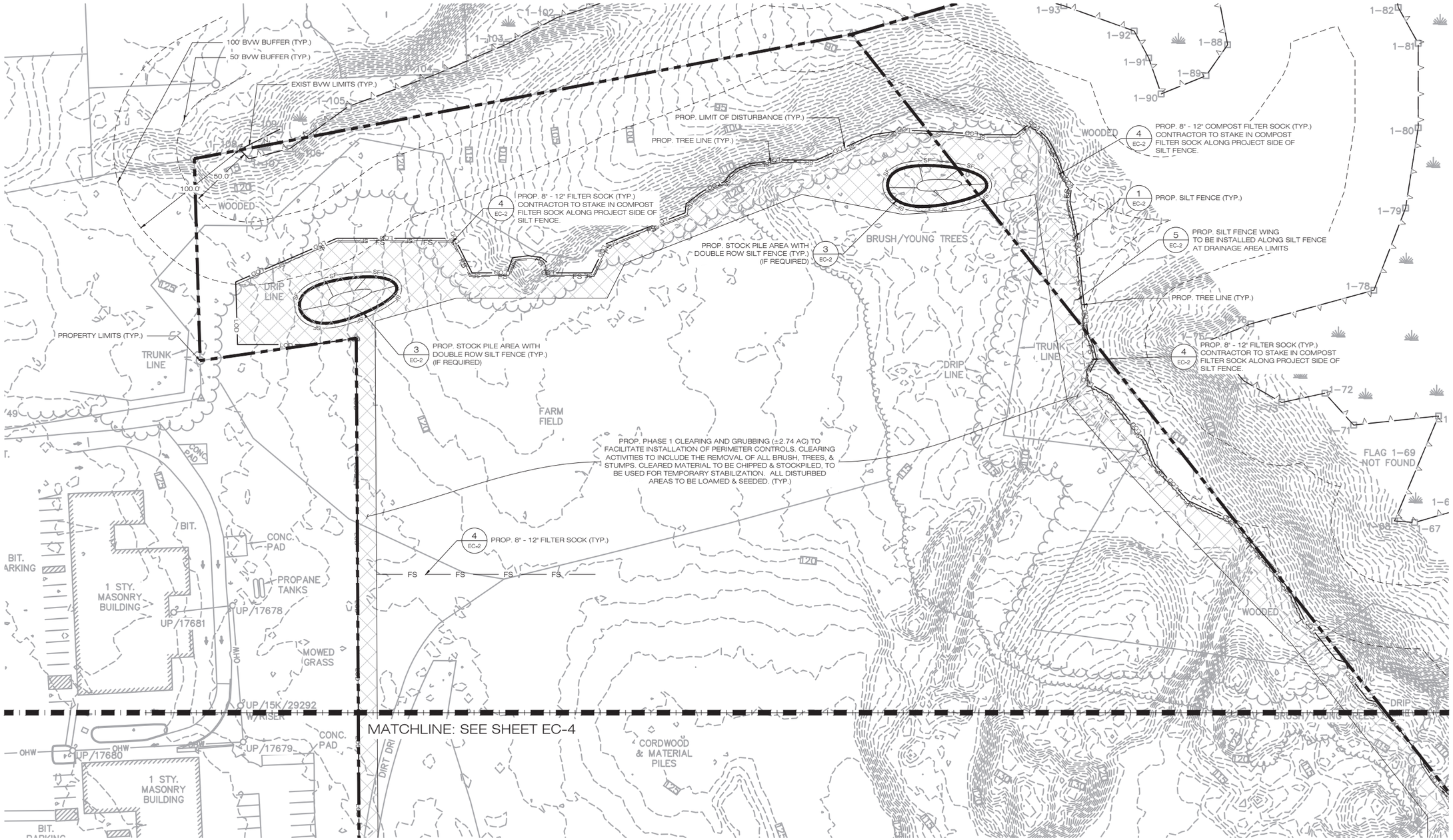
APT FILING NUMBER: CT606160

DRAWN BY: JT
DATE: 12/20/22
CHECKED BY: KAM

SHEET TITLE:
SEDIMENTATION & EROSION CONTROL DETAILS

SHEET NUMBER:
EC-2



1 EC-3 **PHASE 1 - SEDIMENTATION & EROSION CONTROL PLAN**
SCALE : 1" = 40'-0"

40 0 20 40 80
(IN FEET) 1 inch = 40 ft.

LSE HERCULES LLC
40 TOWER LANE, SUITE 145
AVON, CT 06001

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567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
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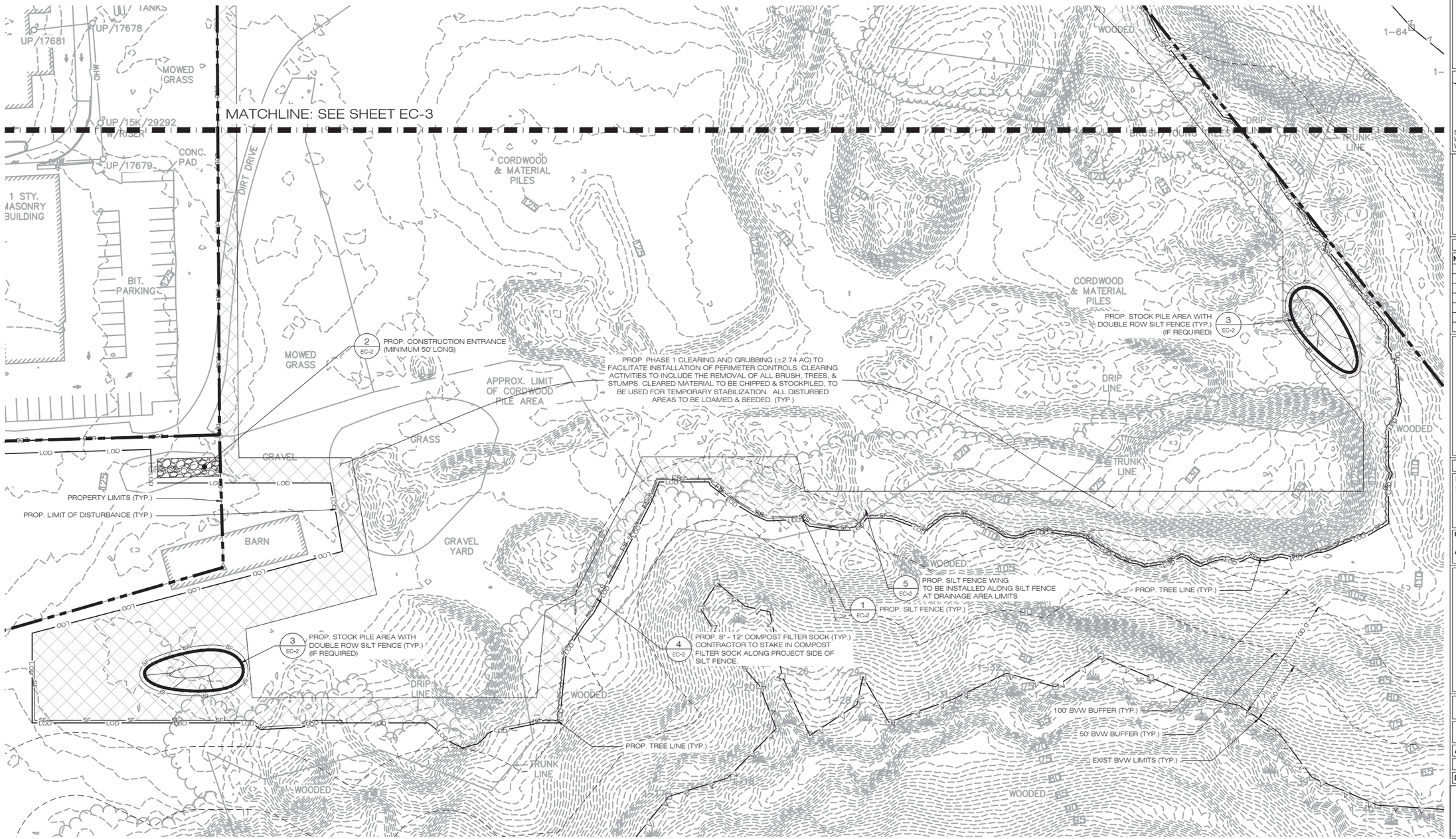
APT FILING NUMBER: CT606160

DRAWN BY: JT
DATE: 12/20/22 CHECKED BY: KAM

SHEET TITLE:
PHASE 1 SEDIMENTATION & EROSION CONTROL PLAN

SHEET NUMBER:
EC-3

STATE OF CONNECTICUT KEVIN A. MCCAFFERY 25977 LICENSED PROFESSIONAL ENGINEER



1 EC-4 **PHASE 1 - SEDIMENTATION & EROSION CONTROL PLAN**

SCALE : 1" = 40'-0"

40 0 20 40 80

(IN FEET) 1 inch = 40 ft.

LSE HERCULES LLC
40 TOWER LANE, SUITE 145
AVON, CT 06001

ALL-POINTS TECHNOLOGY CORPORATION

567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
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RAFFIA RD SOLAR

SITE ADDRESS: 99 & 105 & 113 RAFFIA RD ENFIELD, CT

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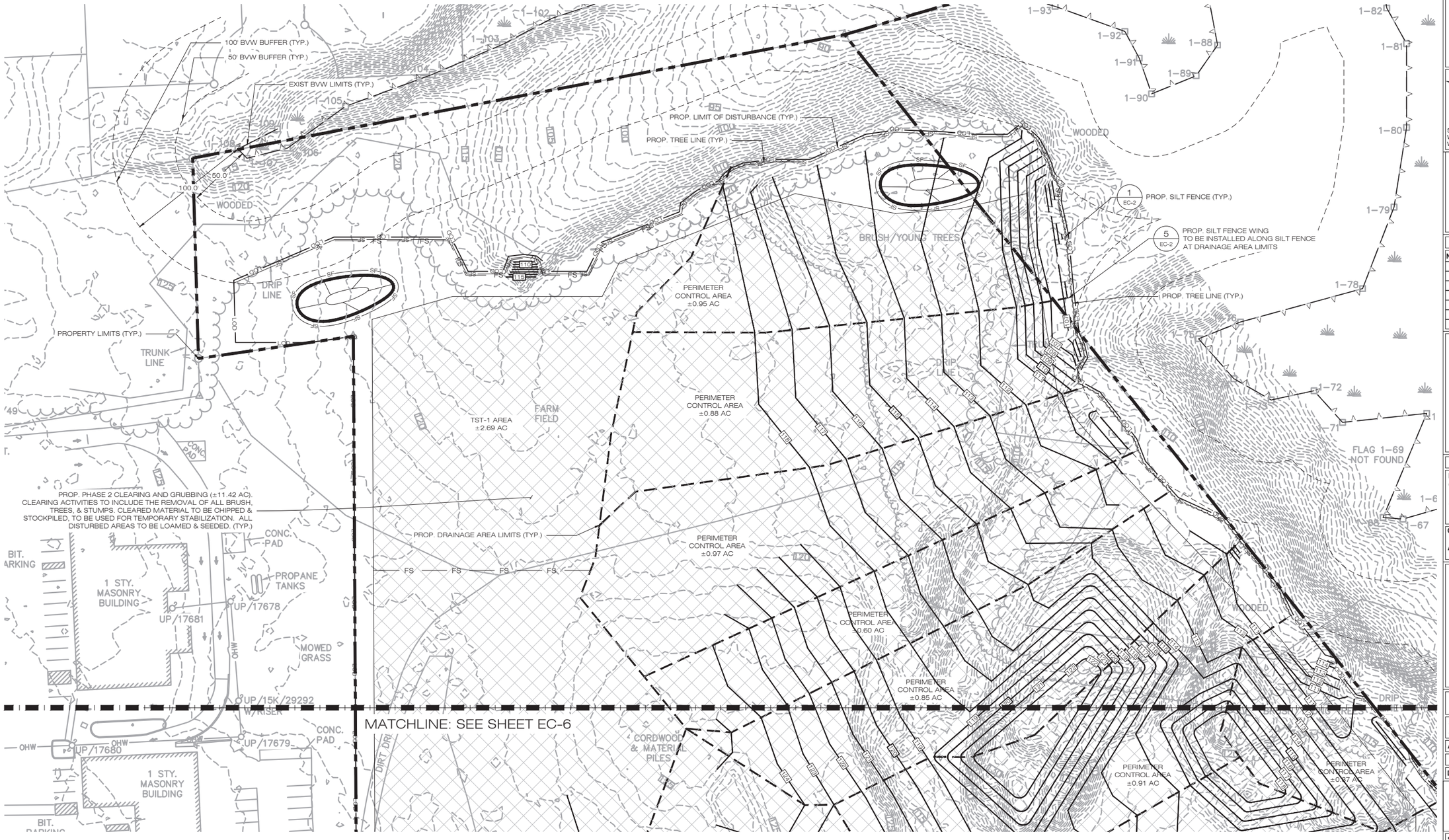
DATE: 12/20/22 CHECKED BY: KAM

SHEET TITLE:
PHASE 1 SEDIMENTATION & EROSION CONTROL PLAN

SHEET NUMBER:
EC-4

STATE OF CONNECTICUT KEVIN A. MCCAFFERY 25977 LICENSED PROFESSIONAL ENGINEER



1 EC-5 **PHASE 2 - SEDIMENTATION & EROSION CONTROL PLAN**

SCALE : 1" = 40'-0"

40 0 20 40 80

(IN FEET) 1 inch = 40 ft.

LSE HERCULES LLC
40 TOWER LANE, SUITE 145
AVON, CT 06001

ALL-POINTS TECHNOLOGY CORPORATION
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SHEET TITLE:
PHASE 2 SEDIMENTATION & EROSION CONTROL PLAN

SHEET NUMBER:
EC-5

STATE OF CONNECTICUT KEVIN A. MCCAFFERY 25977 LICENSED PROFESSIONAL ENGINEER

1 EC-6 PHASE 2 - SEDIMENTATION & EROSION CONTROL PLAN

SCALE : 1" = 40'-0"

40 0 20 40 80

(IN FEET) 1 inch = 40 ft.

LSE HERCULES LLC
40 TOWER LANE, SUITE 145
AVON, CT 06001

ALL-POINTS TECHNOLOGY CORPORATION

567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
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RAFFIA RD SOLAR

SITE ADDRESS: 99 & 105 & 113 RAFFIA RD ENFIELD, CT

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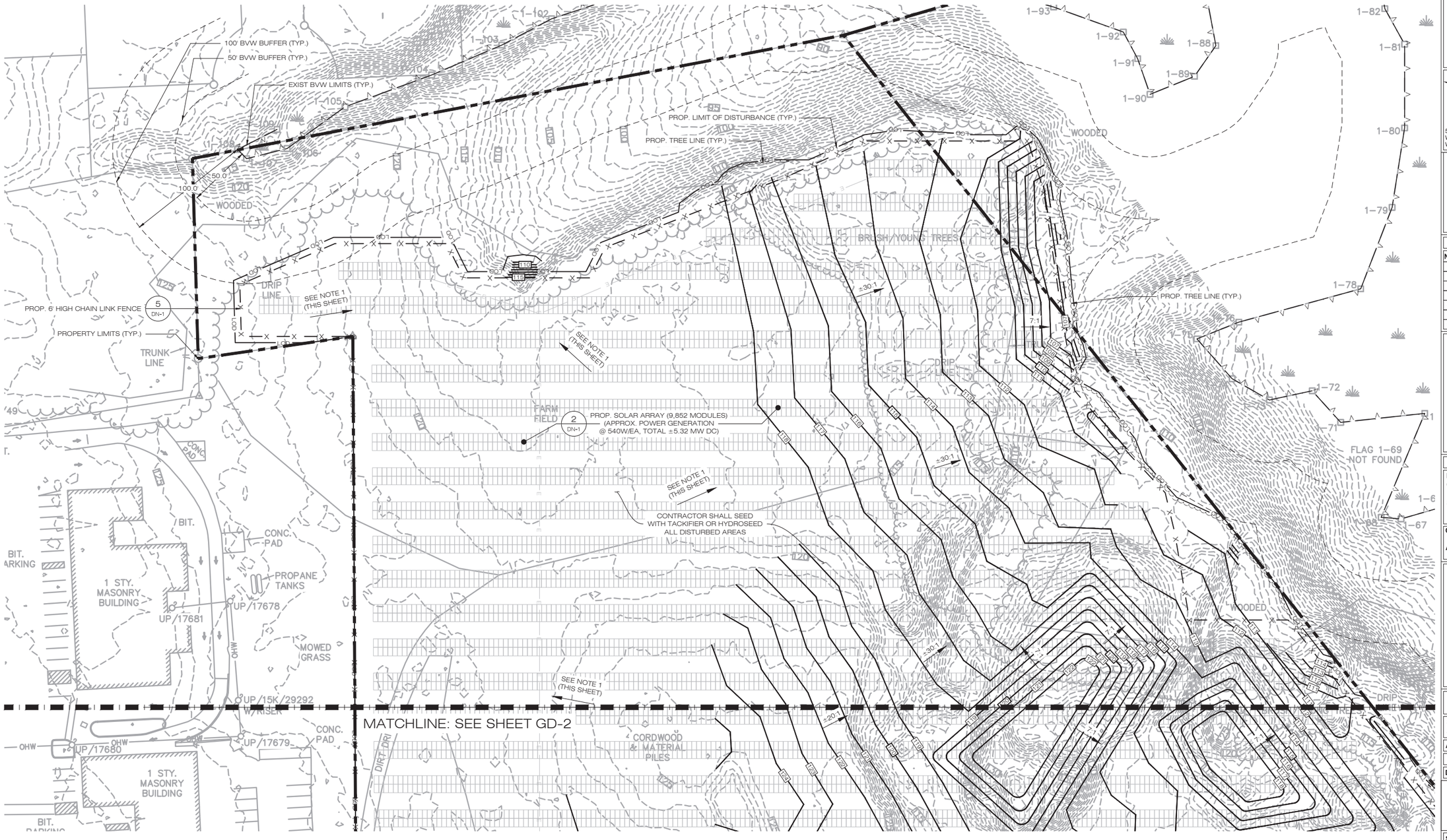
SHEET TITLE:
PHASE 2 SEDIMENTATION & EROSION CONTROL PLAN

SHEET NUMBER:
EC-6

STATE OF CONNECTICUT KEVIN A. MCCAFFERY 25977 LICENSED PROFESSIONAL ENGINEER



NOTES:
1. GRADE/SHAPE AREA TO MAINTAIN EXIST. DRAINAGE PATTERNS.

1 GD-1 **FINAL GRADING & DRAINAGE PLAN**
SCALE : 1" = 40'-0"

40 0 20 40 80
(IN FEET) 1 inch = 40 ft.

LSE HERCULES LLC
40 TOWER LANE, SUITE 145
AVON, CT 06001

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
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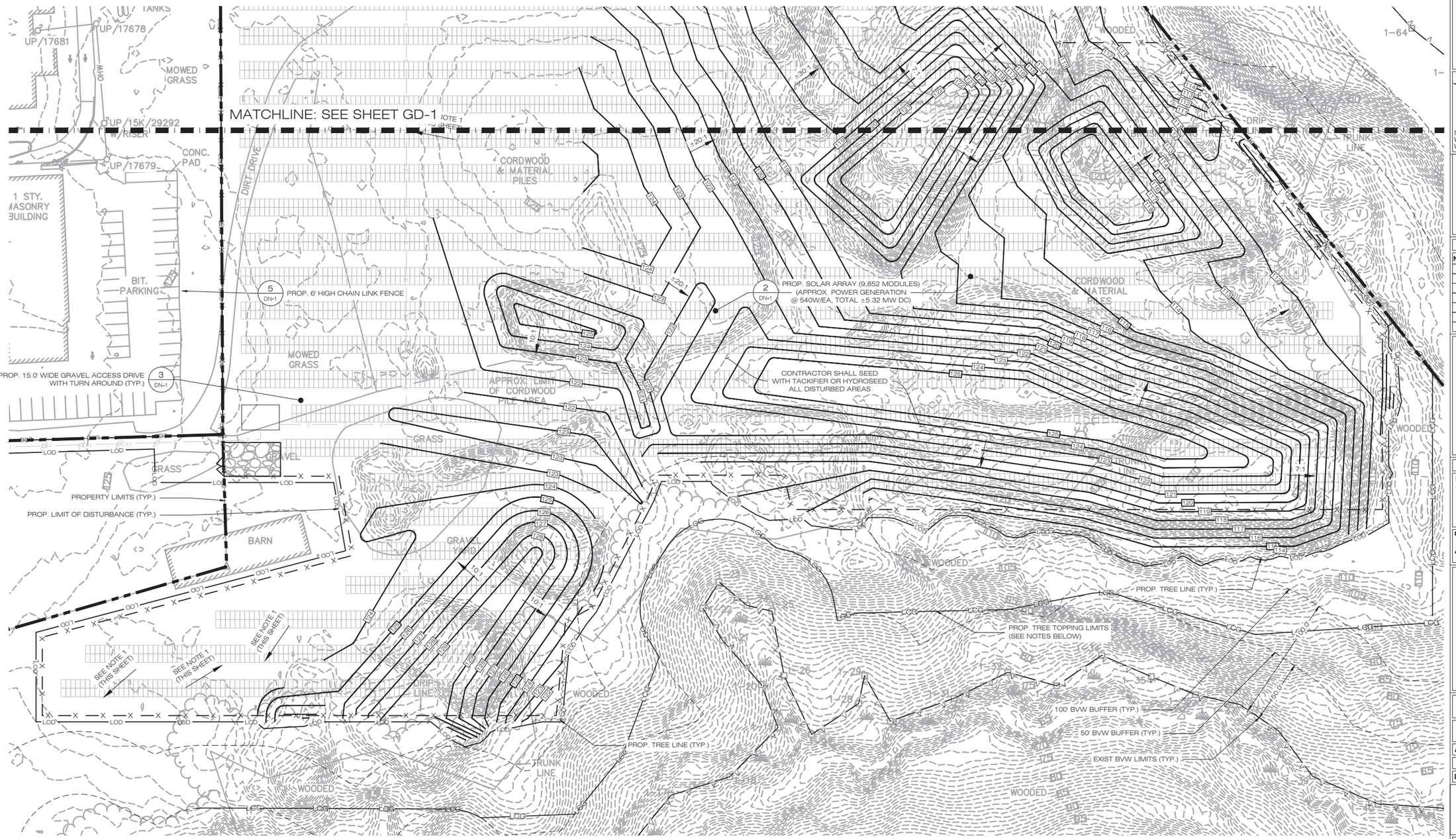
SHEET TITLE:
FINAL GRADING & DRAINAGE PLAN

SHEET NUMBER:
GD-1

STATE OF CONNECTICUT · KEVIN A. MCCAFFERY · 25977 · LICENSED PROFESSIONAL ENGINEER



NOTES:
1. GRADE/SHAPE AREA TO MAINTAIN EXIST. DRAINAGE PATTERNS.

1 GD-2 **FINAL GRADING & DRAINAGE PLAN**
SCALE : 1" = 40'-0"

40 0 20 40 80
(IN FEET) 1 inch = 40 ft.

