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March 21, 2023

VIA ELECTRONIC MAIL AND HAND DELIVERY
Melanie Bachman
Executive Director/Staff Attorney
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Petition of 524 NLR LLC for a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is Required for the Proposed Construction, Operation and Maintenance of a Solar-Based Electric Generating Facility, with an Output of +/- 3.99 MW, to be Located at 524 New London Road, Colchester, Connecticut

Dear Ms. Bachman:

I am writing on behalf of my client, 524 NLR LLC, which is submitting the enclosed petition for a facility to be located at the above-referenced location in Colchester, Connecticut. With this letter, I am enclosing the original and fifteen copies of the Petition, including Appendices A-E for the Petition. I am also enclosing a check for $625.00, made payable to the Connecticut Siting Council.

Should you have any questions concerning this submittal, please contact me at your convenience.

Sincerely,

Lee D. Hoffman

Lee D. Hoffman
Enclosures

cc: Town Clerk, Town of Colchester, Connecticut

Petition of 524 NLR LLC for a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is Required for the Proposed Construction, Operation and Maintenance of a ±3.99 MW AC Ground-Mounted Solar Photovoltaic Electric Facility Located at 524 New London Road in Colchester, Connecticut

Prepared for:

The Connecticut Siting Council

March 21, 2023

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1 Introduction

This is a Petition for a declaratory ruling, pursuant to Connecticut General Statutes §§ 4-176 and 16-50k, and submitted by 524 NLR LLC (the "Petitioner"), that no Certificate of Environmental Compatibility and Public Need ("Certificate") is required for the development, construction, operation