LSE HERCULES LLC
40 TOWER LANE, SUITE 145
AVON, CT 06001

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHALL STREET EXTENSION - SUITE 311
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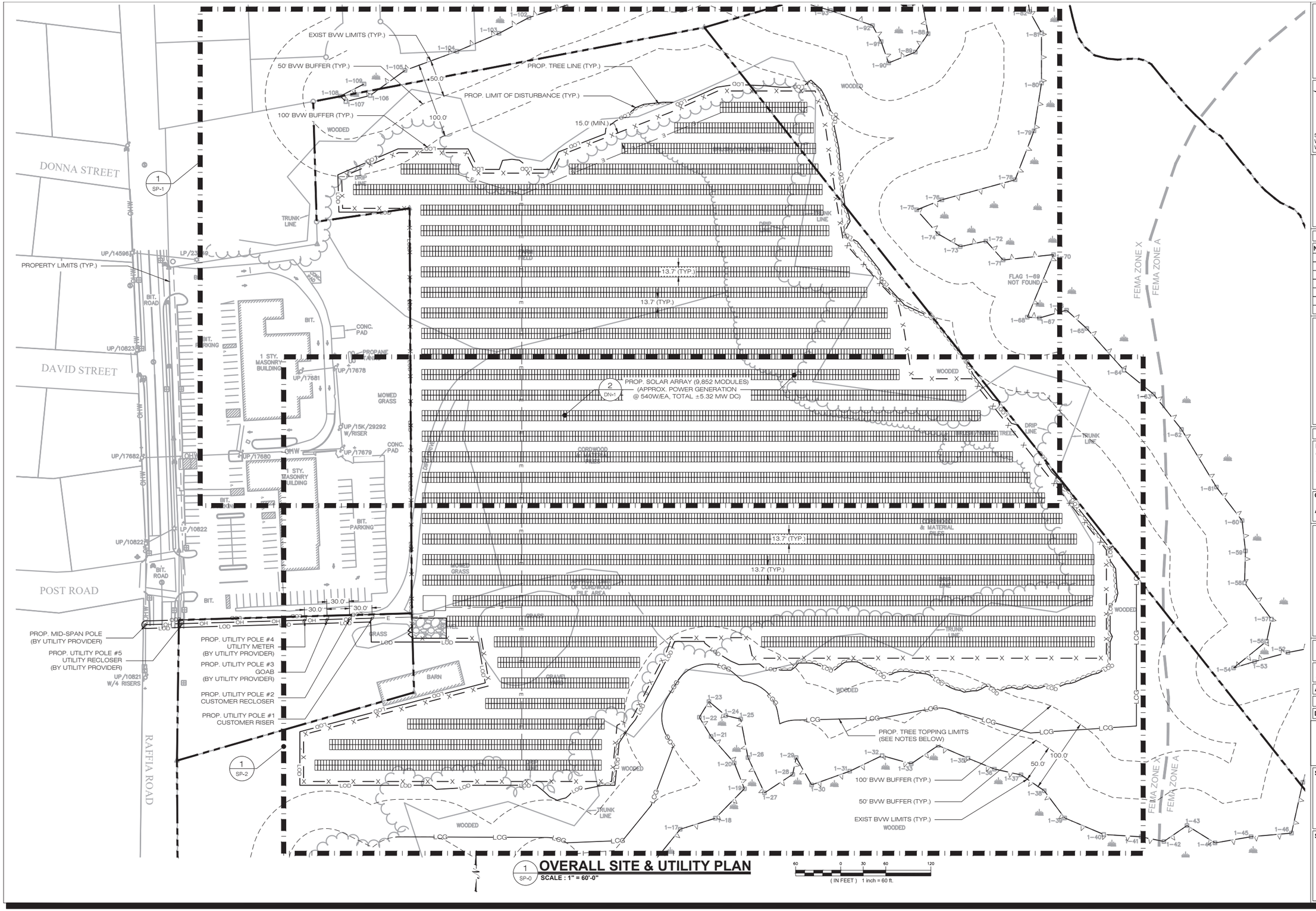
SHEET TITLE:
FINAL GRADING & DRAINAGE PLAN

SHEET NUMBER:
GD-2

STATE OF CONNECTICUT KEVIN A. MCCAFFERY 25977 LICENSED PROFESSIONAL ENGINEER



1 SP-1 — 1 SP-2 — 2 DN-1

1 SP-0 OVERALL SITE & UTILITY PLAN

SCALE : 1" = 60'-0"

60 0 30 60 120

(IN FEET) 1 inch = 60 ft.

LSE HERCULES LLC
40 TOWER LANE, SUITE 145
AVON, CT 06001

ALL-POINTS TECHNOLOGY CORPORATION

567 VAUXHALL STREET EXTENSION - SUITE 311
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RAFFIA RD SOLAR

SITE ADDRESS: 99 & 105 & 113 RAFFIA RD ENFIELD, CT

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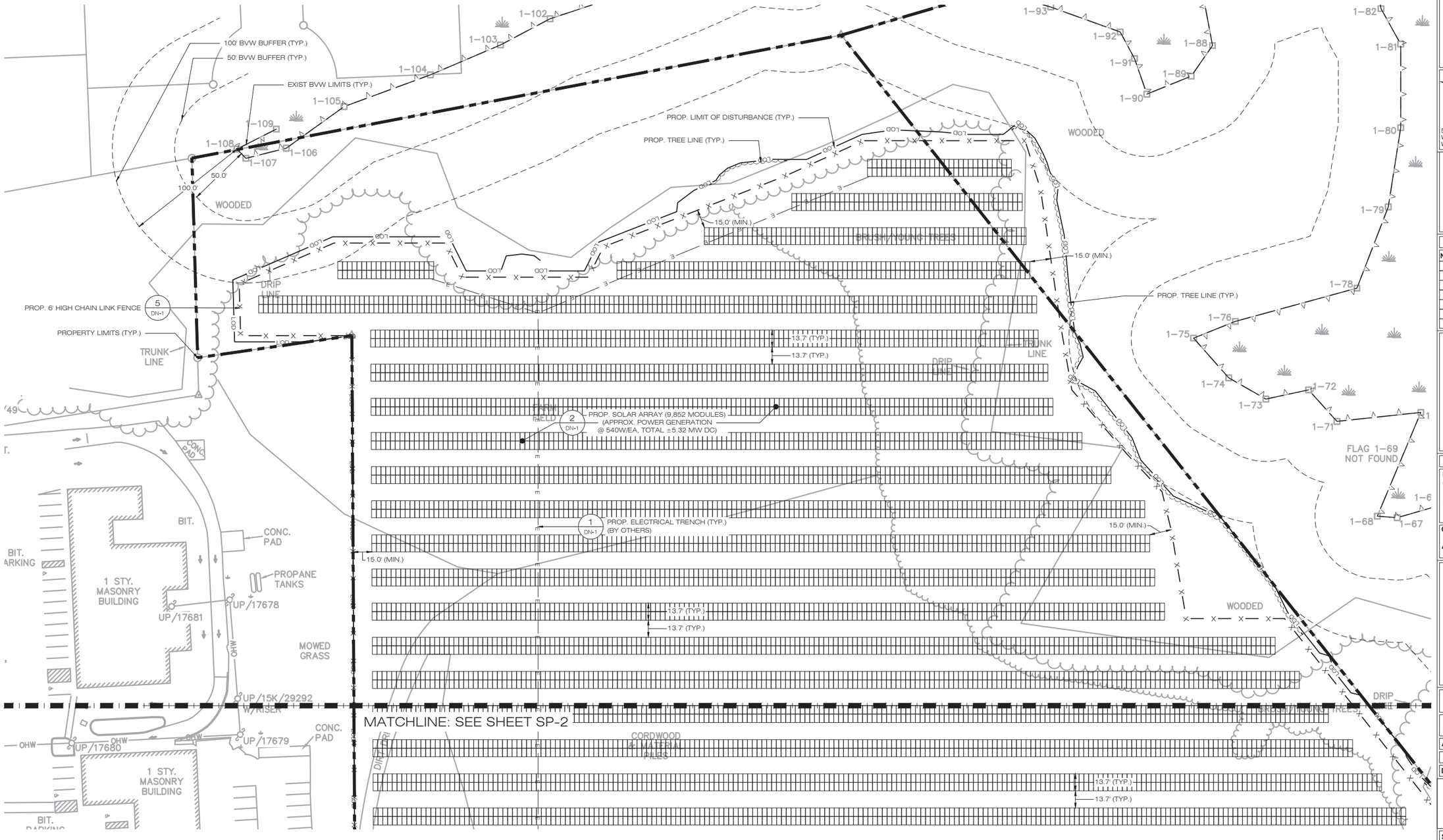
SHEET TITLE:

OVERALL SITE & UTILITY PLAN

SHEET NUMBER:

SP-0

STATE OF CONNECTICUT KEVIN A. MCCAFFERY 25977 LICENSED PROFESSIONAL ENGINEER



1 SP-1 **SITE & UTILITY PLAN**
SCALE : 1" = 40'-0"

40 0 20 40 80
(IN FEET) 1 inch = 40 ft.

LSE HERCULES LLC
40 TOWER LANE, SUITE 145
AVON, CT 06001

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHALL STREET EXTENSION - SUITE 311
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RAFFIA RD SOLAR

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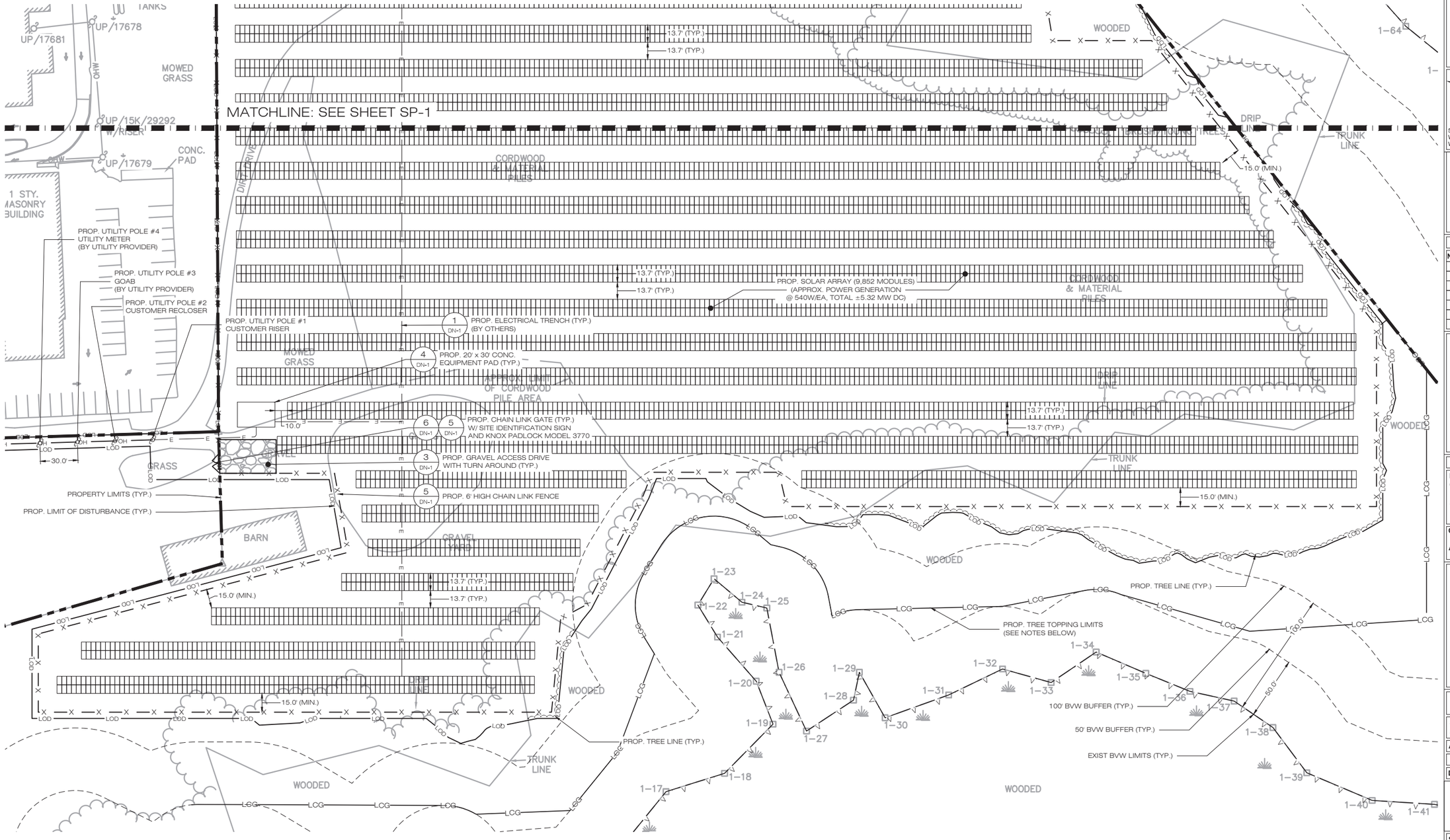
APT FILING NUMBER: CT606160

DRAWN BY: JT
DATE: 12/20/22 CHECKED BY: KAM

SHEET TITLE:
SITE & UTILITY PLAN

SHEET NUMBER:
SP-1

STATE OF CONNECTICUT KEVIN A. MCCAFFERY 25977 REGISTERED PROFESSIONAL ENGINEER



1 SP-2 **SITE & UTILITY PLAN**
SCALE : 1" = 40'-0"

40 0 20 40 80
(IN FEET) 1 inch = 40 ft.

LSE HERCULES LLC
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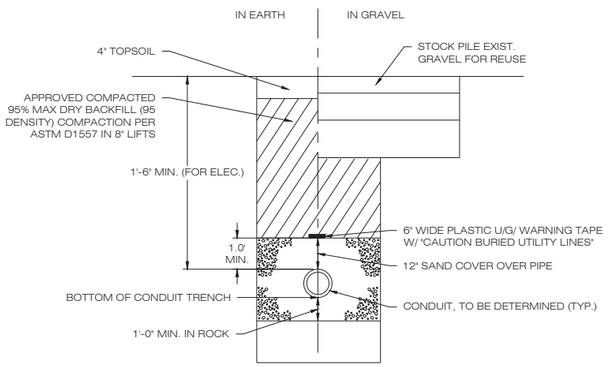
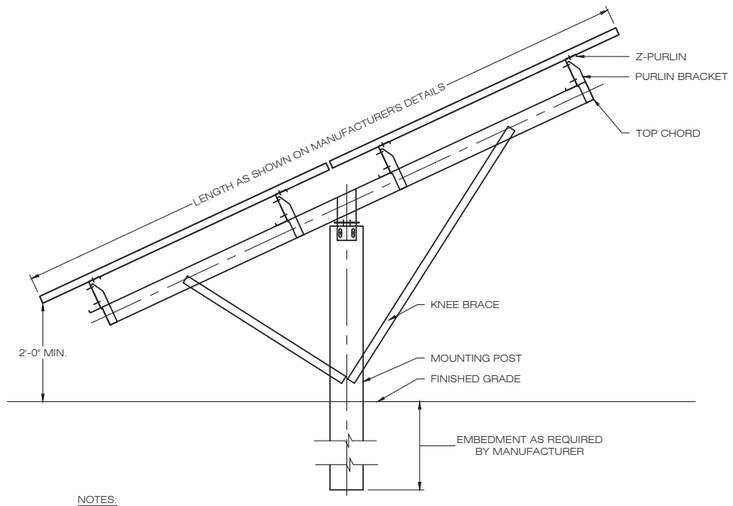
SHEET TITLE:
SITE & UTILITY PLAN

SHEET NUMBER:
SP-2

STATE OF CONNECTICUT KEVIN A. MCCAFFERY 25977 LICENSED PROFESSIONAL ENGINEER

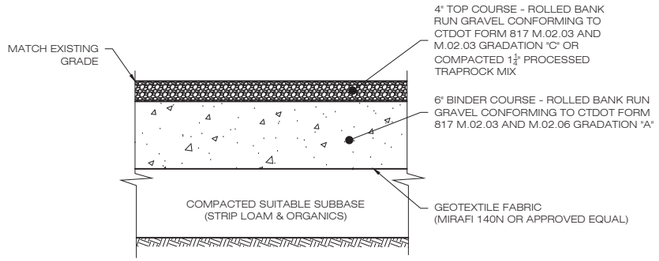


1 DN-1 **ELECTRICAL TRENCH DETAIL**
SCALE : N.T.S.



NOTES:
SEE MANUFACTURER'S DETAIL SHEETS FOR ADDITIONAL INFORMATION REGARDING RACKING SYSTEM REQUIREMENTS AND INSTALLATION PROCEDURES. RACKING SYSTEM TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.

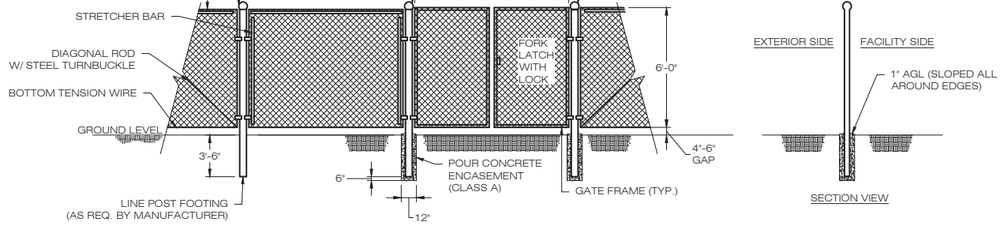
2 DN-1 **TYPICAL POST MOUNTED RACKING SYSTEM**
SCALE : N.T.S.



NOTES:
1. SUBBASE MAY CONSIST OF NATIVE MATERIALS IF FOUND ACCEPTABLE BY THE ENGINEER. SUBBASE TO BE COMPACTED TO 95% MAX DRY DENSITY.
2. SUBBASE IS TO BE FREE FROM DEBRIS AND UNSUITABLE MATERIALS.

3 DN-1 **GRAVEL ACCESS DRIVE SECTION**
SCALE : N.T.S.

4 DN-1 **CONCRETE EQUIPMENT PAD**
SCALE : N.T.S.



5 DN-1 **CHAIN-LINK FENCE & GATE DETAIL**
SCALE : N.T.S.

RAFFIA RD SOLAR LLC

IN CASE OF EMERGENCY CALL T.B.D.

NOTES:
EMERGENCY CALL NUMBER TO BE PROVIDED ONCE DETERMINED.

6 DN-1 **NOTIFICATION SIGN DETAIL**
SCALE : N.T.S.

LSE HERCULES LLC
40 TOWER LANE, SUITE 145
AVON, CT 06001

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567 VAUXHALL STREET EXTENSION - SUITE 311
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DESIGN PROFESSIONAL OF RECORD

PROF: KEVIN A. MCCAFFERY, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: RAFFIA FARMS INC & RAFFIA GEORGE + SONS INC
ADDRESS: 113 RAFFIA RD ENFIELD, CT 06082

RAFFIA RD SOLAR

SITE ADDRESS: 99 & 105 & 113 RAFFIA RD ENFIELD, CT

APT FILING NUMBER: CT606160

DRAWN BY: JT
DATE: 12/20/22 CHECKED BY: KAM

SHEET TITLE:
SITE DETAILS

SHEET NUMBER:
DN-1

STATE OF CONNECTICUT · KEVIN A. MCCAFFERY · 25977 · LICENSED PROFESSIONAL ENGINEER

APPENDIX B

NDDB AND USFWS

COMPLIANCE MEMO

USFWS & NDDB COMPLIANCE

December 1, 2022

Mr. Dan Watson
LSE Hercules LLC
40 Tower Lane – Suite 201
Avon, Connecticut 06001

Re: LSE Hercules, LLC: 99-113 Raffia Road, Enfield, CT
APT Job No: CT606160

On behalf of LSE Hercules LLC ("LSE"), All-Points Technology Corporation, P.C. ("APT") performed an evaluation with respect to possible federally- and state-listed, threatened, endangered or special concern species in order to determine if the proposed referenced solar energy generation facility ("Facility") would result in a potential adverse effect to listed species.

APT understands that LSE proposes the construction of a solar energy generation facility to be generally located on a property that consists of ±51 acres with the proposed facility encompassing an area that is mostly cleared and developed land associated with a timber harvesting operation with associated material storage ("Subject Property").

USFWS

The federal consultation was completed in accordance with Section 7 of the Endangered Species Act through the U.S. Fish and Wildlife Service's ("USFWS") Information, Planning, and Conservation System ("IPaC"). Based on the results of the IPaC review, one federally listed[1] threatened species is known to occur in the vicinity of the Subject Property documented as the northern long-eared bat ("NLEB"; *Myotis septentrionalis*). As a result of this preliminary finding, APT performed an evaluation to determine if the proposed referenced Facility would result in a likely adverse effect to NLEB.

The proposed Facility would be located within a mostly cleared area but some tree clearing including an area of selective tree topping (remove tree tops that exceed 30 feet in height due to shading impacts) that could potentially impact NLEB habitat; trees potentially provide NLEB habitat. A review of the Connecticut Department of Energy & Environmental Protection ("CTDEEP") Wildlife Division Natural Diversity Data Base ("NDDB") NLEB habitat map[2] revealed that the proposed Facility is not within 150 feet of a known occupied NLEB maternity roost tree and is not within 0.25 mile of a known NLEB hibernaculum. The nearest NLEB habitat resource to the proposed Facility is located ±8.0 miles to the south in East Granby.

APT submitted the effects determination using the NLEB key within the IPaC system for the proposed Facility (the "Action"). This IPaC key assists users in determining whether a Federal action is consistent

[1] Listing under the federal Endangered Species Act
[2] *Northern long-eared bat areas of concern in Connecticut to assist with Federal Endangered Species Act Compliance* map. February 1, 2016.

with the activities analyzed in the USFWS's January 5, 2016, intra-Service Programmatic Biological Opinion ("PBO") on the Final 4(d) Rule for the NLEB for Section 7(a)(2) compliance.

Based upon the IPaC submission, the Action is consistent with activities analyzed in the PBO; please refer to the enclosed September 22, 2022 USFWS letter. The Action may affect NLEB; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). If the USFWS does not respond within 30 days from the date of the letter (October 24, 2022), one may presume that the IPaC-assisted determination was correct and that the PBO satisfies and concludes LSE's responsibilities for this Action under ESA Section 7(a)(2) with respect to NLEB. No response was received from USFWS. This would have satisfied compliance with ESA Section 7(a)(2) with respect to NLEB if not for recent reclassification of NLEB to Endangered as published in the Federal Register on November 30, 2022.

On November 30, 2022, the USFWS published reclassification of NLEB as endangered under the ESA. The U.S. District Court for the District of Columbia had ordered the USFWS to complete a new final listing determination for the NLEB by November 2022 (Case 1:15-cv-00477, March 1, 2021). The NLEB, previously listed as threatened, faces extinction due to the range-wide impacts of white-nose syndrome ("WNS"), a deadly fungal disease affecting cave-dwelling bats across the continent. The reclassification, which will be effective January 30, 2023, now removes the current 4(d) rule for the NLEB, as these rules may be applied only to threatened species. Depending on the type of effects a project has on NLEB, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective. This project could result in an incidental take of NLEB and after the new listing goes into effect an updated consultation with USFWS will be required. USFWS is expected to issue a new NLEB consultation tool/framework prior to the January 30, 2023 effective date. As such time, APT will reinitiate NLEB consultation for this project using the new USFWS consultation tool/framework and issue an update to this compliance document.

At this time, LSE would consider the following additional recommended voluntary measures, where appropriate and as the project schedule allows and as potentially subject to change due to reclassification of NLEB to endangered, to reduce the potential for impact to NLEB.

- Conduct tree removal activities outside of the NLEB pup season (June 1-July 31) and active season (April 1-October 31) to minimize impacts to pups at roosts not yet identified.
- Avoid clearing suitable spring staging and fall swarming habitat within a five-mile radius of known or assumed NLEB hibernacula during the staging and swarming seasons (April 1-May 15 and August 15-November 14, respectively). *Not applicable: site is located > 5 miles from the nearest hibernacula.*
- Maintain dead trees (snags) and large trees when possible.
- Use herbicides and pesticides only if unavoidable. If necessary, spot treatment is preferred over aerial application.
- Minimize exterior lighting, opting for down-shielded, motion-sensor security lights instead of constant illumination.

NDDB

No known areas of state-listed species are currently depicted on the most recent CTDEEP NDDB Maps in the location of the proposed Facility or within a 0.25 mile to the proposed development. Please refer to the enclosed NDDB Map which depicts the nearest NDDB buffer ±1.50-mile southeast of the Subject Property. Since the proposed Facility and Subject Property are not located within a NDDB buffer area, consultation with DEEP is not required in accordance with their review policy[3] or the Connecticut Siting Council's review policy.

Therefore, with implementation of these protective measures the proposed Facility is not anticipated to adversely impact any federal or state threatened, endangered or species of special concern. Once the new NLEB consultation tool/framework is issued by USFWS, this statement will be reassessed and modified as necessary.

Sincerely,
All-Points Technology Corporation, P.C.

Dean Gustafson
Senior Biologist

Enclosures

[3] DEEP Requests for NDDB State Listed Species Reviews.
http://www.ct.gov/deep/cwp/view.asp?a=2702&q=323466&deepNav_GID=1628%20

USFWS NLEB Letter

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To: September 22, 2022
Project code: 2022-0087940
Project Name: LSE Hercules LLC Raffia Road, Enfield CT

Subject: Consistency letter for the 'LSE Hercules LLC Raffia Road, Enfield CT' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Dear Deborah Gustafson:

The U.S. Fish and Wildlife Service (Service) received on September 22, 2022 your effects determination for the 'LSE Hercules LLC Raffia Road, Enfield CT' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause "take"[1] of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action's effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

The IPaC-assisted determination for the northern long-eared bat **does not** apply to the following ESA-protected species that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Candidate

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above.

---

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

LSE Hercules LLC Raffia Road, Enfield CT

2. Description

The following description was provided for the project 'LSE Hercules LLC Raffia Road, Enfield CT':

> LSE Hercules LLC intends to lease a portion of the ±43.27-acre Site for development of a ±4.0 (AC) megawatt solar photovoltaic electric generating facility. We understand that the Client intends to lease a portion of the Site, which consists of two parcels identified by the Town of Enfield as 95 and 113 Raffia Road, for Project development.

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.96340565,-72.56265519765,14z

Determination Key Result

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

Determination Key Description: Northern Long-eared Bat 4(d) Rule
This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

   No

2. Will your activity purposefully **Take** northern long-eared bats?

   No

3. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

   Automatically answered
   No

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

   Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/media/nleb-roost-tree-and-hibernacula-state-specific-data-links-0.

   Yes

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

   No

6. Will the action involve Tree Removal?

   Yes

7. Will the action only remove hazardous trees for the protection of human life or property?

   No

8. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

   No

9. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

   No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

1.21

2. If known, estimated acres of forest conversion from April 1 to October 31

1.21

3. If known, estimated acres of forest conversion from June 1 to July 31

1.21

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

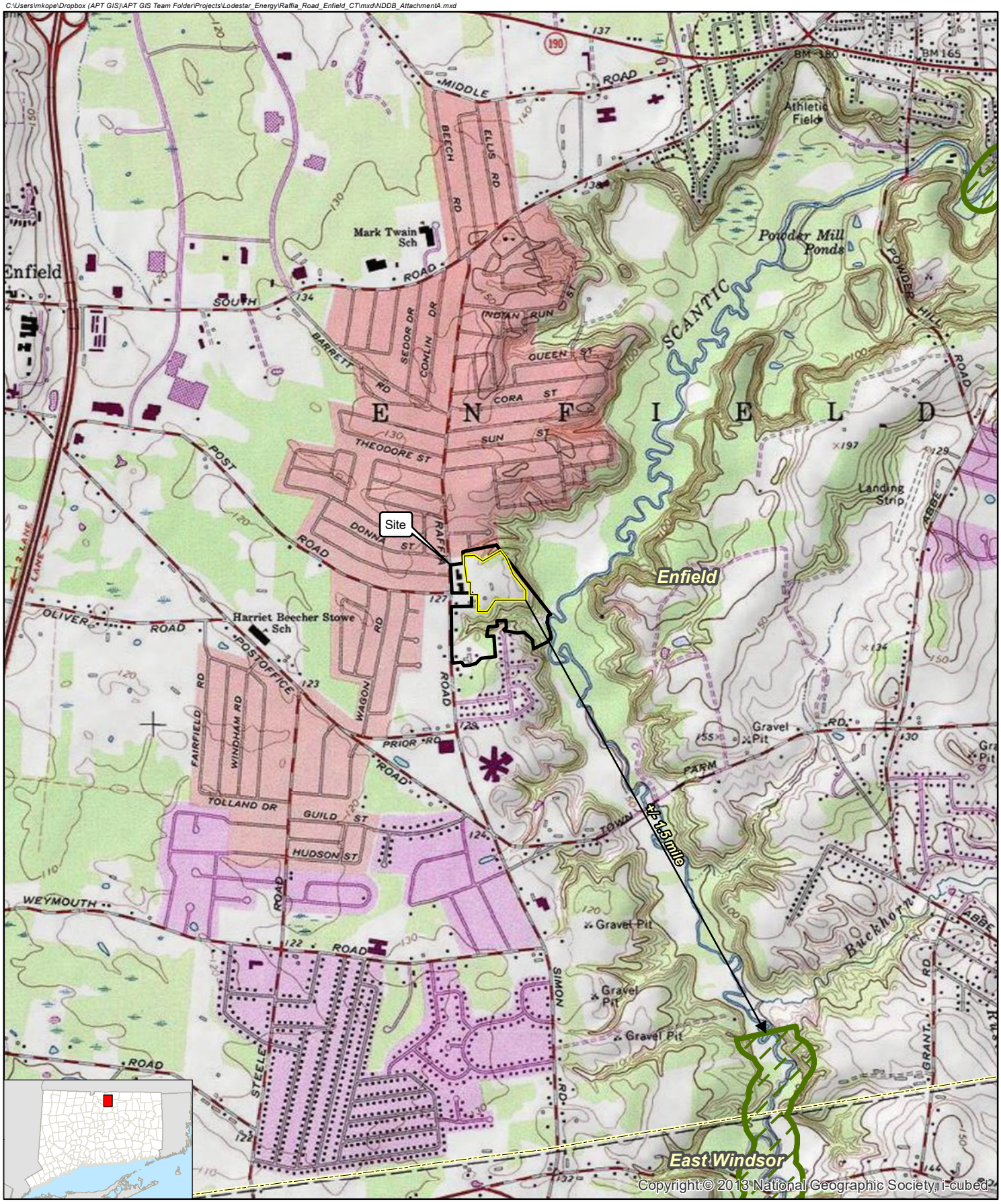
0

IPaC User Contact Information

Agency:	All-Points Technology Corporation, P.C.
Name:	Deborah Gustafson
Address:	567 Vauxhall Street Extension
Address Line 2:	Suite 311
City:	Waterford
State:	CT
Zip:	06235
Email	dleonardo@allpointstech.com
Phone:	8609849514

NDDB Map

C:\Users\mkope\Dropbox (APT GIS)\APT GIS Team Folder\Projects\Lodestar_Energy\Raffia_Road_Enfield_CT\mxd\NDDB_AttachmentA.mxd



Legend

- Site
- Project Area
- CTDEEP Natural Diversity Database (updated Aug 2022)
- Municipal Boundary

1,000 500 0 1,000 Feet

NDDB Map

Proposed Solar Facility
95 - 113 Raffia Road
Enfield, Connecticut

Map Notes:
Base Map Source: USGS 7.5 Minute
Topographic Quadrangle Map: Broad Brook, CT (1984)
Map Scale: 1:24,000
Map Date: September 2022

LODESTAR ENERGY

ALL-POINTS TECHNOLOGY CORPORATION

APPENDIX C

DEEP AND DOA CORRESPONDENCE

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

November 18, 2022

Melanie A. Bachman
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

cc: Carrie L. Ortolano
General Counsel
Lodestar Energy
40 Tower Lane | Suite 201
Avon, CT 06001

RE: LSE Hercules LLC
Proposed 4.0MW (AC)
95, 99, and 113 Raffia Rd, Enfield, Connecticut

Dear Ms. Bachman,

Carrie L. Ortolano, General Counsel for Lodestar Energy on behalf of LSE Hercules LLC ("Petitioner") has contacted the Connecticut Department of Energy and Environmental Protection ("DEEP") Bureau of Natural Resources and informed us of the intention to file a petition for a declaratory ruling with the Connecticut Siting Council. Petitioner proposes to construct a solar project with a capacity of two or more megawatts, to be located at 95, 99, and 113 Raffia Rd, Enfield, Connecticut, Connecticut 06082 ("Site").

Pursuant to Sec. 16-50k of the Connecticut General Statutes the DEEP Bureau of Natural Resources staff have reviewed documents submitted by Attorney Ortolano concerning this proposed project, which includes a letter with site map attached to an email received November 14, 2022.

In conducting such review of the proposed project, DEEP Bureau of Natural Resources has determined that such proposed project, as represented in the above-mentioned documents **will not** materially affect the status of such Site as core forest.

Nothing in this letter relieves the Petitioner of other obligations under applicable federal, state, and local law that may be necessary as part of the proposed project design and implementation.

If you have any questions, you may contact me at 860-424-3060, or by mail at 79 Elm Street, Sixth Floor, Hartford, CT 06106-5127.

Connecticut is one of the most heavily forested states in America. Our forests clean our air and water, shelter our wildlife, sequester carbon, contribute tens of millions of dollars to our economy, and add immeasurably to the quality of our lives. Yet every day, our forests are under threat. Invasive insects and diseases and our dense and growing human population continue to stress our forests in

unprecedented ways. Thank you for helping us to conserve a healthy core forest for future generations, providing public transparency and working to make thoughtful development choices.

Sincerely,

Christopher Martin, State Forester
Bureau of Natural Resources
Department of Energy and Environmental Protection

CC: Bryan P. Hurlburt, Connecticut Department of Agriculture

Holly Lalime, Connecticut Department of Agriculture

Jenny Dickson, Director of Wildlife, Bureau of Natural Resources, DEEP

DEEP.OPPD@ct.gov

siting.council@ct.gov

CONNECTICUT DEPARTMENT OF AGRICULTURE
450 Columbus Blvd, Suite 701 | Hartford, Connecticut 06103 | 860.713.2500
Office of the Commissioner
An Equal Opportunity Employer

December 13, 2022

Melanie A. Bachman
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: LSE Hercules LLC Solar Project – 95, 99, 113 Raffia Road, Enfield

Dear Executive Director Bachman:

Pursuant to 16-50k(a) of the Connecticut General Statutes, we have reviewed the above cited project with respect to agricultural impacts, specifically, to determine whether "…such project will not materially affect the status of such land as prime farmland…"

LSE Hercules LLC is proposing to construct a 4.0-megawatt solar photovoltaic electric generating facility to be located on an active wood processing and storage yard at 95, 99 and 113 Raffia Road in Enfield owned by Raffia Farms, Inc. Our Department has reviewed a project proposal dated November 11, 2022, as well as follow-up correspondence dated November 18, 2022.

Based on statements provided in LSE Hercules LLC's correspondence enclosed, the parcel contains 10.8 acres of statewide important farmland soils that are impacted by the operation of a wood processing and storage yard. There is no active farming on the Property. In 2020, a 3-acre field was used for growing hay but has since been converted to further storage areas for the wood-processing done on the property.

The project will not remove any soils on the property and grading will be minimal. LSE Hercules LLC will return the project site to a grassy meadow following the project's deconstruction.

Based on preliminary information provided to DoAg (enclosed), and assuming the project is constructed according to the representations made by the applicant in its correspondence, the Department of Agriculture concludes there will be no further material impact, beyond the existing impact.

If you have any questions, please feel free to contact Holly Lalime of my staff. Holly can be reached at Holly.Lalime@ct.gov or at (860) 969-7053.

Sincerely,

Bryan P. Hurlburt
Commissioner

Enc.
Cc: Katie Dykes, Commissioner, Department of Energy and Environmental Protection
Carrie L. Ortolano, Lodestar Energy

APPENDIX D

SHPO CONSULTATION

November 29, 2022

Mr. David George
Heritage Consultants, LLC
830 Berlin Turnpike
Berlin, CT 06057
(sent via email only to dgeorge@heritage-consultants.com)

Subject: Phase IA Archaeological Assessment Survey
Proposed Solar Facility
95, 99, and 113 Raffia Road
Enfield, Connecticut

Dear Mr. George:

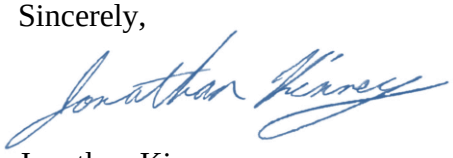
The State Historic Preservation Office (SHPO) received the report prepared by Heritage Consultants, LLC (Heritage) titled *Phase IA Cultural Resources Assessment Survey of the Proposed Raffia Road Solar Facility at 95, 99, and 113 Raffia Road in Enfield, Connecticut,* dated November 2022. SHPO understands that the proposed project consists of the construction of a 10,162-module solar facility with associated infrastructure on a within a project area measuring approximately 14 acres in size. The proposed activities are under the jurisdiction of the Connecticut Siting Council and are subject to review by this office pursuant to the Connecticut Environmental Policy Act. The submitted technical report is comprehensive and meets the standards set forth in the *Environmental Review Primer for Connecticut's Archaeological Resources*

The Phase IA assessment survey included a contextual overview of the region containing the project area, a review of previously identified cultural resources, a review of historical maps and aerial imagery, and a pedestrian survey of the project area. During the assessment survey, Heritage identified a previously recorded archaeological site (Site 49-20), two State Register of Historic Places listed properties (John Abbe House and Coleman House), and one property listed on the National Register of Historic Places (NRHP) within one mile of the project area the (Hazardville Historic District). SHPO concurs with Heritage that the proposed activities will not impact these four previously recorded cultural resources. A pedestrian survey of the project area was completed by Heritage as part of the archaeological assessment survey. The results of the survey revealed that the majority of the project area, approximately 11.43 acres, was previously disturbed and retained no/low archaeological sensitivity. The remaining portion of the project parcel, approximately 2.57 acres, contained environmental characteristics often associated with intact archaeological deposits. Based on the information provided to our office, SHPO requests that a professional archaeological reconnaissance survey of the identified area of moderate/high archaeological sensitivity be completed prior to construction to ensure due diligence. All work should conform with our *Environmental Review Primer for Connecticut's Archaeological*

Resources and no construction or other project-related ground disturbance should be initiated until SHPO has had an opportunity to review and comment upon the requested survey.

SHPO appreciates the opportunity to comment upon this project and we look forward to continuing consultation. Do not hesitate to contact Cory Atkinson, Staff Archaeologist and Environmental Reviewer, for additional information at (860) 500-2458 or cory.atkinson@ct.gov.

Sincerely,



Jonathan Kinney
State Historic Preservation Officer

NOVEMBER 2022

PHASE IA CULTURAL RESOURCES ASSESSMENT SURVEY OF THE PROPOSED RAFFIA ROAD SOLAR FACILITY AT 95, 99, AND 113 RAFFIA ROAD IN ENFIELD, CONNECTICUT

PREPARED FOR:

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHALL STREET EXTENSION – SUITE 311
WATERFORD, CONNECTICUT 06385

PREPARED BY:

HERITAGE CONSULTANTS
830 BERLIN TURNPIKE
BERLIN, CONNECTICUT 06037

ABSTRACT

This report presents the results of a Phase IA cultural resources assessment survey for a proposed Solar Facility at 95, 99, and 113 Raffia Road in Enfield, Connecticut. The proposed project will consist of the construction of a ground mounted solar panel array with associated equipment and infrastructure. The solar facility area encompasses approximately 14 acres of land across three properties. Heritage Consultants, LLC, working on behalf of All-Points Technology Corporation, completed the current Phase IA cultural resources assessment survey in November of 2022. The current investigation consisted of: 1) preparation of an overview of the region's precontact, post-European Contact period, and natural settings; 2) a literature search to identify and discuss previously recorded cultural resources in the region; 3) a review of readily available maps and aerial imagery depicting the solar facility to identify past use and/or areas of past disturbance; and 4) pedestrian survey and photo-documentation of the solar facility to assess its archaeological sensitivity. The desktop review and pedestrian survey revealed that the proposed fenced area was characterized by heavy soil disturbance resulting from previous logging and development activities, as well as areas of steep topography. No further archaeological investigation of the no/low potential area is recommended. The pedestrian survey also resulted in the identification of one area of archaeological sensitivity, which was designated as Sensitivity Area SA-1. It is located on the northwestern corner of the project area and encompasses 2.57 acres of land characterized by level topography and well-drained soils previously used for agriculture. This area is located in close proximity to the Scantic River and retains a moderate/high potential to yield archaeological deposits.

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CHAPTER I
INTRODUCTION

This report presents the results of a Phase IA cultural resources assessment survey of the proposed Raffia Road Solar Facility (the Facility) at 95, 99, and 113 Raffia Road in Enfield, Connecticut. The Facility area encompasses approximately 14 acres of land (Figure 1). All-Points Technology Corporation (All-Points) requested that Heritage Consultants, LLC (Heritage) complete the Phase IA assessment survey as part of the planning process for the proposed Facility. Heritage completed this investigation in November of 2022. All work associated with this project was performed in accordance with the *Environmental Review Primer for Connecticut's Archaeological Resources* (Poirier 1987) promulgated by the Connecticut State Historic Preservation Office (CT-SHPO).

Project Description and Methods Overview

The proposed Facility will consist of a ground mounted solar array consisting of 10,162 modules along with associated equipment and infrastructure (Figure 2). The Facility area encompasses 14 acres and is situated at elevations ranging from 32 to 41 meters (118 to 114 feet) NGVD. It is bounded by forest and vegetated land to the east, commercial development west, and residential development to the north and south. The Phase IA cultural resources assessment survey of the Facility area consisted of the completion of the following tasks: 1) a contextual overview of the region's precontact era, post-European Contact period, and natural settings (e.g., soils, ecology, hydrology, etc.); 2) a literature search to identify and discuss previously recorded cultural resources in the region encompassing the Facility; 3) a review of readily available maps and aerial imagery depicting the Facility in order to identify potential post-European Contact period resources and/or areas of past disturbance; and 4) pedestrian survey and photo-documentation of the Facility area in order to assess its archaeological sensitivity.

Project Results and Management Recommendations Overview

The review of available maps and aerial images depicting the Facility area, as well as files maintained by the CT-SHPO, resulted in the identification of one precontact era archaeological site (49-20) situated within 1.6 kilometers (1 mile) of the Facility. In addition, two State Register of Historic Places properties (John Abbe House and Coleman House) and one National Register of Historic Places district (Hazardville Historic District) were located within 1.6 kilometers (1 mile) of the Facility. Heritage combined data from the map and aerial image analysis, as well as the subsequent pedestrian survey, to stratify the Facility area into zones of no/low and/or moderate/high archaeological sensitivity.

Pedestrian survey of the Facility was completed in November of 2022 and it revealed that the majority of the area was characterized by large disturbances related to logging and development efforts. Further, the forested area on the northeast side of the Facility was characterized by steeply sloping topography and poorly drained or disturbed soils. This indicated that 11.33 acres of the Facility possessed a no/low potential to yield archaeological sites or intact deposits. No further archaeological investigation of the no/low potential area is needed prior to the Facility construction.

Pedestrian survey of the remainders of the Facility area resulted in the identification of one archaeological sensitivity area. It was designated as Sensitivity Area SA-1 and it is located in the northwestern corner of the Facility. Sensitivity Area SA-1 measures 2.57 acres in size and is characterized by an former agricultural field with level topography and well-drained soils. Further, it is

located only approximately 230 meters (754 feet) west of the Scantic River. Thus, it was determined to retain a moderate/high potential to yield archaeological deposits.

Project Personnel

Key personnel for this investigation included David R. George, M.A., RPA, (Principal Investigator), Matthew Denno, B.A., (Field Director), Brenna Pisanelli, M.A. (Project Manager), Nita Vitaliano, (Historian), and Sean Buckley, M.A., (GIS Specialist).

CHAPTER II
NATURAL SETTING

Introduction

This chapter provides a brief overview of the natural setting of the region containing the Facility in Enfield, Connecticut. Previous archaeological research has documented that specific environmental factors can be associated with both precontact era and post-European Contact period site selection. These include general ecological conditions, as well as types of fresh water sources present, degree of slopes, and soils situated within a given project area. The remainder of this chapter provides a brief overview of the ecology, hydrological resources, and soils present within the project area and the larger region in general.

Ecoregions of Connecticut

Throughout the Pleistocene and Holocene Periods, Connecticut has undergone numerous environmental changes. Variations in climate, geology, and physiography have led to the "regionalization" of Connecticut's modern environment. It is clear, for example, that the northwestern portion of the state has different natural characteristics than the coastline. Recognizing this fact, Dowhan and Craig (1976), as part of their study of the distribution of rare and endangered species in Connecticut, subdivided the state into various ecoregions. Dowhan and Craig (1976:27) defined an ecoregion as:

> "An area characterized by a distinctive pattern of landscapes and regional climate as expressed by the vegetation composition and pattern, and the presence or absence of certain indicator species and species groups. Each ecoregion has a similar interrelationship between landforms, local climate, soil profiles, and plant and animal communities. Furthermore, the pattern of development of plant communities (chronosequences and toposequences) and of soil profile is similar in similar physiographic sites. Ecoregions are thus natural divisions of land, climate, and biota."

Dowhan and Craig defined nine major ecoregions for the State of Connecticut. They are based on regional diversity in plant and animal indicator species (Dowhan and Craig 1976). Only one of the ecoregions is germane to the current investigation: Northcentral Lowlands Ecoregion. A summary of this ecoregion is presented below. It is followed by a discussion of the hydrology and soils found in and adjacent to the Facility area.

<u>Northcentral Lowlands Ecoregion</u>

The North-Central Lowlands ecoregion consists of a broad valley located between 40.2 and 80.5 km (25 and 50 mi) to the north of Long Island Sound (Dowhan and Craig 1976). It is characterized by extensive floodplains, backwater swamps, and lowland areas situated near large rivers and tributaries. Physiography in this region is composed of a series of north-trending ridge systems, the easternmost of which is referred to as the Bolton Range (Bell 1985:45). These ridge systems comprise portions of the terraces that overlook the larger rivers such as the Connecticut and Farmington Rivers. The bedrock of the region is composed of Triassic sandstone, interspersed with very durable basalt or "traprock" (Bell 1985). Soils found in the upland portion of this ecoregion are developed on red, sandy to clayey glacial till, while those soils situated nearest to the rivers are situated on widespread deposits of stratified sand, gravel, silt, and alluvium resulting from the impoundment of glacial Lake Hitchcock.

Hydrology in the Vicinity of the Facility Area

The Facility is situated within a region that contains several sources of freshwater, including the Connecticut River, Scantic River, Frog Brook, Buckhorn Brook, and Shenipsit Lake. Previously completed archaeological investigations in Connecticut have demonstrated that streams, rivers, and wetlands were focal points for precontact era occupations because they provided access to transportation routes, sources of freshwater, and abundant faunal and floral resources. These water sources also provided the impetus for the construction of water powered mill facilities during the eighteenth and nineteenth centuries.

Soils Comprising the Project Area

Soil formation is the direct result of the interaction of several variables, including climate, vegetation, parent material, time, and organisms present (Gerrard 1981). Once archaeological deposits are buried within the soil, they are subject to many diagenic processes. Different classes of artifacts may be preferentially protected, or unaffected by these processes, whereas others may deteriorate rapidly. Cyclical wetting and drying, freezing, and thawing, and compression can accelerate chemically and mechanically the decay processes for animal bones, shells, lithics, ceramics, and plant remains. Lithic and ceramic artifacts are largely unaffected by soil pH, whereas animal bones and shells decay more quickly in acidic soils such as those that are present within the Project area. In contrast, acidic soils enhance the preservation of charred plant remains.

A total of three soil types were identified within the Facility area: Windsor Soils, Raypol Soils, and Udorthents (Figure 3). These three soil types fall into the categories of well-drained, poorly drained, and disturbed soils. When well-drained soil types, such as Windsor soils, remain undisturbed and on less than eight percent slope, they are generally well correlated with precontact era and post-European Contact period site locations and are considered to have higher archaeological sensitivity. In contract, Raypol soils are characterized as poorly drained soils and are not likely to contain archaeological deposits. In addition, udorthent soils are characterized as disturbed from previous development or construction efforts and are therefore unlikely to contain archaeological material. Below is a summary of each specific soil type identified within the Project area.

<u>Raypol Soils (Soil Code 12)</u>

The Raypol series consists of very deep, poorly drained soils formed in loamy over sandy and gravelly outwash. They are nearly level to gently sloping soils in shallow drainageways and low-lying positions on terraces and plains. Slope ranges from 0 to 5 percent. A typical soil profile is as follows: **Ap**--0 to 8 inches; very dark brown (10YR 2/2) silt loam, pale brown (10YR 6/3) dry; weak medium granular structure; friable; common very fine, fine and medium roots; strongly acid; **Bg1**--8 to 12 inches; grayish brown (10YR 5/2) very fine sandy loam; weak medium subangular blocky structure; friable; common very fine, fine and medium roots; common medium prominent yellowish brown (10YR 5/8) masses of iron accumulation; strongly acid; **Bg2**--12 to 20 inches; grayish brown (10YR 5/2) silt loam; weak medium subangular blocky structure; friable; common fine and medium roots; common medium prominent yellowish brown (10YR 5/8) masses of iron accumulation; strongly acid; **Bw1**--20 to 26 inches; dark yellowish brown (10YR 4/4) silt loam; weak medium subangular blocky structure; friable; few fine roots; common medium prominent yellowish brown (10YR 5/8) and common medium distinct light brownish gray (10YR 6/2) masses of iron accumulation; strongly acid; **Bw2**--26 to 29 inches; olive brown (2.5Y 4/4) very fine sandy loam; massive; friable; 5 percent gravel; common medium prominent yellowish brown (10YR 5/8) masses of iron accumulation and common medium distinct light brownish gray (10YR 6/2) iron depletions; strongly acid; **2C1**--29 to 52 inches; light olive brown (2.5Y 5/4) gravelly sand; single grain; loose; 25 percent gravel; few medium prominent yellowish brown (10YR 5/8) masses of iron accumulation; and **2C2**--52 to 65 inches; dark grayish brown (2.5Y 4/2) very gravelly sand; single grain;

loose; 35 percent gravel and 5 percent cobbles; few medium prominent yellowish brown (10YR 5/6) masses of iron accumulation; strongly acid.

Windsor Soils (Soil Code 36B)

The Windsor series consists of very deep, excessively drained soils formed in sandy outwash or eolian deposits. They are nearly level through very steep soils on glaciofluvial landforms. Slope ranges from 0 through 60 percent. A typical profile associated with Windsor soils is as follows: **Oe**--0 to 3 cm; black (10YR 2/1) moderately decomposed forest plant material; many very fine and fine roots; very strongly acid; abrupt smooth boundary; **A**--3 to 8 cm; very dark grayish brown (10YR 3/2) loamy sand; weak medium granular structure; very friable; many very fine and fine roots; strongly acid; abrupt wavy boundary; **Bw1**--8 to 23 cm; strong brown (7.5YR 5/6) loamy sand; very weak fine granular structure; very friable; many fine and medium roots; strongly acid; gradual wavy boundary; **Bw2**--23 to 53 cm; yellowish brown (10YR 5/6) loamy sand; very weak fine granular structure; very friable; common fine and medium roots; strongly acid; gradual wavy boundary; **Bw3**--53 to 64 cm; light yellowish brown (10YR 6/4) sand; single grain; loose; few coarse roots; strongly acid; clear wavy boundary; and **C**--64 to 165 cm; pale brown (10YR 6/3) and light brownish gray (10YR 6/2) sand; single grain; loose; few coarse roots; strongly acid.

Udorthents-Urban Land (Soil Code 304)

The Udorthents-Urban Land Complex consists of moderately well drained, to excessively drained soils that have been disturbed by cuffing or filling, and areas that are covered by buildings and pavement. The areas are mostly larger than 5 acres of land. Udorthents are in areas that have been cut to a depth of 2 feet or more or are on areas with more than 2 feet of fill. Udorthents consist primarily of moderately coarse textured soil material and a few small areas of medium textured material. In some areas fill has been used to build up recreational areas and highways.

Summary

A review of mapping, geological data, ecological conditions, soils, slopes, and proximity to freshwater, suggests that portions of the Facility area appear to be amenable to both precontact era and post-European Contact period occupations. This includes areas of low to moderate slopes with well drained soils located near freshwater sources. The types of Native American sites that may be contained in these areas include task specific, temporary, or seasonal base camps, which may include areas of lithic tool manufacturing, hearths, post-molds, and storage pits.

CHAPTER III
PRECONTACT ERA SETTING

Introduction

Prior to the late 1970s and early 1980s, very few systematic archaeological surveys of large portions of the State of Connecticut had been undertaken. Rather, the precontact era occupation of the region was studied at the site level. Sites chosen for excavation were highly visible and they were in such areas as the coastal zone, e.g., shell middens, and Connecticut River Valley. As a result, a skewed interpretation of the precontact era occupation of Connecticut was developed. It was suggested that the upland portions of the state, i.e., the northeastern and northwestern hills ecoregions, were little used and rarely occupied by precontact era Native Americans, while the coastal zone, i.e., the eastern and western coastal and the southeastern and southwestern hills ecoregions, was the focus of settlements and exploitation. This interpretation remained unchallenged until the 1970s and 1980s when several town-wide and regional archaeological studies were completed. These investigations led to the creation of several archaeological phases that subsequently were applied to understand the precontact period of Connecticut. The remainder of this chapter provides an overview of the precontact era setting of the region encompassing the Facility.

Paleo-Indian Period (12,000 to 10,000 Before Present [B.P.])

The earliest inhabitants of the area encompassing the State of Connecticut, who have been referred to as Paleo-Indians, arrived in the area by ca., 13,000 B.P. (Gramly and Funk 1990; Snow 1980). Due to the presence of large Pleistocene mammals at that time and the ubiquity of large fluted projectile points in archaeological deposits of this age, Paleo-Indians often have been described as big-game hunters (Ritchie and Funk 1973; Snow 1980); however, as discussed below, it is more likely that they hunted a broad spectrum of animals. While there have been over 50 surface finds of Paleo-Indian projectile points throughout the State of Connecticut (Bellantoni 1995), only three sites, the Templeton Site (6-LF-21) in Washington, Connecticut, the Hidden Creek Site (72-163) in Ledyard, Connecticut, and the Brian D. Jones Site (4-10B) in Avon, Connecticut have been studied in detail and dated using the radiocarbon method (Jones 1997; Moeller 1980; Singer 2017a; Leslie et al., 2020).

The Templeton Site (6-LF-21) in Washington, Connecticut was occupied between 10,490 and 9,890 years ago (Moeller 1980). In addition to a single large and two small, fluted points, the Templeton Site produced a stone tool assemblage consisting of gravers, drills, core fragments, scrapers, and channel flakes, which indicates that the full range of stone tool production and maintenance took place at the site (Moeller 1980). Moreover, the use of both local and non-local raw materials was documented in the recovered tool assemblage, suggesting that not only did the site's occupants spend some time in the area, but they also had access to distant stone sources, the use of which likely occurred during movement from region to region. More recently, the site has undergone re-investigation by Singer (2017a and 2017b), who has determined that the overwhelming majority of tools and debitage are exotic and were quarried directly from the Hudson River Valley. Recent research has focused on task-specific loci at the Templeton Site, particularly the production of numerous Michaud-Neponset projectile points, as identified through remnant channel flakes.

The Hidden Creek Site (72-163) is situated on the southeastern margin of the Great Cedar Swamp on the Mashantucket Pequot Reservation in Ledyard, Connecticut (Jones 1997). While excavation of the Hidden Creek Site produced evidence of Terminal Archaic and Woodland Period components (see below) in the

upper soil horizons, the lower levels of the site yielded artifacts dating from the Paleo-Indian era. Recovered Paleo-Indian artifacts included broken bifaces, side-scrapers, a fluted preform, gravers, and end-scrapers. Based on the types and number of tools present, Jones (1997:77) has hypothesized that the Hidden Creek Site represented a short-term occupation, and that separate stone tool reduction and rejuvenation areas were present.

The Brian D. Jones Site (4-10B) was identified in a Pleistocene levee on the Farmington River in Avon, Connecticut; it was buried under 1.5 m (3.3 ft) of alluvium (Leslie et al., 2020). The Brian D. Jones Site was identified by Archaeological and Historical Services, Inc., in 2019 during a survey for the Connecticut Department of Transportation preceding a proposed bridge construction project. It is now the oldest known archaeological site in Connecticut at +12,500 years old. The site also provides a rare example of a Paleo-Indian site on a river rather than the more common upland areas or on the edges of wetlands. Ground-penetrating radar survey revealed overbank flooding and sedimentation that resulted in the creating of a stable ancient river levee with gentle, low-energy floods. Archaeological deposits on the levee were therefore protected.

Excavations at the Brian D. Jones Site revealed 44 soil anomalies, 27 of which were characterized as cultural features used as hearths and post holes, among other uses. Of these, one hearth has been dated thus far (10,520 ± 30 14C yr BP; charred Pinus; 2-sigma 12,568 to 12,410 CAL BP) (Leslie et al., 2020: 4). Further radiocarbon testing will be completed in the future. Artifact concentrations surrounded these features and were separated in two stratigraphic layers represented at least two temporally discrete Paleoindian occupations. The recovered lithic artifacts are fashioned from Normanskill chert, Hardyston jasper, Jefferson/Mount Jasper rhyolite, chalcedony, siltstone, and quartz. They include examples of a fluted point base, preforms, channel flakes, pièces esquillées, end scrapers, side scrapers, grinding stones, bifaces, utilized flakes, gravers, and drilled stone pendant fragment. Lithic tools numbered over 100, while toolmaking debris was in the thousands. The channel flakes represent the production of spear points used in hunting. Scrapers, perforators, and grinding stones indicate animal butchering, plant food grinding, the production of wood and bone tools, and the processing of animal skins for clothing and tents. Other collected cultural materials included charred botanicals and calcined bone. Botanical specimens recovered in hearth features included burned remains of cattail, pin cherry, strawberry, acorn, sumac, water lily, and dogwood. In addition, pieces of ochre were recovered during the excavations; these, in combination with the drilled pendant fragment, are the earliest evidence of personal adornment and artistic expression identified in Connecticut (Leslie et al. 2020). Approximately 15,000 artifacts were collected in total.

The scarcity of identified Paleoindian sites suggests a low population density during this period. The small size of most Paleoindian sites, their likely inundation by rising sea levels, and the high degree of landscape disturbance over the past 10,000 years likely contribute to poor site visibility, although the presence of two deeply alluvially buried Paleoindian sites in Connecticut suggests that other sites may be located along stable rivers (Leslie et al. 2021).

Archaic Period (10,000 to 2,700 B.P.)

The Archaic Period, which succeeded the Paleoindian Period, began by ca., 10,000 B.P. (Ritchie and Funk 1973; Snow 1980), and it has been divided into three subperiods: Early Archaic (10,000 to 8,000 B.P.), Middle Archaic (8,000 to 6,000 B.P.), and Late Archaic (6,000 to 3,400 B.P.). These periods were devised to describe all non-farming, non-ceramic producing populations in the area. Regional archeologists recently have recognized a final “transitional” Archaic Period, the Terminal Archaic Period (3,400-2,700 B.P.), which was meant to describe those groups that existed just prior to the onset of the Woodland

Period and the widespread adoption of ceramics into the toolkit (Snow 1980; McBride 1984; Pfeiffer 1984, 1990; Witthoft 1949, 1953).

Early Archaic Period (10,000 to 8,000 B.P.)

To date, very few Early Archaic sites have been identified in southern New England. As a result, researchers such as Fitting (1968) and Ritchie (1969), have suggested a lack of these sites likely is tied to cultural discontinuity between the Early Archaic and preceding Paleo-Indian Period, as well as a population decrease from earlier times. However, with continued identification of Early Archaic sites in the region, and the recognition of the problems of preservation, it is difficult to maintain the discontinuity hypothesis (Curran and Dincauze 1977; Snow 1980).

Like their Paleo-Indian predecessors, Early Archaic sites tend to be very small and produce few artifacts, most of which are not temporally diagnostic. While Early Archaic sites in other portions of the United States are represented by projectile points of the Kirk series (Ritchie and Funk 1973) and by Kanawha types (Coe 1964), sites of this age in southern New England are identified on the basis of a series of ill-defined bifurcate-based projectile points. These projectile points are identified by the presence of their characteristic bifurcated base, and they generally are made from high quality raw materials. Moreover, finds of these projectile points have rarely been in stratified contexts. Rather, they occur commonly either as surface expressions or intermixed with artifacts representative of later periods. Early Archaic occupations, such as the Dill Farm Site and Sites 6LF64 and 6LF70 in Litchfield County, are represented by camps that were relocated periodically to take advantage of seasonally available resources (McBride 1984; Pfeiffer 1986). In this sense, a foraging type of settlement pattern was employed during the Early Archaic Period.

Another localized cultural tradition, the Gulf of Maine Archaic, which lasted from ca. 9,500 to 6,000 14C BP, is beginning to be recognized in Southern New England (Petersen and Putnam 1992). It is distinguished by its microlithic industry, which may be associated with the production of compound tools (Robinson and Peterson 1993). Assemblages from Maine (Petersen et al. 1986; Petersen 1991; Sanger et al. 1992), Massachusetts (Strauss 2017; Leslie et al. 2022), and Connecticut (Forrest 1999) reflect the selection of local, coarse-grained stones. Large choppers and hoe-like forms from southeastern Connecticut's Sandy Hill Site likely functioned as digging implements. Woodworking tools, including adzes, celts, and gull-channeled gouges recovered at the Brigham and Sharrow sites in Maine (Robinson and Petersen 1993: 68), may have been used for dugout canoe manufacture. The deeply stratified Sandy Hill (Forrest 1999; Jones and Forrest 2003) and Sharrow sites (Petersen 1991), with their overlapping lenses of "black sand" floor deposits, suggest intensive site re-occupations according to an adaptation that relied, in part, on seasonally available wetland resources. Thus far, sites from this tradition have only been identified within coastal and near-coastal territories along the Gulf of Maine, in southeastern Connecticut, and in Massachusetts.

Middle Archaic Period (8,000 to 6,000 B.P.)

By the onset of the Middle Archaic Period modern deciduous forests had developed in the region (Davis 1969). Increased numbers and types of sites associated with this period are noted in Connecticut (McBride 1984). The most well-known Middle Archaic site in New England is the Neville Site in Manchester, New Hampshire studied by Dincauze (1976). Careful analysis of the Neville Site indicated that the Middle Archaic occupation dated from between 7,700 and 6,000 years ago. In fact, Dincauze obtained several radiocarbon dates from the Middle Archaic component of the Neville Site associated with the then-newly named Neville type projectile point, ranging from 7,740±280 and 7,015±160 B.P. (Dincauze 1976).

In addition to Neville points, Dincauze (1976) described two other projectile points styles that are attributed to the Middle Archaic Period: Stark and Merrimac projectile points. While no absolute dates were recovered from deposits that yielded Stark points, the Merrimac type dated from 5,910±180 B.P. Dincauze argued that both the Neville and later Merrimac and Stark occupations were established to take advantage of the excellent fishing that the falls situated adjacent to the site area would have afforded Native American groups. Thus, based on the available archaeological evidence, the Middle Archaic Period is characterized by continued increases in diversification of tool types and resources exploited, as well as by sophisticated changes in the settlement pattern to include different site types, including both base camps and task-specific sites (McBride 1984:96).

Late Archaic Period (6,000 to 3,700 B.P.)

The Late Archaic Period in southern New England is divided into two major cultural traditions that appear to have coexisted. They include the Laurentian and Narrow-Stemmed Traditions (Funk 1976; McBride 1984; Ritchie 1969a and b). Artifacts assigned to the Laurentian Tradition include ground stone axes, adzes, gouges, ulus (semi-lunar knives), pestles, atlatl weights, and scrapers. The diagnostic projectile point forms of this time period in southern New England include the Brewerton Eared-Notched, Brewerton Eared and Brewerton Side-Notched varieties (McBride 1984; Ritchie 1969a; Thompson 1969). In general, the stone tool assemblage of the Laurentian Tradition is characterized by flint, felsite, rhyolite, and quartzite, while quartz was largely avoided for stone tool production.

In terms of settlement and subsistence patterns, archaeological evidence in southern New England suggests that Laurentian Tradition populations consisted of groups of mobile hunter-gatherers. While a few large Laurentian Tradition occupations have been studied, sites of this age generally encompass less than 500 m^2 (5,383 ft^2). These base camps reflect frequent movements by small groups of people in search of seasonally abundant resources. The overall settlement pattern of the Laurentian Tradition was dispersed in nature, with base camps located in a wide range of microenvironments, including riverine as well as upland zones (McBride 1978, 1984:252). Finally, subsistence strategies of Laurentian Tradition focused on hunting and gathering of wild plants and animals from multiple ecozones.

The second Late Archaic tradition, known as the Narrow-Stemmed Tradition, is unlike the Laurentian Tradition, and it likely represents a different cultural adaptation. The Narrow-Stemmed tradition is recognized by the presence of quartz and quartzite narrow stemmed projectile points, triangular quartz Squibnocket projectile points, and a bipolar lithic reduction strategy (McBride 1984). Other tools found in Narrow-Stemmed Tradition artifact assemblages include choppers, adzes, pestles, antler and bone projectile points, harpoons, awls, and notched atlatl weights. Many of these tools, notably the projectile points and pestles, indicate a subsistence pattern dominated by hunting and fishing, as well the collection of a wide range of plant foods (McBride 1984; Snow 1980:228).

Terminal Archaic Period (3,700 to 2,700 B.P.)

The Terminal Archaic, which lasted from ca., 3,700 to 2,700 BP, is perhaps the most interesting, yet confusing of the Archaic Periods in southern New England precontact period. Originally termed the "Transitional Archaic" by Witthoft (1953) and recognized by the introduction of technological innovations, e.g., broadspear projectile points and soapstone bowls, the Terminal Archaic has long posed problems for regional archeologists. While the Narrow-Stemmed Tradition persisted through the Terminal Archaic and into the Early Woodland Period, the Terminal Archaic is coeval with what appears to be a different technological adaptation, the Susquehanna Tradition (McBride 1984; Ritchie 1969b). The Susquehanna Tradition is recognized in southern New England by the presence of a new stone tool

industry that was based on the use of high-quality raw materials for stone tool production and a settlement pattern different from the "coeval" Narrow-Stemmed Tradition.

The Susquehanna Tradition is based on the classification of several Broadspear projectile point types and associated artifacts. There are several local sequences within the tradition, and they are based on projectile point type chronology. Temporally diagnostic projectile points of these sequences include the Snook Kill, Susquehanna Broadspear, Mansion Inn, and Orient Fishtail types (Lavin 1984; McBride 1984; Pfeiffer 1984). The initial portion of the Terminal Archaic Period (ca., 3,700-3,200 BP) is characterized by the presence of Snook Kill and Susquehanna Broadspear projectile points while the latter Terminal Archaic (3,200-2,700 BP) is distinguished by Orient Fishtail projectile points (McBride 1984:119; Ritchie 1971).

In addition, it was during the late Terminal Archaic that interior cord marked, grit tempered, thick-walled ceramics with conoidal (pointed) bases made their initial appearance in the Native American toolkit. These are the first ceramics in the region, and they are named Vinette I (Ritchie 1969a; Snow 1980:242); this type of ceramic vessel appears with much more frequency during the ensuing Early Woodland Period. In addition, the adoption and widespread use of soapstone bowls, as well as the implementation subterranean storage, suggests that Terminal Archaic groups were characterized by reduced mobility and longer-term use of established occupation sites (Snow 1980:250).

Finally, while settlement patterns appeared to have changed, Terminal Archaic subsistence patterns were analogous to earlier patterns. The subsistence pattern still was diffuse in nature, and it was scheduled carefully. Typical food remains recovered from sites of this period consist of fragments of white-tailed deer, beaver, turtle, fish, and various small mammals. Botanical remains recovered from the site area consisted of *Chenopodium* sp., hickory, butternut, and walnut (Pagoulatos 1988:81). Such diversity in food remains suggests at least minimal use of a wide range of microenvironments for subsistence purposes.

Woodland Period (2,700 to 350 B.P.)

Traditionally, the advent of the Woodland Period in southern New England has been associated with the introduction of pottery; however, as mentioned above, early dates associated with pottery now suggest the presence of Vinette I ceramics appeared toward the end of the preceding Terminal Archaic Period (Ritchie 1969a; McBride 1984). Like the Archaic Period, the Woodland Period has been divided into three subperiods: Early, Middle, and Late Woodland. The various subperiods are discussed below.

<u>Early Woodland Period (ca., 2,700 to 2,000 B.P.)</u>

The Early Woodland Period of the northeastern United States dates from ca., 2,700 to 2,000 B.P., and it was thought to have been characterized by the advent of farming, the initial use of ceramic vessels, and increasingly complex burial ceremonialism (Griffin 1967; Ritchie 1969a and 1969b; Snow 1980). In the Northeast, the earliest ceramics of the Early Woodland Period are thick walled, cord marked on both the interior and exterior, and possess grit temper. Archaeological investigations of Early Woodland sites in southern New England resulted in the recovery of narrow stemmed projectile points in association with ceramic sherds and subsistence remains, including specimens of White-tailed deer, soft and hard-shell clams, and oyster shells (Lavin and Salwen: 1983; McBride 1984:296-297; Pope 1952). McBride (1984) has argued that the combination of the subsistence remains and the recognition of multiple superimposed cultural features at various sites indicate that Early Woodland Period settlement patterns were characterized by multiple re-use of the same sites on a seasonal basis by small co-residential groups.

Middle Woodland Period (2,000 to 1,200 B.P.)

The Middle Woodland Period is marked by an increase in the number of ceramic types and forms utilized (Lizee 1994a), as well as an increase in the amount of exotic lithic raw material used in stone tool manufacture (McBride 1984). The latter suggests that regional exchange networks were established, and that they were used to supply local populations with necessary raw materials (McBride 1984; Snow 1980). The Middle Woodland Period is represented archaeologically by narrow stemmed and Jack's Reef projectile points; increased amounts of exotic raw materials in recovered lithic assemblages, including chert, argillite, jasper, and hornfels; and conoidal ceramic vessels decorated with dentate stamping. Ceramic types that are indicative of the Middle Woodland Period includes Linear Dentate, Rocker Dentate, Windsor Cord Marked, Windsor Brushed, Windsor Plain, and Hollister Stamped (Lizee 1994a:200).

In terms of settlement patterns, the Middle Woodland Period is characterized by the occupation of village sites by large co-residential groups that utilized native plant and animal species for food and raw materials in tool making (George 1997). These sites were the principal place of occupation, and they were positioned close to major river valleys, tidal marshes, estuaries, and the coastline, all of which would have supplied an abundance of plant and animal resources (McBride 1984:309). In addition to villages, numerous temporary and task-specific sites were utilized in the surrounding upland areas, as well as in closer ecozones such as wetlands, estuaries, and floodplains. The use of temporary and task-specific sites to support large village populations indicates that the Middle Woodland Period was characterized by a resource acquisition strategy that can best be termed as logistical collection (McBride 1984:310).

Late Woodland Period (ca., 1,200 to 350 B.P.)

The Late Woodland Period in southern New England dates from ca., 1,200 to 350 B.P., and it is characterized by the earliest evidence for the use of corn in the lower Connecticut River Valley (Bendremer 1993; Bendremer and Dewar 1993; Bendremer et al. 1991; George 1997; McBride 1984); an increase in the frequency of exchange of non-local lithics (Feder 1984; George and Tryon 1996; McBride 1984; Lavin 1984); increased variability in ceramic form, function, surface treatment, and decoration (Lavin 1980, 1986, 1987; Lizee 1994a, 1994b); and a continuation of a trend towards larger, more permanent settlements in riverine, estuarine, and coastal ecozones (Dincauze 1974; McBride 1984; Snow 1980).

Stone tool assemblages associated with Late Woodland occupations, especially village-sized sites, are functionally variable and they reflect plant and animal resource processing and consumption on a large scale. Finished stone tools recovered from Late Woodland sites include Levanna and Madison projectile points; drills; side-, end-, and thumbnail scrapers; mortars and pestles; nutting stones; netsinkers; and celts, adzes, axes, and digging tools. These tools were used in activities ranging from hide preparation to plant processing to the manufacture of canoes, bowls, and utensils, as well as other settlement and subsistence-related items (McBride 1984; Snow 1980). Finally, ceramic assemblages recovered from Late Woodland sites are as variable as the lithic assemblages. Ceramic types identified include Windsor Fabric Impressed, Windsor Brushed, Windsor Cord Marked, Windsor Plain, Clearview Stamped, Sebonac Stamped, Selden Island, Hollister Plain, Hollister Stamped, and Shantok Cove Incised (Lavin 1980, 1988a, 1988b; Lizee 1994a; Pope 1953; Rouse 1947; Salwen and Ottesen 1972; Smith 1947). These types are more stylistically diverse than their predecessors with incision, shell stamping, punctation, single point, linear dentate, rocker dentate stamping, and stamp and drag impressions common (Lizee 1994a:216).

Summary of Connecticut's Precontact Era

The precontact period of Connecticut spans from ca., 13,000 to 350 B.P., and it is characterized by numerous changes in tool types, subsistence patterns, and land use strategies. Much of this era is characterized by local Native American groups who practiced a subsistence pattern based on a mixed economy of hunting and gathering plant and animal resources. It is not until the Late Woodland Period that incontrovertible evidence for the use of domesticated species is available. Further, settlement patterns throughout the precontact period shifted from seasonal occupations of small co-residential groups to large aggregations of people in riverine, estuarine, and coastal ecozones. In terms of the region that includes the proposed project area, a variety of precontact site types may be expected, ranging from seasonal camps utilized by Paleoindian and Archaic populations to temporary and task-specific sites of the Woodland era.

CHAPTER IV
POST-EUROPEAN CONTACT PERIOD OVERVIEW

Introduction

The proposed Facility is located at 95, 99, and 113 Raffia Road in the town of Enfield, which is situated just to the south of the Massachusetts border in Hartford County, Connecticut. Settled in approximately 1680, Enfield was originally part of the Massachusetts Bay Colony due to a surveying error. In 1734, the eastern portion of Enfield became the town of Somers and in 1749, the town of Enfield became incorporated as part of the Connecticut Colony. While the town experienced significant growth in the nineteenth and twentieth centuries, Enfield remains a combination of urban areas, housing developments, and farmland. This chapter presents an overview of Hartford County and the town of Enfield, as well as data specific to the project location.

Hartford County

Hartford was one of the four original counties established in 1666 following the merger of Connecticut Colony and New Haven Colony (Van Dusen 1961). Located in central-northern Connecticut, it is bounded to the north by the State of Massachusetts, to the east by Tolland County, to the south by Windham, Middlesex, and New Haven Counties, and to the west by New Haven and Litchfield Counties. Bisected by the Connecticut River, the county is also the location of the City of Hartford, the capital of Connecticut. Although Hartford has the highest population in the county (an estimated 126,443 as of 2020), Glastonbury has the largest land area (52.3 sq. mi.) (Connecticut 2021). Hartford County is in the lower central Connecticut River Valley and the land rises in the western portion of the county on a low mountain range known as the Metacomet Range (Bell 1985). The landscape varies from densely populated urban areas in most of the county to rich farmland regions in its northern bounds and includes a long stretch of the Connecticut River as well as other significant freshwater rivers. Important waterways associated with Hartford County include the Connecticut, Farmington, Hockanum, Podunk, and Scantic Rivers (Trumbull 1886). The county's three largest cities are Hartford, New Britain, and West Hartford; other important population centers are located at Bristol, Manchester, East Hartford, and Glastonbury (Connecticut 2021).

Woodland Period to the Seventeenth Century

During the Woodland Period of northeastern North American history (ca., 3,000 to 2,500 years ago), the Indigenous peoples who resided in central Connecticut were part of the greater Algonquian culture of northeastern North America (Lavin 2013). They spoke local variations of Southern New England Algonquian (SNEA) languages and lived in extended kinship groups on lands they maintained for a variety of horticultural and resource extraction purposes (Goddard 1978). Indigenous people in the region practiced subsistence activities that included hunting, fowling, and fishing, along with the cultivation of various crops, the most important of which were maize, squash, and beans. They supplemented these foods seasonally by collecting shellfish, fruits, and plants during warmer periods, and gathering nuts, roots, and tubers during colder times. In addition, these communities came together in large groups to hunt deer in the fall and winter. Indigenous peoples lived with their immediate or extended families in large settlements, often concentrated along rivers and/or wetlands. Some villages were fortified by wooden palisades. Their habitation, known as a *weetu* or *wigwam,* was usually constructed of a tree-sapling frame and covered in reed matting during warm months and tree bark throughout the winter. These varied in size from a small, individual dwelling, to an expansive "long house," which could

accommodate several families. Native communities commonly traded among their immediate neighbors and often maintained long-distance networks (Lavin 2013).

Seventeenth Century through Eighteenth Century

As Indigenous communities maintained oral tradition rather than a written record, most surviving information concerning the Indigenous people of present-day Connecticut was recorded by European observers who were Dutch or English colonists (Lavin 2013). At the time of the arrival of Europeans, Native people who resided at present-day Enfield were affiliated with the Agawam Tribe, who were closely connected with other Native groups through kinship, culture, language, and trade (De Forest 1852; Lavin 2013; Trumbull 1886). The Agawam occupied and used land on both sides of the Connecticut River in the vicinity of what are now Springfield and Agawam, Massachusetts. The group also occupied areas to the south, near the southern boundary of Enfield, as well as other towns in Connecticut to the east and west; they were one of several native groups that occupied both sides of the Connecticut River in what are now Massachusetts, northern Connecticut, and southern New Hampshire and Vermont (Spiess 1930).

The earliest Europeans known to have sailed along Long Island Sound and up the Connecticut River were the Dutch around 1614 (Love 1903). The Dutch developed trade relationships with local Native communities. By the early 1620s, Dutch traders entered into an agreement with the Pequot of present-day southeastern Connecticut in which the Pequot supplied wampum (polished shells) and furs in return for European goods. In 1624, the Dutch West India Company formally established New Netherland Colony centered around Manhattan and the Hudson River with its eastern bounds extending as far as Cape Cod, including much of present-day Connecticut (Jacobs 2009). Through their relationship with the Dutch, the Pequot accessed a variety of trade goods they distributed to tributaries and traded with other groups in the region. The Pequot extended their dominance over the region, bringing all the Native nations in the area into a tributary relationship under their leadership (Hauptman & Wherry 2009; McBride 2013).

In 1633, the Dutch built a fortified trading post, the *Huys de Hoop,* on the Connecticut River at the site of present-day Hartford to further cement both parties' domination over the flow of wampum, fur, and trade goods. To break from the Pequot, several Connecticut River sachems invited the English to the valley who then settled Windsor (1633), Wethersfield (1634), and Hartford (1635), as well as Saybrook Colony (1635) at the mouth of the Connecticut River (Trumbull 1886; Van Dusen 1961). Increased European interaction resulted in exposure to diseases and epidemics Indigenous people had never encountered and to which they had no natural immunity. Illnesses such as smallpox, measles, tuberculosis, and cholera devastated Native communities in the early seventeenth century. In 1633, one epidemic spread from Plimoth Colony to Connecticut, impacting the Pequot and the people of the Connecticut River Valley in 1634 (Trumbull 1886).

Tensions between Native and European groups in the region resulted in the death of several English traders in 1634 and 1636, which were blamed on the Pequot. In retaliation, English forces from Massachusetts Bay destroyed Pequot and Niantic villages on the Pequot (Thames) River in August of 1636, which began the Pequot War. The Pequot laid siege to Saybrook Fort at the mouth of the Connecticut River during the winter of 1636-1637 and attacked Wethersfield in April of 1637. The Connecticut Colony declared war on the Pequot and were joined by Native warriors from the Connecticut River and Mohegans under the Sachem Uncas (Oberg 2006). In May of 1637, English allied forces destroyed the fortified Pequot village at Mistick and in July of that year they pursued refugees west. The Pequot were defeated in present-day Fairfield and the war soon came to an end (Cave 1996). Afterwards, the English considered

Pequot territory, including land in the Connecticut River Valley, to be conquered lands and they were claimed by the Connecticut Colony (Trumbull 1886).

The community of Enfield was thought for many years to be within the Massachusetts Bay Colony based on the results of a 1642 survey of the boundary line with the Connecticut Colony. Following the Pequot War, in 1678, many changes in land titleship occurred in the region. A trio of Indigenous men confirmed a 1675 sale of the part of Enfield lying north of Freshwater River, which had not been recorded because of King Philip's War. In 1680, a Native American named Tawtaps sold the land south of the Freshwater River to the falls on the Connecticut River (in what is now East Windsor) – reserving hunting and fishing rights on the common lands (Wright 1905). In 1679, Springfield established a committee to form a new town in the vicinity of Freshwater River. The 1680 land purchase was in aid of this plan and the first colonists arrived there in 1681, settling south of the river. In 1703, Connecticut began asserting ownership of Enfield and other areas along the Massachusetts border due to errors found in the 1642 survey. In addition, because the southern boundary of the town was originally thought to be the colony line from 1642, a two-mile strip of land was claimed by both Enfield and the town of Windsor, Connecticut. In 1713, the matter was finally settled, and Windsor relinquished its claim in exchange for land elsewhere. Officials in Enfield and other towns along the border soon concluded that they would prefer to be part of Connecticut, though it was not until 1747 that they petitioned the legislature of both colonies to be transferred. The government of Connecticut agreed but Massachusetts objected. In 1749, the British monarch decided in Connecticut's favor, although Enfield had already begun sending representatives to the Connecticut legislature (Winch 1886). As of the first federal census in 1756, the town was reported to have 1,050 residents (Connecticut 2022a).

The 1774 Connecticut colonial census for Enfield recorded a "Negro" population of seven and zero "Indians;" it is unclear what proportion of the figure was enslaved (Hoadly 1887). In 1784, the State passed a gradual manumission law, but slavery was not fully abolished until 1848 (Normen 2013). During the American Revolution (1775-1783), the state of Connecticut played an important role in the process of recruiting soldiers, supplying food stores, and providing a variety of military goods for the war effort. Throughout the war, Connecticut was a leader in sourcing provisions for American forces, due to a rationing system set up by individual towns, including in Enfield (Van Dusen 1961). The town sent many of its citizens to fight as part of the Continental Army and at least 14 died in service (Winch 1886). Following the war, on January 9, 1788, Connecticut ratified the U.S. Constitution to become the fifth state (Van Dusen 1961).

Nineteenth Century through the Twenty-First Century

Enfield's industrial legacy began in the early 1800s with the manufacture of carpeting in the village of Thompsonville near the Connecticut River. By 1836, local factories had 120 looms and 300 adult employees. The town also had a village of followers of the Shaker religion, which started in England around 1770 and moved to New England in 1774. The Shaker community in Enfield was established in 1780 and persisted well into the 1830s (Barber 1836). Their commercial garden seed business grew, and Enfield seed was soon sold all over the country (Miller 2005). Transportation modernized and changed in Enfield as well. In June of 1827, construction began on the Enfield Canal in order to circumvent the Enfield Falls and facilitate transportation along the Connecticut River (Roth 1981). With labor provided predominantly by recently arrived Irish immigrants, the canal was completed in 1829 and it stretched for 5.5 miles, designed with steamboat navigation in mind. Ultimately, increased rail transportation would come to replace the canal. In 1844, the Hartford & Springfield Railroad was built along the west bank of the Connecticut River. It crossed the east bank to the south of Enfield in East Windsor and passed through Thompsonville on its way to the state border (Turner and Jacobus 1989).

As industry continued to develop, a second industrial village in Enfield, called Hazardville, began expanding around the manufacture of gunpowder (Winch 1886). Founded in 1843, the Hazard Powder Company in Enfield was the largest powder factory in the state and one of the largest in the nation. The facility encompassed 125 buildings, and during the Civil War, it served the growing wartime need for gunpowder (Niven 1965). Enfield, like many Connecticut towns, provided men and resources during the conflict. A total of 402 Enfield men served in the Union army (Hines 2002). In the post-war era, the industrial boom continued in town. As a result of this industrial activity, Enfield saw steady population growth through most of the nineteenth century. By 1890, the population had increased to 7,199 (Connecticut 2022b). Despite this industrial growth, agriculture remained important, particularly the growth of fruit trees, grains, dairying, and tobacco.

Like towns throughout the United States, Enfield contributed personnel and resources during the First World War. The town saw 517 men and women who served in various capacities and contributed a total of nearly $46,500 in goods through different drives held in town (Enfield 1919). During the influenza outbreak of 1918, Enfield lost 104 individuals to the illness (Winslow and Rogers 1920). Despite these changes and challenges associated with modernization in the early twentieth century, manufacturing in Enfield progressed and the town continued to grow. As of 1920, Enfield had 11,719 residents, and in addition to agriculture, the town's principal industries included the production of carpets, coffin hardware, papers, and textiles (Connecticut 1920, 2022c; Table 1).

As in other parts of the Connecticut River Valley, tobacco was an important crop in Enfield at that time. The new technique of growing "shade tobacco" under tents had become standard, and it was both more profitable but also more expensive to grow than the open-field variety. As a result, large corporations began buying up small farms and over the century tobacco production declined (Alcorn 1970). By mid-century, the suburbanization trend began to take hold in the state, which was bolstered by the construction of highways. Interstate 91 had been built through Enfield in 1949, and over the following decades, the population grew dramatically (Oglesby 2014). In 1950, Enfield had 15,464 inhabitants and by 1970, this number had nearly tripled, reaching 46,189 (Table 1; Connecticut 2022c, 2022d). By the early twenty-first century, the economic base of the town had shifted away from industry and agriculture. As of 2021, the majority of jobs were in tertiary-sector areas, namely retail, health care, hotels, and finance. The population has fallen slightly from its peak in 1970 to 44,143 residents (AdvanceCT and CTData Collaborative 2021). While manufacturing was not as prevalent as it once was, a variety of items were still produced in Enfield in recent years, including water filtration systems, toys, wooden reels for wire and cables, electronic assemblies, envelopes, tools and gages, and ice cream. Vegetable and tobacco farming were still considered principal industries, as was evidenced by the agricultural fields present throughout the town, particularly in the eastern region (Connecticut 2021). Limited growth is projected for the town of Enfield as officials intend to encourage economic development, but in a manner that will preserve Enfield's agrarian roots and small-town character (Enfield 2021).

Table 1: Population of Enfield, Connecticut, Hartford County 1900-2010 (Connecticut 2022c, 2022d)

Town	1900	1910	1920	1930	1940	1950
Town of Enfield, Hartford County, Connecticut	6,699	9,719	11,719	13,404	13,561	15,464
	1960	**1970**	**1980**	**1990**	**2000**	**2010**
	31,464	46,189	42,695	45,532	45,212	44,654

History of the Facility Area

The proposed Facility is located at 95, 99, and 113 Raffia Road in Enfield, Connecticut. Woodford's 1855 map shows that the area containing the proposed Facility was located in a rural part of Enfield (Figure 4). Baker and Tilden's 1869 map shows that the Facility area was in what was then the ninth district of Enfield, which was located on the western side of the Scantic River (Figure 5). The property closest to the Facility in 1869 was owned by John Carroll, a powder mill worker who was born in Ireland (Figure 5; USCB 1880). During the twentieth and early twenty-first centuries, the surrounding environs of the Facility slowly transformed from agricultural land to residential areas. An aerial photograph from 1934 indicates that the Facility area was roughly half open space and half wooded land, with the Scantic River to the east (Figure 6). There was one long tobacco shed in the center of the parcel and a second tobacco shed directly to the west of the proposed Facility (Figure 6). The surrounding environment was undeveloped agricultural and wooded land at that time. By 1951, an additional agricultural building was erected within the proposed project parcel in the southwest corner of the plot (Figure 7). By 1970, the surrounding environment had changed with the trend towards suburbanization. Single family dwellings and commercial buildings were visible to the west of the proposed Facility, along what is now Raffia Road (Figure 8). In addition, more of the land within the project parcel had been cleared, leaving only a small portion still wooded at that time. Further residential development was completed to the west of the Facility by 1995 (Figure 9). By this time, the two tobacco sheds within the Facility area had been razed (Figure 9). In the twenty first century, some changes occurred within the Facility area. No buildings were within the project area, which was then primarily composed of disturbed soils and push piles (Figure 10). Residential development was still present to the west of the proposed Facility, although the area to the east of the parcel remained wooded (Figure 10).

Conclusions

The documentary record suggests that with the exception of farming, the proposed project parcel is unlikely to be associated with any significant cultural resources. The former tobacco sheds on the property were originally described to be temporary structures and the removal of them is unlikely to have left behind any large scale architectural features, though twentieth century artifacts may be expected in these areas. However, archaeological deposits associated with the former agricultural use of the property are not likely to be considered culturally significant.

CHAPTER V
PREVIOUS INVESTIGATIONS

Introduction

This chapter presents an overview of previous archaeological research completed within the vicinity of the Facility in Enfield, Connecticut and it provides the comparative data necessary for assessing the results of the current Phase IA cultural resources assessment survey. It also ensures that the potential impacts to all previously recorded cultural resources located within and adjacent to the Facility are taken into consideration. Specifically, this chapter reviews previously identified archaeological sites and National/State Register of Historic Places properties situated in the project region (Figures 11 and 12). The discussions presented below are based on information currently on file at the CT-SHPO in Hartford, Connecticut. In addition, the electronic site files maintained by Heritage were examined during this investigation. Both the quantity and quality of the information contained in the original cultural resources survey reports and State of Connecticut archaeological site forms are reflected below.

Previously Recorded Archaeological Sites and National/State Register of Historic Places Pproperties/Districts in the Vicinity of the Project Area

A review of data currently on file at the CT-SHPO, as well as the electronic site files maintained by Heritage, resulted in the identification of a single precontact era archaeological site (49-20) situated within 1.6 kilometers (1 miles) of the Facility (Figure 10). It also revealed the presence of two State Register of Historic Places (Abbe John House and Coleman House) and one National Register of Historic Places District (Hazardville) within 1.6 kilometers (1 miles) of the Facility (Figure 11). A brief discussion of these cultural resources is provided below.

Site 49-20

Site 49-20, also known as the Indian Run Road Site, is located on private land along Indian Run Road in Enfield, Connecticut. The site is characterized as an unknown precontact era site type that dates from the Late Archaic through the Late Woodland periods. The site was identified and surface collected by a local enthusiast, Edward Gamble, at an undisclosed time. It was reported to the State of Connecticut by Gregory F. Walwer of Archaeological Consulting Services in 1996. Walwer states in the site form that the actual site contents are unconfirmed; however, it was claimed that there were “35 projectile points arranged in a sunburst patter around two burials. Also reports of a fort and possible burial location of Scioto.” Artifacts reportedly recovered from the site included projectile points, lithic tools, lithic debitage, an axe, hoes, net sinkers, gouges, steatite bowl fragments, and ceramic sherds. This site was not assessed applying the National Register of Historic Places criteria for evaluation (36 CR 60.4 [a-d]). It is located approximately 1.5 kilometers to the north of the proposed Facility. No impact to Site 49-20 will occur as a result of the proposed Facility construction.

John Abbe House

The John Abbe House is located along Town Farm Road in Enfield, Connecticut. Built in 1770 by John Abbe in the Colonial Saltbox Style, the house is a two-story, five bay, clapboard structure with a central chimney and a gabled roofline. Simple forms characterize the architectural details on the structure, including the sash windows, trim, and door. The central entrance to the house consists of a six-panel door with Doric molded pilasters. A lean-to addition was added to the rear elevation of the structure at an unknown time, but likely in the nineteenth century. The John Abbe House was added to the Connecticut State Register of Historic Places by Elric J. Endersby on July 11 in 1967. The House is located

approximately 0.75 kilometers (0.46 miles) to the southeast of the Facility area. No impact to the property will result from the proposed Facility construction.

Coleman House

The Coleman House is located to the north of the bend in Abbe Road in Enfield, Connecticut. The house was built in 1838 and is a one-and-a-half-story, five bay wide, clapboard revival style structure with a central chimney and a shallow pitch gable roof. It has two-over-two sash windows with shutters, and a central entranceway. The structure is listed as being in good condition and undergoing restoration efforts. The Coleman House was added to the Connecticut State Register of Historic Places by Elric J. Endersby on July 16 in 1967. While not listed individually on the National Register of Historic Places, the Coleman House falls within the larger National Register Area of Hazardville Historic District (see below) and is considered a contributing element to that district. The house is located approximately 1.6 kilometers to the east of the proposed Facility. No impact to the property will occur as a result of the proposed Facility construction.

Hazardville Historic District

The Hazardville Historic District is situated in central Enfield, Connecticut. The district encompasses 1,075 acres of land and contains 260 sites and structures, of which 219 are considered contributing to the district's historical character. The district contains the location of the Hazard Powder Company, which was a gun powder mill that operated from 1835 to 1913, as well as its associated nineteenth century village. While the Powder Mill and associated buildings no longer stand, the area was included in the Historic District due to its direct association and its potential to yield post-European Contact archeological sites related to its 78 years of operation. The district consists mainly of residential homes, churches/religious establishments, and civic buildings with few commercial buildings. It is listed as significant for its archaeological potential, architectural history, and industrial history. The Hazardville Historic District was added to the National Register of Historic Places on February 19, 1980. The Hazardville Historic District is located approximately 0.7 kilometers (0.43 miles) to the northeast of the proposed Facility. Neither the district, nor any of its associated resources, will be impacted by the proposed Facility construction.

CHAPTER VI
METHODS

Introduction

This chapter describes the research design and field methods used to complete the Phase IA cultural resources assessment survey of the proposed Facility area at 95, 99, and 113 Raffia Road in Enfield, Connecticut. The following tasks were completed during this investigation: 1) study of the region's precontact era and post-European Contact period, and natural settings, as presented in Chapters II through IV; 2) a literature search to identify and discuss previously recorded cultural resources in the region; 3) a review of maps, topographic quadrangles, and aerial imagery depicting the Facility in order to identify potential post-European contact period resources and/or areas of past disturbance; and 4) pedestrian survey and photo-documentation of the Facility area in order to assess its archaeological sensitivity. These methods are in keeping with those required by the Connecticut State Historic Preservation Office in the document entitled: *Environmental Review Primer for Connecticut's Archaeological Resources* (Poirier 1987).

Research Framework

The current Phase IA cultural resources assessment survey was designed to assess the archaeological sensitivity of the Facility, as well as to visually examine the development areas for any previously unidentified cultural resources during pedestrian survey. The undertaking was comprehensive in nature, and project planning considered the distribution of previously recorded cultural resources located within 1.6 kilometers (1 mile) of the Facility. The methods used to complete this investigation were designed to provide coverage of all portions of the proposed Facility. The fieldwork portion of this undertaking entailed pedestrian survey, photo-documentation, and mapping (see below).

Archival Research & Literature Review

Background research for this survey included a review of a variety of maps depicting the region containing the Facility; an examination of USGS 7.5' series topographic quadrangles; an examination of aerial images dating from 1934 through 2019; and a review of all archaeological sites and National and State Register of Historic Places on file with the CT-SHPO, as well as electronic cultural resources data maintained by Heritage. The intent of this review was to identify all previously recorded cultural resources situated within and immediately adjacent to the Facility, and to provide a natural and cultural context for the project region. This information then was used to develop the archaeological context of the Facility, and to assess its sensitivity with respect to the potential for producing intact cultural resources.

Background research materials, including maps, aerial imagery, and information related to previous archaeological investigations, were gathered from the CT-SHPO. Finally, electronic databases and Geographic Information System files maintained by Heritage were employed during the course of this investigation, and they provided valuable data related to the project region, as well as data concerning previously identified archaeological sites and National and State Register of Historic Places properties within the general vicinity of the proposed Facility.

Field Methodology and Data Synthesis

The field methods for this project included pedestrian survey, photo-documentation, and mapping of the Facility area. During the completion of the pedestrian survey, a representative from Heritage photo-

documented all potential areas of impact using digital media. The proposed Facility area was assessed for archaeological sensitivity and photographs were taken throughout the area.

CHAPTER VII
RESULTS OF THE INVESTIGATION

Introduction

This chapter presents the results of the Phase IA cultural resources assessment survey of the proposed solar Facility at 95, 99, and 113 Raffia Road in Enfield, Connecticut (Figure 13 and Photos 1 through 14). As stated in the introductory section of this report, the goals of the investigation included completion of the following tasks: 1) a contextual overview of the region's precontact era and post-European Contact period, and natural settings (e.g., soils, ecology, hydrology, etc.); 2) a literature search to identify and discuss previously completed cultural resources surveys and previously recorded cultural resources in the project region; 3) a review of readily available maps and aerial imagery depicting the Facility in order to identify potential post-European Contact period resources and/or areas of past disturbance; and 4) pedestrian survey and photo-documentation of the Facility area in order to assess its archaeological sensitivity.

Determining Archaeological Sensitivity

The field data associated with soils, slopes, aspect, distance to water, and previous disturbance collected during the pedestrian survey and presented above was used in conjunction with the analysis of maps, aerial images, and data regarding previously identified archaeological sites and National/State Register of Historic Places properties to stratify the Facility area into zones of no/low and/or moderate/high archaeological sensitivity. In general, post-European contact period archaeological sites are relatively easy to identify on the current landscape as the features associated with them tend to be relatively permanent constructions that extend above the ground surface (i.e., stone foundations, pens, wells, privies, etc.). Archaeological sites dating from the precontact era, on the other hand, are less often identified during pedestrian survey because they are buried, and predicting their locations relies more on the analysis and interpretation of environmental factors that would have informed Native American site choices.

With respect to the potential for identifying precontact era archaeological sites, the Facility was divided into areas of no/low and/or moderate/high archaeological potential by analyzing the landform types, slope, aspect, soils contained within them, and their distance to water. In general, areas located less than 300 meters (1,000 feet) from a freshwater source and that contain slopes of less than 8 percent and well-drained soils possess a high potential for producing precontact period archaeological deposits. Those areas located between 300 and 600 meters (1,000 and 2,000 feet) from a freshwater source and well drained soils are considered moderate probability areas. This is in keeping with broadly based interpretations of precontact era settlement and subsistence models that are supported by decades of previous archaeological research throughout the region. It is also expected that there may be variability of precontact era site types found in the moderate/high sensitivity zones. For example, large Woodland period village sites and Archaic period seasonal camps may be expected along large river floodplains and near stream/river confluences, while smaller temporary or task specific sites may be expected on level areas with well-drained soils that are situated more than 300 meters (1,000 feet) but less than 600 meters (2,000 feet) from a water source. Finally, steeply sloping areas, poorly drained soils, or areas of previous disturbance are generally deemed to retain a no/low archaeological sensitivity with respect to their potential to contain precontact era archaeological sites.

In addition, the potential for a given area to yield evidence of post-European Contact period archaeological deposits is based not only on the above-defined landscape features but also on the presence or absence of previously identified post-European Contact period archaeological resources as identified during previous archaeological surveys, recorded on maps, or captured in aerial images of the region under study. In this case, project areas that are situated within 100 meters (328 feet) of a previously identified post-European Contact period archaeological site or a National or State Register of Historic Places district/individually listed property also may be deemed to retain a moderate/high archaeological sensitivity. In contrast, those areas situated over 100 meters (328 feet) from any of the above-referenced properties would be considered to retain a no/low historical period archaeological sensitivity.

Results of Phase IA Survey

As noted earlier, the proposed Facility area encompasses approximately 14 acres of land bounded by forest and vegetated land to the east, commercial development west, and residential development to the north and south. It is situated at elevations ranging from 32 to 41 meters (118 to 114 feet) NGVD. The pedestrian survey revealed that the majority of the Facility was characterized by modified terrain and disturbances, and that 11.33 acres of the Facility had no/low potential to yield archaeological sites or intact deposits (Photos 1 through 11). The southern portion of the Facility is characterized by heavy disturbances resulting from logging and development activity (Photos 1 through 8). Disturbances in this area of the Facility include push piles, log piles, wood chip piles, and two track roads. The northeast section of the Facility area is vegetated land characterized by steep sloping topography and poorly drained and disturbed soils; it too was assessed as having a no/low archaeological sensitivity (Photo 9 through 11). No additional archaeological investigation of the no/low potential areas is needed prior to construction of the proposed Facility.

Finally, the pedestrian survey resulted in the identification of one archaeological sensitivity area, which was designated as Sensitivity Area SA-1. This area is located in the northwestern corner of the proposed Facility area (Photos 12 through 14). Sensitivity Area SA-1 encompasses of 2.57 acres of land and is characterized by an agricultural field with level topography and well-drained soils. Further, it is located only approximately 230 meters (754 feet) west of the Scantic River. This area was assessed as retaining a moderate/high potential to yield archaeological deposits.

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Figure 1. Excerpt from a USGS 7.5' series topographic quadrangle image showing the location of the proposed Facility.

Figure 2. Client provided Project plans for the proposed Facility.

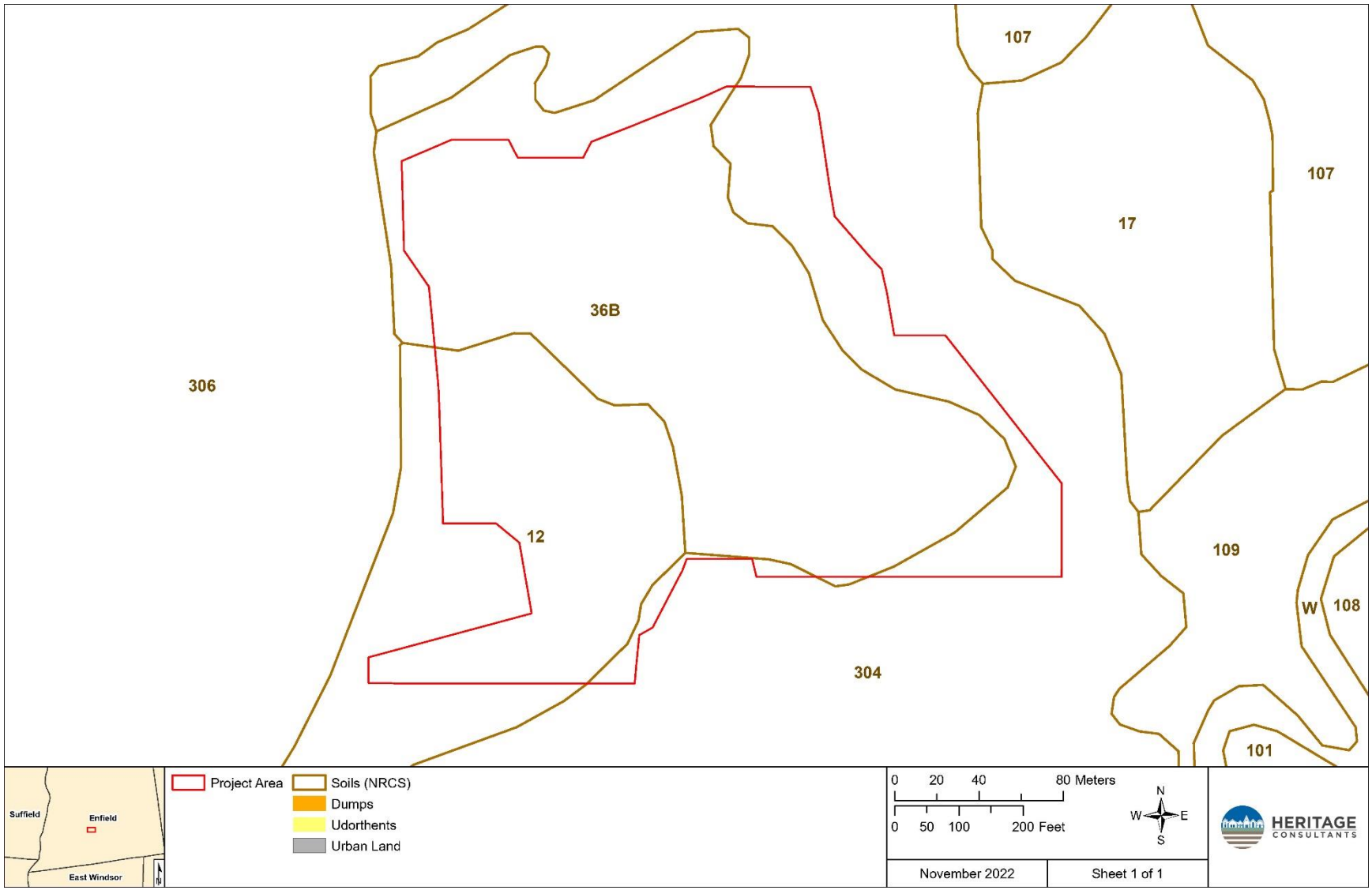


Figure 3. Map of soils located in the vicinity of the proposed Facility.

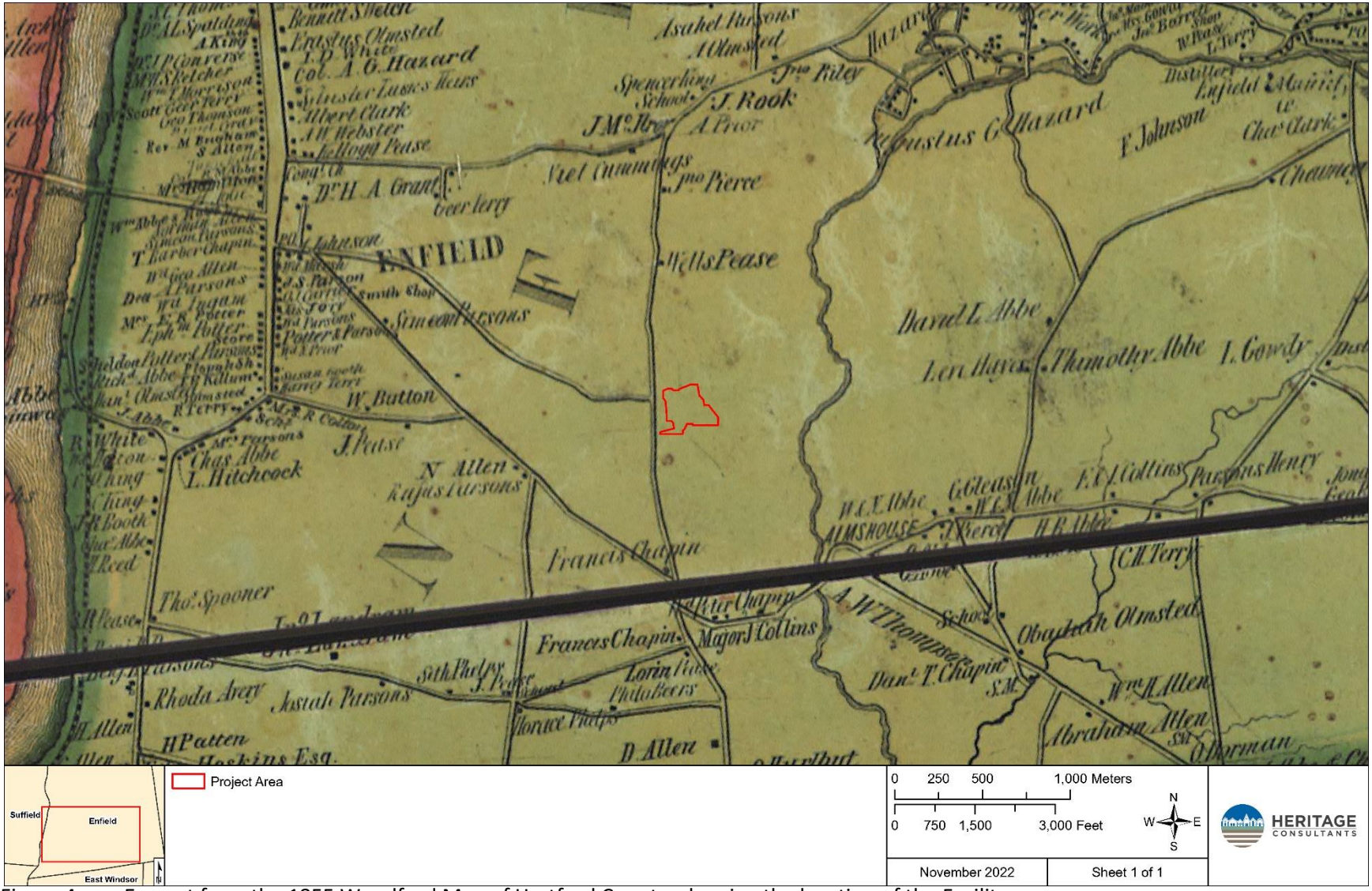


Figure 4. Excerpt from the 1855 Woodford Map of Hartford County, showing the location of the Facility

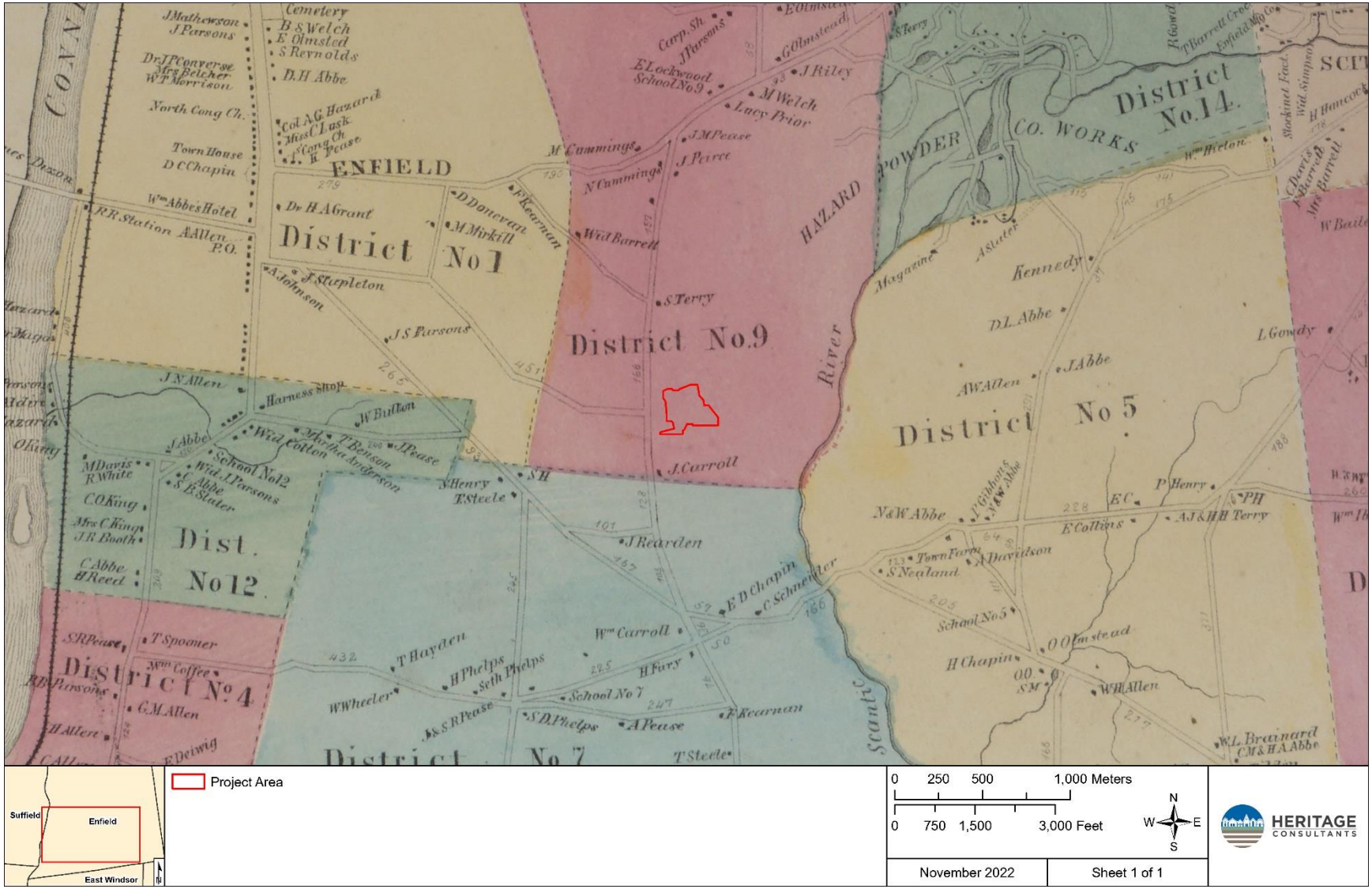


Figure 5. Excerpt from the 1869 Baker and Tilden's Map, showing the proposed.

Figure 6. Excerpt from the 1934 Fairchild aerial image showing the location of the proposed Facility.

Figure 7. Excerpt from the 1951 aerial image showing the location of the proposed Facility.

Figure 8. Excerpt from the 1970 aerial image showing the location of the proposed Facility.

Figure 9. Excerpt from the 1995 aerial image showing the proposed Facility.

Figure 10. Excerpt from the 2019 aerial image showing the location of the proposed Facility.

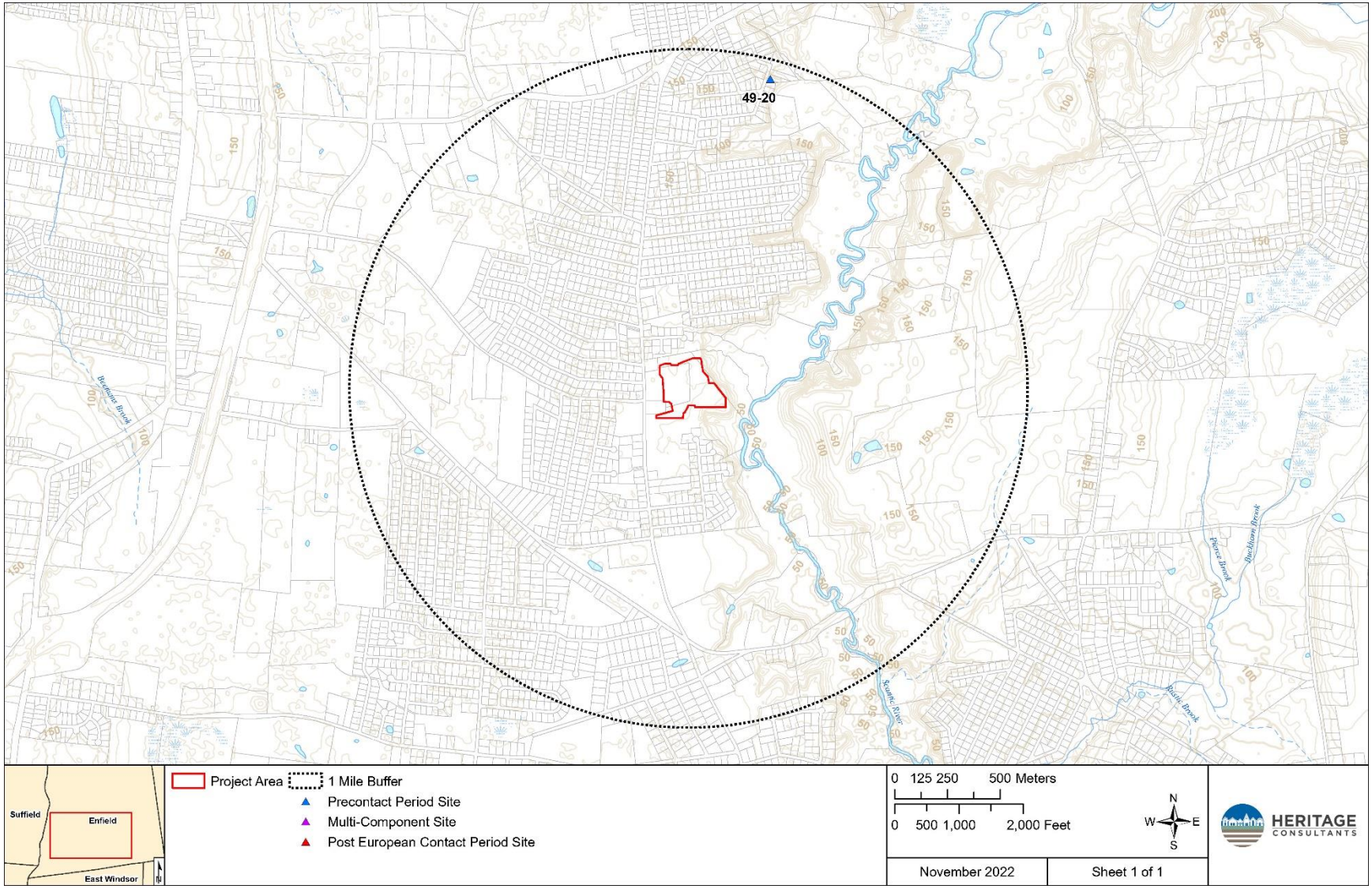


Figure 11. Digital map showing the location of previously identified archaeological sites in the vicinity of the proposed Facility.

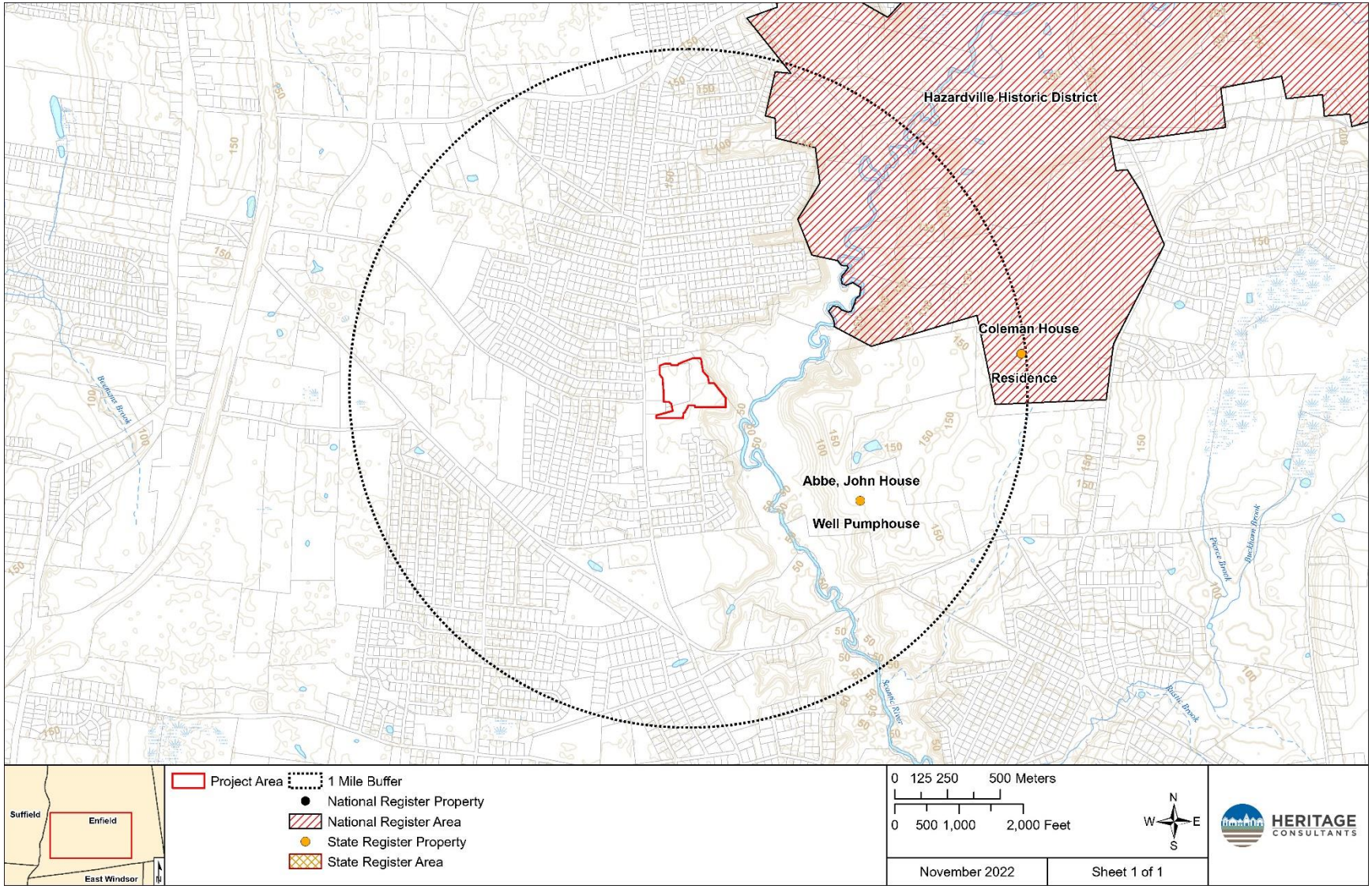


Figure 12. Digital map showing the location of previously identified National and State Register of Historic Places properties in the vicinity of the proposed Facility.

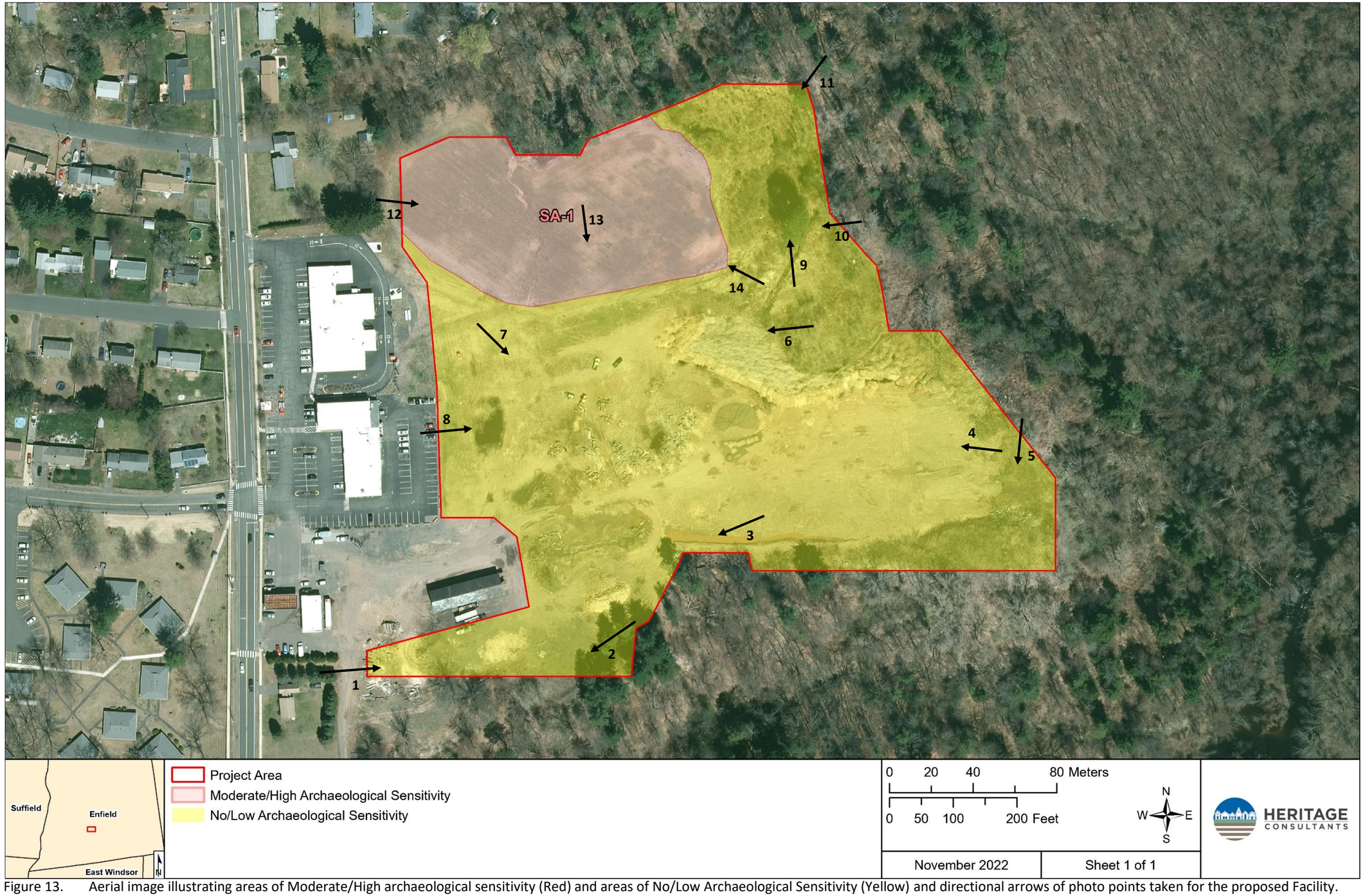


Figure 13. Aerial image illustrating areas of Moderate/High archaeological sensitivity (Red) and areas of No/Low Archaeological Sensitivity (Yellow) and directional arrows of photo points taken for the proposed Facility.

Photo 1. Overview photo of low/no sensitivity area taken from the southwestern corner of Project boundary. Photo facing to the east.

Photo 2. Overview photo of low/no sensitivity area taken from the southern boundary of Project area. Photo facing to the southwest.

Photo 3. Overview photo of low/no sensitivity area taken from the southern boundary of Project area. Photo facing to the southwest.

Photo 4. Overview photo of low/no sensitivity area taken from the southeastern boundary of Project area. Photo facing to the west.

Photo 5. Overview photo of low/no sensitivity area taken from the southeastern boundary of Project area. Photo facing to the south.

Photo 6. Overview photo of low/no sensitivity area. Photo facing to the west.

Photo 7. Overview photo of low/no sensitivity area taken from the western boundary of Project area. Photo facing to the southeast.

Photo 8. Overview photo of low/no sensitivity area taken from the western boundary of Project area. Photo facing to the east.

Photo 9. Overview photo of push pile in low/no sensitivity area taken from the northeastern end of Project area. Photo facing to the north.

Photo 10. Overview photo of low/no sensitivity area taken from the northeastern boundary of Project area. Photo facing to the west.

Photo 11. Overview photo of low/no sensitivity area taken from the northeastern boundary of Project area. Photo facing to the southwest.

Photo 12. Overview photo of Archaeological Sensitivity Area SA-1. Taken from the western boundary. Photo facing to the east.

Photo 13. Overview photo of Archaeological Sensitivity Area SA-1. Photo facing to the south.

Photo 14. Overview photo of Archaeological Sensitivity Area SA-1. Photo facing to the northwest.

APPENDIX E

NOISE ANALYSIS

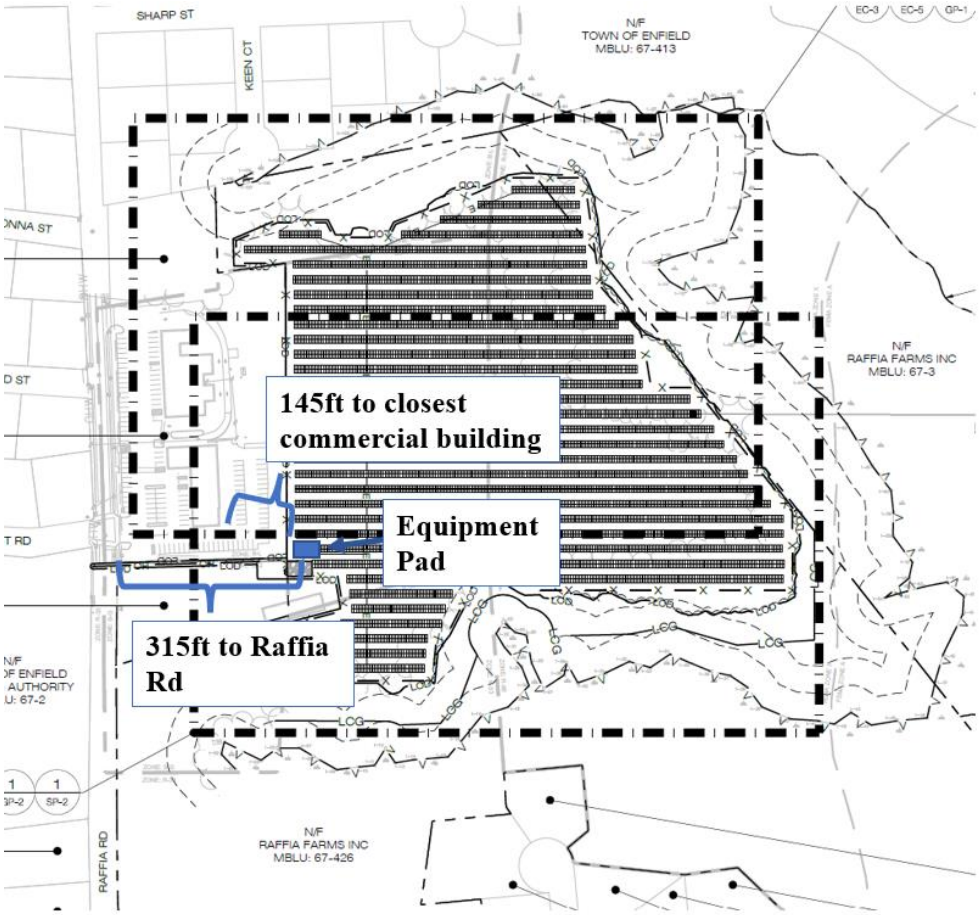
LODESTAR ENERGY

Raffia Rd Solar – Noise Analysis

Introduction

Noise generated by this Project will derive from the operation of (32) Sungrow SG125HV 125 kW inverters and (2) Eaton 2000kVA transformers. All proposed inverters and transformers are designed to be installed on a single equipment pad at the location illustrated in Figure 1 below. According to the Sungrow equipment specifications, a single inverter has an acoustic noise output of 53.7dBA at 1 meter (3.28 ft) from the unit; meanwhile, a single Eaton transformer has an output of 61dBA at 1 meter (3.28ft). The two abutting properties closest to the equipment pad are both under common ownership of the landowner for the Project. Furthermore, the uses on these properties are commercial and industrial in nature, including a strip mall and automobile service station. The equipment pad's proximity to the closest property line abutting a non-common owner is at Raffia Rd. For the purposes of this analysis, we have conducted an audibility study at Raffia Rd as well as the commercial building, as shown below.

Figure 1: Equipment Pad Location



LODESTAR ENERGY

As stated in Regulations of Connecticut State Agencies Sec. 22a-69-3.5, noise received within residential zones shall not exceed 51dBA and noise received within commercial zones shall not exceed 66dBA in order to minimize disturbance to abutting and adjacent property owners.

Methods/Analysis Sound Intensity of All Equipment at a Common Point

To quantify the noise output of all inverters, a logarithmic formula is required to accurately determine amplification of sound. This formula and the processes related to calculating a result are illustrated below.

Equation 1. Decibel Addition

$$L = 10 \operatorname{Log}_{10}\left(\sum_{i=1}^{n} 10^{(L_i / 10)} \right)$$

(1) Sungrow SG125HV 125 kW inverter = 53.7dBA at 3.28ft
(32) Sungrow SG125HV 125 kW inverters = **68.7dBA at 3.28ft**
(1) Eaton 2000kVa transformer = 61dBA at 3.28ft
(2) Eaton 2000kVa transformers = 64dBA at 3.28ft
(32) Sungrow SG125HV 125 kW inverters + (2) Eaton 2000kVa transformers = **70dBA at 3.28ft**

Equation 2. Audibility

The proposed Project design includes the installation of inverters. The 32 inverters and two transformers combined have a 70 dBA output. To quantify the reduction in sound from the point of origin to Raffia Rd (315ft away) and from the point of origin to the closest commercial building (145ft away), the formula stated in Equation 2 utilizes the inverse square law for sound intensity. This formula states that the reduction in sound pressure is relative to the distance from the source. The formula is set forth below in equation 2 and applied to the instant case in which proposed site conditions are calculated:

Equation 2. $DL = L_{P2} - L_{P1}$

Raffia Rd Calculation

$$DL = 10\ log\ log\ (R_2/R_1)^2$$
$$DL = 20log\ (R_2/R_1)$$
$$DL = 20\ log(315/3.28)$$
DL= 39.6 dBA

70 dBA – 39.6 dBA = 30.4 dBA

Variables:
DL = difference in sound pressure (dBA)
L_{P1} = Sound pressure level at location 1 (1m)
L_{P2} = Sound pressure level at location 2 (property line at Raffia Rd)
R_1 = distance from source to location 1
R_2 = distance from source to location 2

Commercial Building Calculation

$$DL = 10\ log\ log\ (R_2/R_1)^2$$
$$DL = 20log\ (R_2/R_1)$$
$$DL = 20\ log(145/3.28)$$
DL= 32.9 dBA
70 dBA – 32.9 dBA = 37.1 dBA

Variables:
DL = difference in sound pressure (dBA)
L_{P1} = Sound pressure level at location 1 (1m)
L_{P2} = Sound pressure level at location 2 (commercial building)
R_1 = distance from source to location 1
R_2 = distance from source to location 2

Conclusion

In conclusion, the noise levels emitted from the inverters and transformers will be 30.4 dBA at Raffia Rd (the closest property line abutting a non-common owner), which is 315ft away from the origin of noise emanation. The noise levels emitted from the inverters and transformers will be 37.1 dBA at the closest commercial building, which is 145ft away from the origin of noise emanation. Noise will be further reduced at farther property lines and buildings. Therefore, the proposed Project and its components comply with the applicable regulations, well below 51dBA for residential zone receptors and 66dBA for commercial zone receptors.

APPENDIX F

FEDERAL AVIATION ADMINISTRATION
DETERMINATIONS

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7287-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 1
Location:	Enfield, CT
Latitude:	41-57-56.48N NAD 83
Longitude:	72-33-45.97W
Heights:	112 feet site elevation (SE) 10 feet above ground level (AGL) 122 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 06/07/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7287-OE.

Signature Control No: 563121985-564037111 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-7287-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7288-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 2
Location:	Enfield, CT
Latitude:	41-57-50.51N NAD 83
Longitude:	72-33-40.93W
Heights:	111 feet site elevation (SE) 10 feet above ground level (AGL) 121 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 06/07/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

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This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7288-OE.

Signature Control No: 563121986-564037121 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-7288-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7289-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 3
Location:	Enfield, CT
Latitude:	41-57-49.28N NAD 83
Longitude:	72-33-40.93W
Heights:	120 feet site elevation (SE)
	10 feet above ground level (AGL)
	130 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 06/07/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7289-OE.

Signature Control No: 563121987-564037119 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-7289-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7290-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 4
Location:	Enfield, CT
Latitude:	41-57-49.32N NAD 83
Longitude:	72-33-48.64W
Heights:	122 feet site elevation (SE) 10 feet above ground level (AGL) 132 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 06/07/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

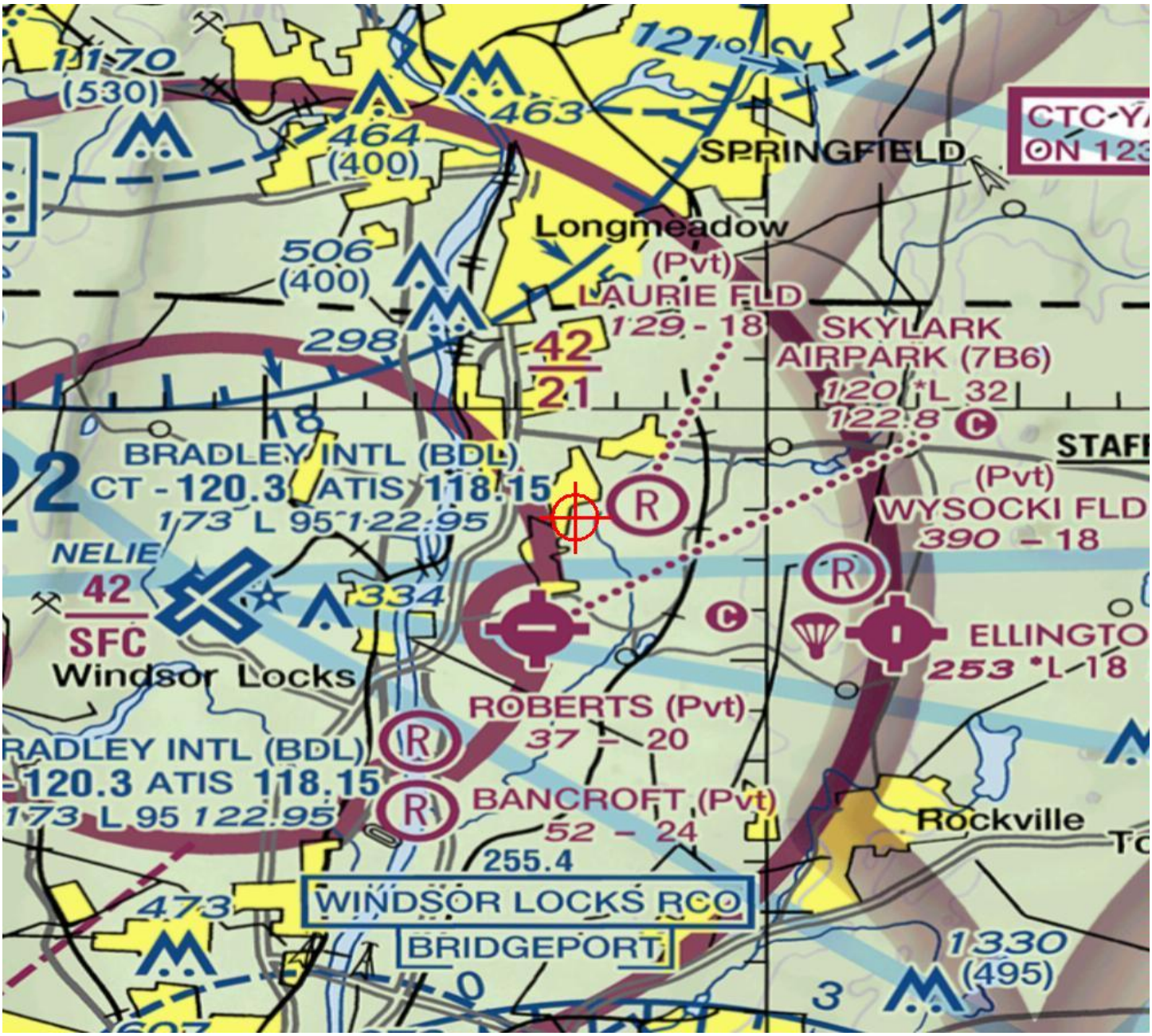
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7290-OE.

Signature Control No: 563121989-564037110 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-7290-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7291-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 5
Location:	Enfield, CT
Latitude:	41-57-47.70N NAD 83
Longitude:	72-33-49.61W
Heights:	122 feet site elevation (SE) 10 feet above ground level (AGL) 132 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 06/07/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7291-OE.

Signature Control No: 563121990-564037120 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-7291-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7292-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 6
Location:	Enfield, CT
Latitude:	41-57-47.70N NAD 83
Longitude:	72-33-54.68W
Heights:	123 feet site elevation (SE) 10 feet above ground level (AGL) 133 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 06/07/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7292-OE.

Signature Control No: 563121994-564037113 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-7292-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7293-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 7
Location:	Enfield, CT
Latitude:	41-57-48.10N NAD 83
Longitude:	72-33-54.43W
Heights:	123 feet site elevation (SE) 10 feet above ground level (AGL) 133 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 06/07/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7293-OE.

Signature Control No: 563121995-564037109 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-7293-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7294-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 8
Location:	Enfield, CT
Latitude:	41-57-49.57N NAD 83
Longitude:	72-33-52.34W
Heights:	123 feet site elevation (SE) 10 feet above ground level (AGL) 133 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 06/07/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7294-OE.

Signature Control No: 563122001-564037115 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-7294-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7295-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 9
Location:	Enfield, CT
Latitude:	41-57-50.11N NAD 83
Longitude:	72-33-52.78W
Heights:	124 feet site elevation (SE) 10 feet above ground level (AGL) 134 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 06/07/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

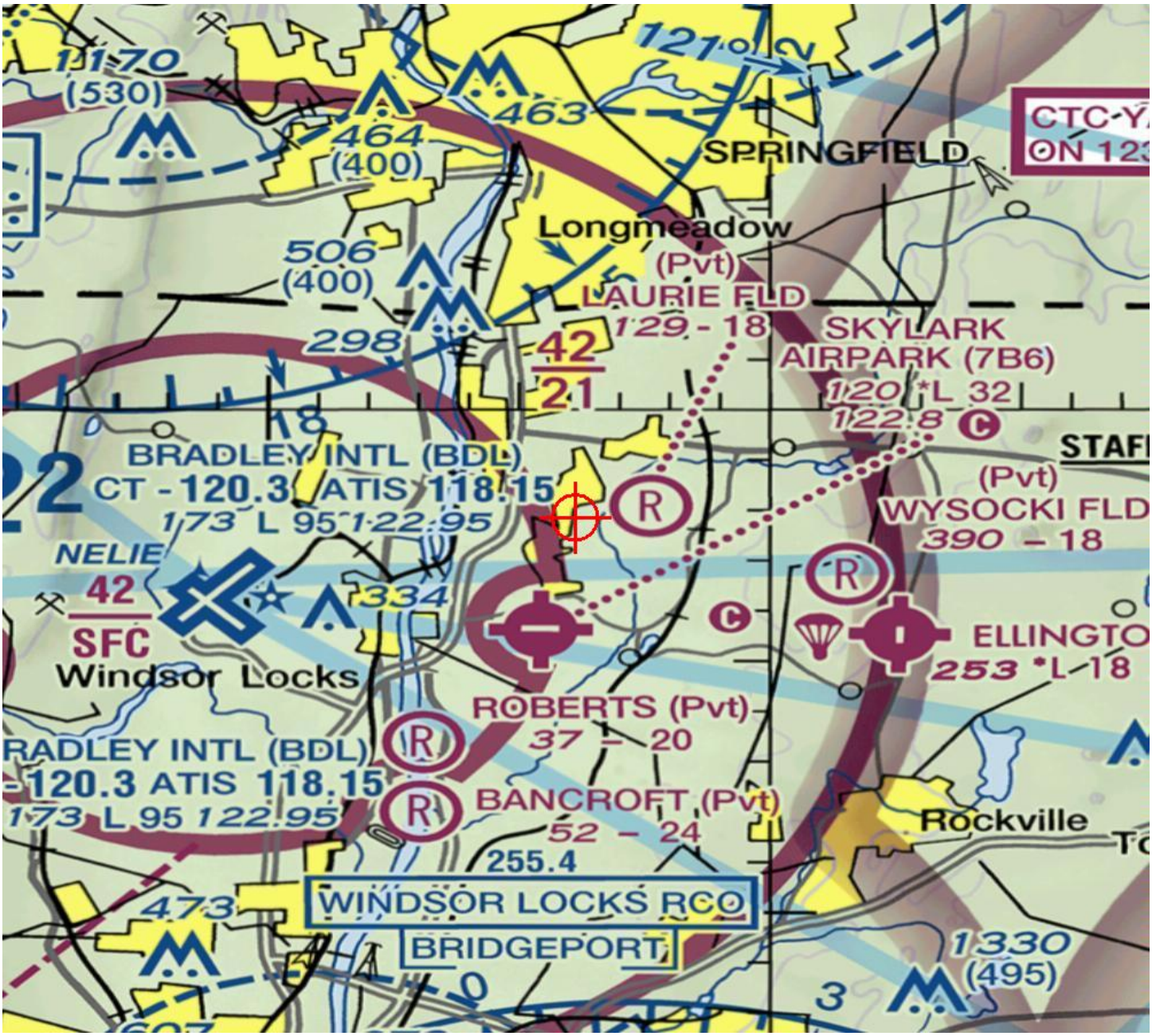
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7295-OE.

Signature Control No: 563122011-564037108 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-7295-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7296-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 10
Location:	Enfield, CT
Latitude:	41-57-55.12N NAD 83
Longitude:	72-33-52.78W
Heights:	119 feet site elevation (SE) 10 feet above ground level (AGL) 129 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 06/07/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

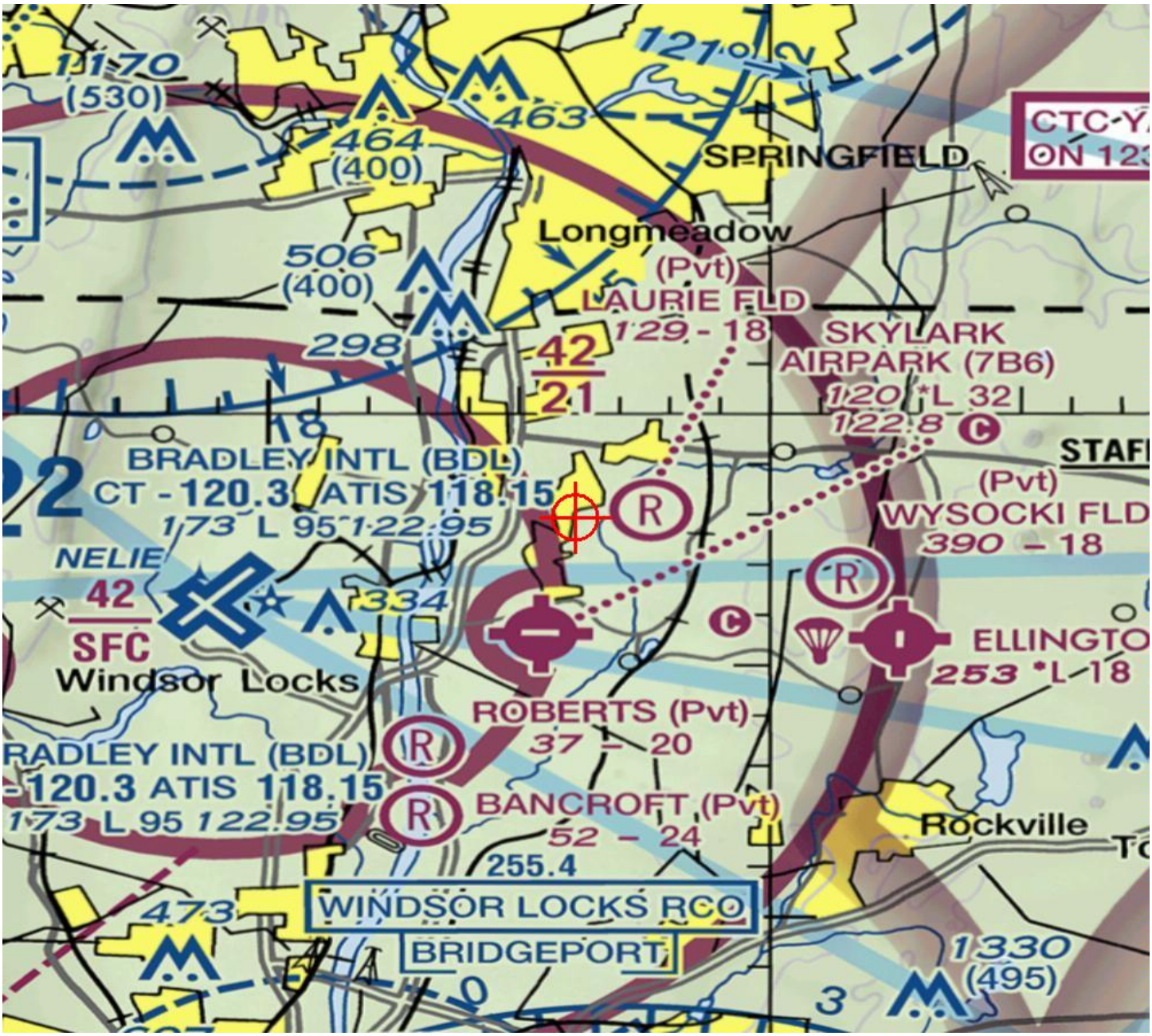
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7296-OE.

Signature Control No: 563122025-564037116 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-7296-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7297-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 11
Location:	Enfield, CT
Latitude:	41-57-55.26N NAD 83
Longitude:	72-33-53.96W
Heights:	124 feet site elevation (SE) 10 feet above ground level (AGL) 134 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 06/07/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

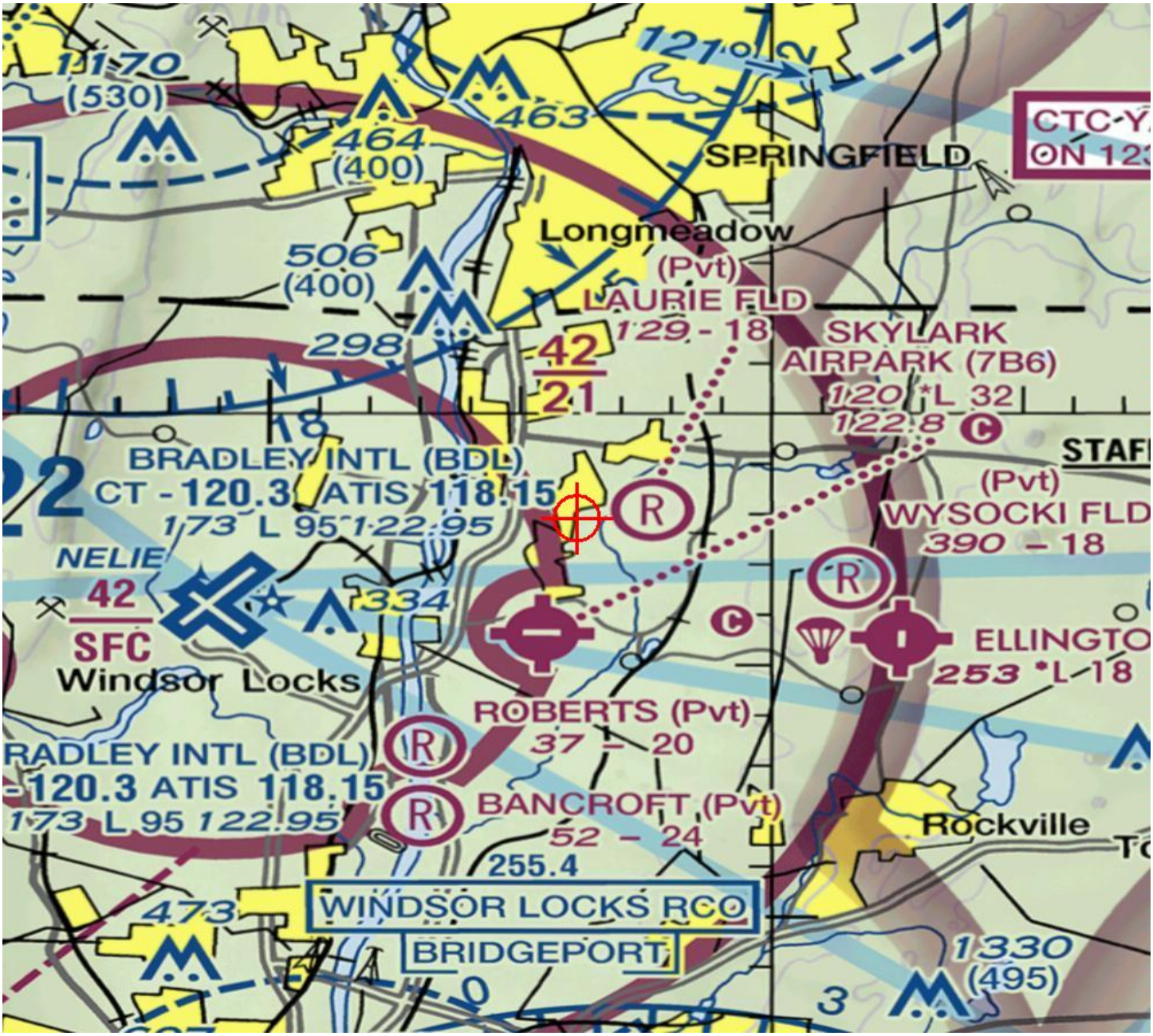
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7297-OE.

Signature Control No: 563122028-564037118 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-7297-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7298-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 12
Location:	Enfield, CT
Latitude:	41-57-55.69N NAD 83
Longitude:	72-33-53.14W
Heights:	121 feet site elevation (SE) 10 feet above ground level (AGL) 131 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 06/07/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7298-OE.

Signature Control No: 563122031-564037112 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-7298-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
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Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7299-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 13
Location:	Enfield, CT
Latitude:	41-57-56.48N NAD 83
Longitude:	72-33-47.48W
Heights:	113 feet site elevation (SE) 10 feet above ground level (AGL) 123 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 06/07/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7299-OE.

Signature Control No: 563122037-564037117 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-7299-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7300-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel HP
Location:	Enfield, CT
Latitude:	41-57-47.81N NAD 83
Longitude:	72-33-50.18W
Heights:	140 feet site elevation (SE)
	10 feet above ground level (AGL)
	150 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 06/07/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7300-OE.

Signature Control No: 563122040-564037114 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-7300-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7273-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Mobile Crane Point 1
Location:	Enfield, CT
Latitude:	41-57-56.48N NAD 83
Longitude:	72-33-45.97W
Heights:	112 feet site elevation (SE)
	35 feet above ground level (AGL)
	147 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7273-OE

Signature Control No: 563112938-564037274 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-7273-OE

Proposal: To construct and/or operate a(n) Mobile Crane to a height of 35 feet above ground level, 147 feet above mean sea level.

Location: The structure will be located 2.32 nautical miles north of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of SKYLARK AIRPARK, (413) 537-5121 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 06/07/2024 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-7273-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7274-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Mobile Crane Point 2
Location:	Enfield, CT
Latitude:	41-57-50.51N NAD 83
Longitude:	72-33-40.93W
Heights:	111 feet site elevation (SE)
	35 feet above ground level (AGL)
	146 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7274-OE

Signature Control No: 563112939-564037269 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-7274-OE

Proposal: To construct and/or operate a(n) Mobile Crane to a height of 35 feet above ground level, 146 feet above mean sea level.

Location: The structure will be located 2.24 nautical miles north of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of SKYLARK AIRPARK, (413) 537-5121 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 06/07/2024 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-7274-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7275-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Mobile Crane Point 3
Location:	Enfield, CT
Latitude:	41-57-49.28N NAD 83
Longitude:	72-33-40.93W
Heights:	120 feet site elevation (SE)
	35 feet above ground level (AGL)
	155 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7275-OE

Signature Control No: 563112942-564037262 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-7275-OE

Proposal: To construct and/or operate a(n) Mobile Crane to a height of 35 feet above ground level, 155 feet above mean sea level.

Location: The structure will be located 2.22 nautical miles north of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of SKYLARK AIRPARK, (413) 537-5121 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 06/07/2024 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-7275-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7276-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Mobile Crane Point 4
Location:	Enfield, CT
Latitude:	41-57-49.32N NAD 83
Longitude:	72-33-48.64W
Heights:	122 feet site elevation (SE) 35 feet above ground level (AGL) 157 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7276-OE

Signature Control No: 563112945-564037264 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-7276-OE

Proposal: To construct and/or operate a(n) Mobile Crane to a height of 35 feet above ground level, 157 feet above mean sea level.

Location: The structure will be located 2.19 nautical miles north of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of SKYLARK AIRPARK, (413) 537-5121 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 06/07/2024 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-7276-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7277-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Mobile Crane Point 5
Location:	Enfield, CT
Latitude:	41-57-47.70N NAD 83
Longitude:	72-33-49.61W
Heights:	122 feet site elevation (SE)
	35 feet above ground level (AGL)
	157 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7277-OE

Signature Control No: 563112949-564037267 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-7277-OE

Proposal: To construct and/or operate a(n) Mobile Crane to a height of 35 feet above ground level, 157 feet above mean sea level.

Location: The structure will be located 2.16 nautical miles north of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of SKYLARK AIRPARK, (413) 537-5121 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 06/07/2024 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-7277-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7278-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Mobile Crane Point 6
Location:	Enfield, CT
Latitude:	41-57-47.70N NAD 83
Longitude:	72-33-54.68W
Heights:	123 feet site elevation (SE)
	35 feet above ground level (AGL)
	158 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7278-OE

Signature Control No: 563112959-564037263 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-7278-OE

Proposal: To construct and/or operate a(n) Mobile Crane to a height of 35 feet above ground level, 158 feet above mean sea level.

Location: The structure will be located 2.15 nautical miles north of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of SKYLARK AIRPARK, (413) 537-5121 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 06/07/2024 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-7278-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7279-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Mobile Crane Point 7
Location:	Enfield, CT
Latitude:	41-57-48.10N NAD 83
Longitude:	72-33-54.43W
Heights:	123 feet site elevation (SE)
	35 feet above ground level (AGL)
	158 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7279-OE

Signature Control No: 563112963-564037271 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-7279-OE

Proposal: To construct and/or operate a(n) Mobile Crane to a height of 35 feet above ground level, 158 feet above mean sea level.

Location: The structure will be located 2.16 nautical miles north of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

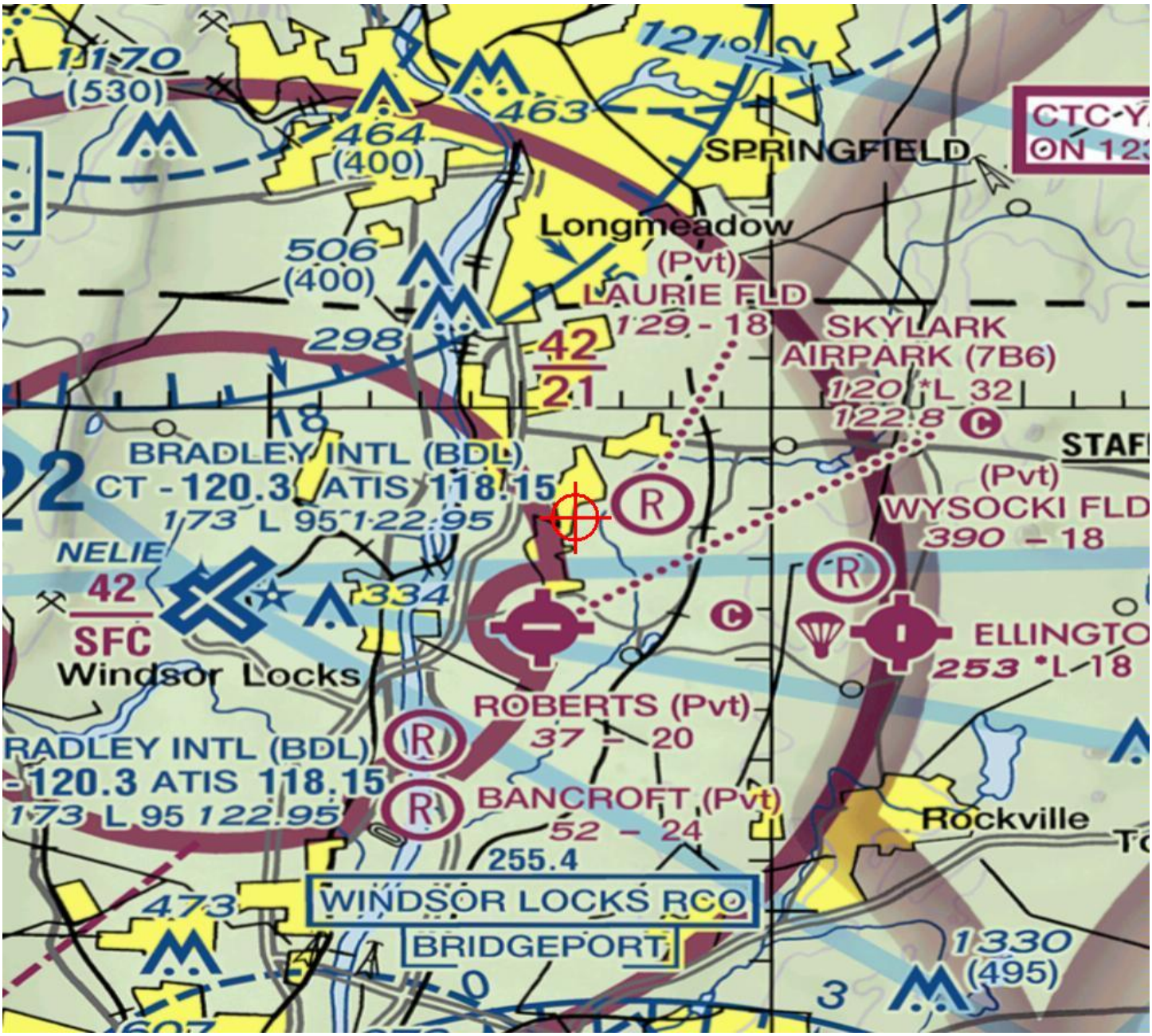
Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of SKYLARK AIRPARK, (413) 537-5121 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 06/07/2024 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-7279-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7280-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Mobile Crane Point 8
Location:	Enfield, CT
Latitude:	41-57-49.57N NAD 83
Longitude:	72-33-52.34W
Heights:	123 feet site elevation (SE)
	35 feet above ground level (AGL)
	158 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7280-OE

Signature Control No: 563112967-564037265 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-7280-OE

Proposal: To construct and/or operate a(n) Mobile Crane to a height of 35 feet above ground level, 158 feet above mean sea level.

Location: The structure will be located 2.19 nautical miles north of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of SKYLARK AIRPARK, (413) 537-5121 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 06/07/2024 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-7280-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7281-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Mobile Crane Point 9
Location:	Enfield, CT
Latitude:	41-57-50.11N NAD 83
Longitude:	72-33-52.78W
Heights:	124 feet site elevation (SE)
	35 feet above ground level (AGL)
	159 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7281-OE

Signature Control No: 563112970-564037270 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-7281-OE

Proposal: To construct and/or operate a(n) Mobile Crane to a height of 35 feet above ground level, 159 feet above mean sea level.

Location: The structure will be located 2.19 nautical miles north of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

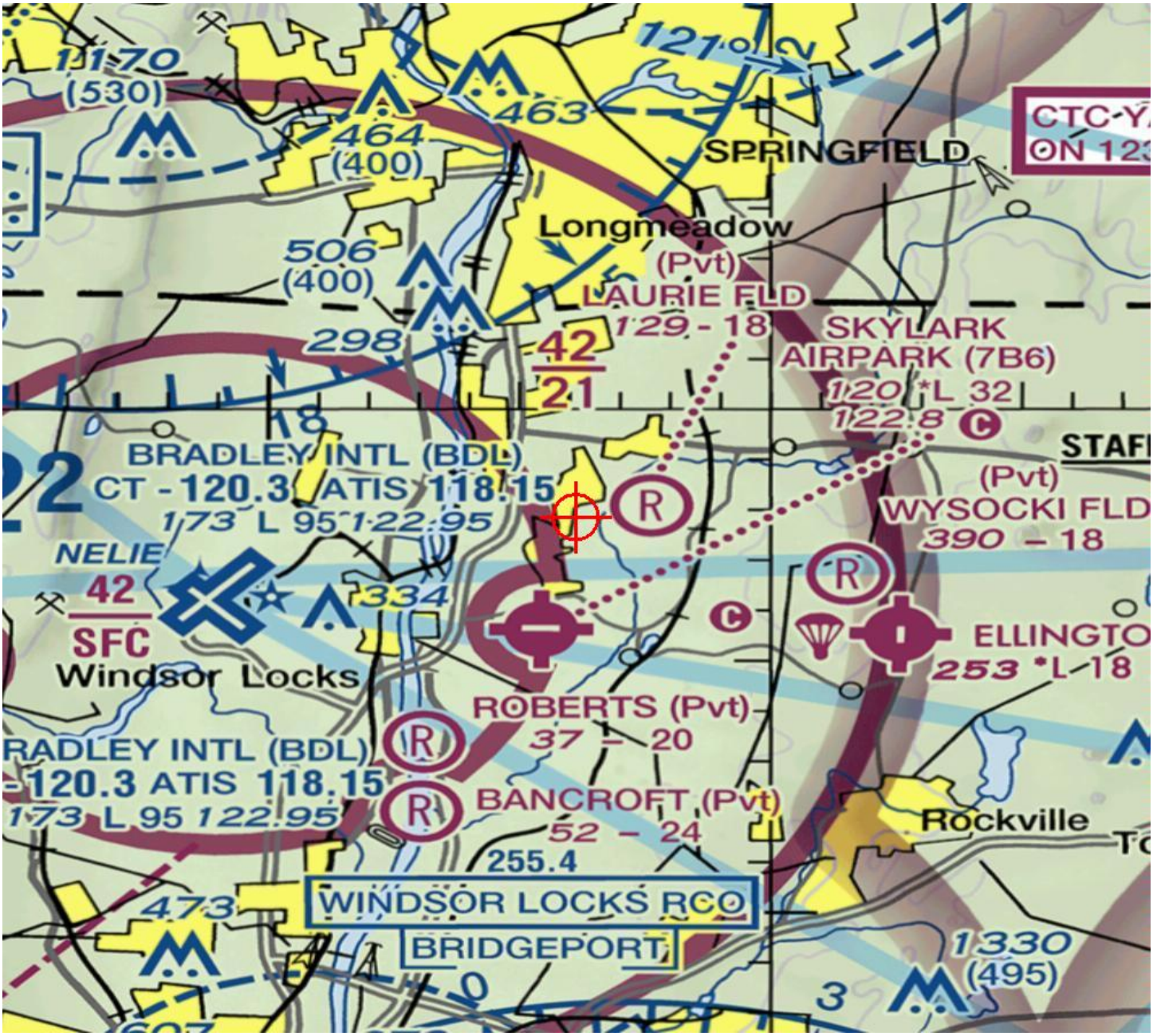
Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of SKYLARK AIRPARK, (413) 537-5121 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 06/07/2024 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-7281-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7282-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Mobile Crane Point 10
Location:	Enfield, CT
Latitude:	41-57-55.12N NAD 83
Longitude:	72-33-52.78W
Heights:	119 feet site elevation (SE)
	35 feet above ground level (AGL)
	154 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7282-OE

Signature Control No: 563112973-564037272 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-7282-OE

Proposal: To construct and/or operate a(n) Mobile Crane to a height of 35 feet above ground level, 154 feet above mean sea level.

Location: The structure will be located 2.27 nautical miles north of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of SKYLARK AIRPARK, (413) 537-5121 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 06/07/2024 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-7282-OE

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Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7283-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Mobile Crane Point 11
Location:	Enfield, CT
Latitude:	41-57-55.26N NAD 83
Longitude:	72-33-53.96W
Heights:	124 feet site elevation (SE)
	35 feet above ground level (AGL)
	159 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7283-OE

Signature Control No: 563112974-564037273 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-7283-OE

Proposal: To construct and/or operate a(n) Mobile Crane to a height of 35 feet above ground level, 159 feet above mean sea level.

Location: The structure will be located 2.27 nautical miles north of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

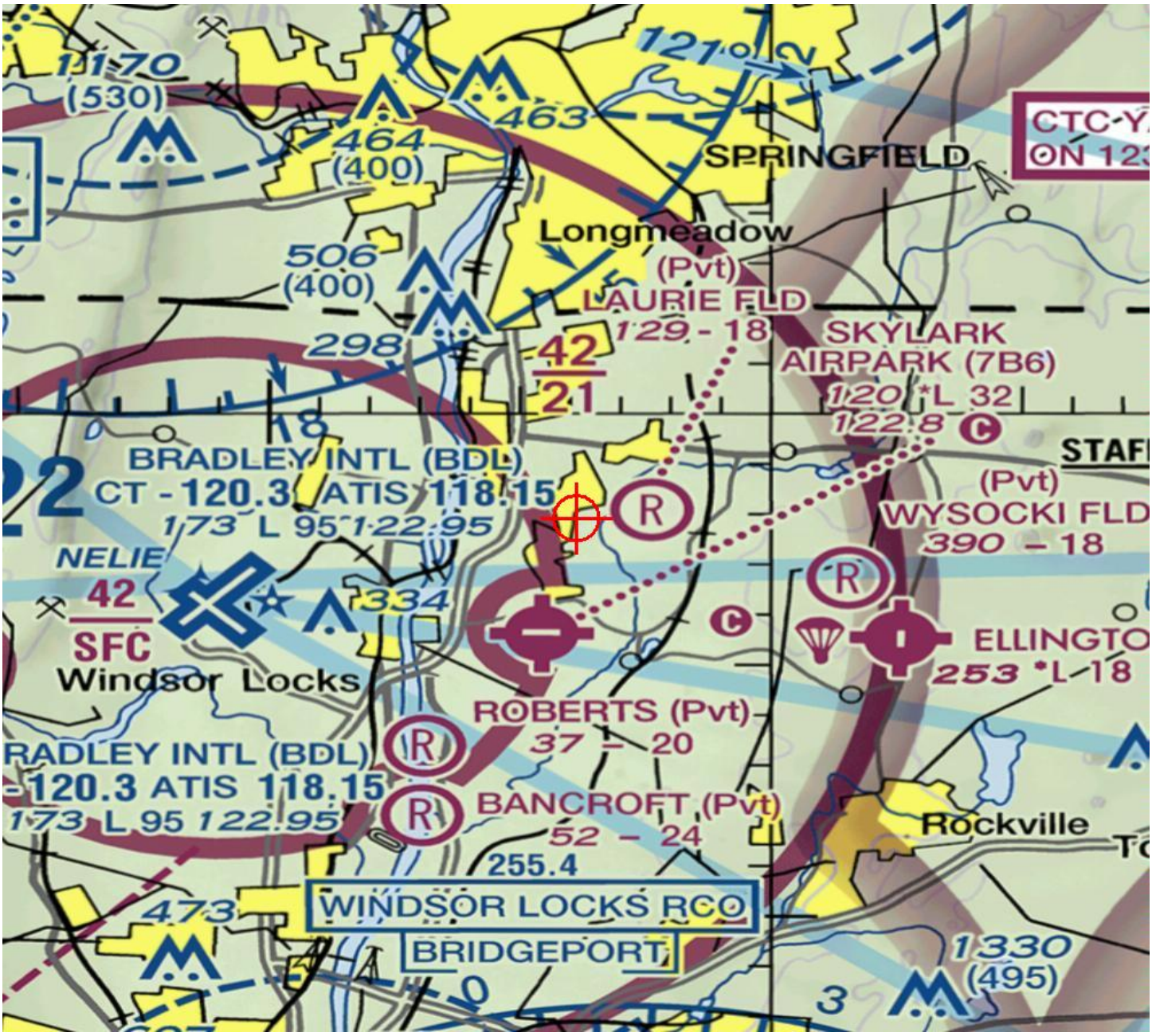
As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of SKYLARK AIRPARK, (413) 537-5121 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 06/07/2024 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.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BRIDGEPORT
473
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Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7284-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Mobile Crane Point 12
Location:	Enfield, CT
Latitude:	41-57-55.69N NAD 83
Longitude:	72-33-53.14W
Heights:	121 feet site elevation (SE)
	35 feet above ground level (AGL)
	156 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7284-OE

Signature Control No: 563112975-564037268 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-7284-OE

Proposal: To construct and/or operate a(n) Mobile Crane to a height of 35 feet above ground level, 156 feet above mean sea level.

Location: The structure will be located 2.28 nautical miles north of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of SKYLARK AIRPARK, (413) 537-5121 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 06/07/2024 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-7284-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7285-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Mobile Crane Point 13
Location:	Enfield, CT
Latitude:	41-57-56.48N NAD 83
Longitude:	72-33-47.48W
Heights:	113 feet site elevation (SE)
	35 feet above ground level (AGL)
	148 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7285-OE

Signature Control No: 563112976-564037266 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-7285-OE

Proposal: To construct and/or operate a(n) Mobile Crane to a height of 35 feet above ground level, 148 feet above mean sea level.

Location: The structure will be located 2.31 nautical miles north of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of SKYLARK AIRPARK, (413) 537-5121 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 06/07/2024 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-7285-OE

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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-7286-OE

Issued Date: 12/07/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Mobile Crane HP
Location:	Enfield, CT
Latitude:	41-57-47.81N NAD 83
Longitude:	72-33-50.18W
Heights:	140 feet site elevation (SE)
	35 feet above ground level (AGL)
	175 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

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A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-7286-OE

Signature Control No: 563112977-564037275 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-7286-OE

Proposal: To construct and/or operate a(n) Mobile Crane to a height of 35 feet above ground level, 175 feet above mean sea level.

Location: The structure will be located 2.16 nautical miles north of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of SKYLARK AIRPARK, (413) 537-5121 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 06/07/2024 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-7286-OE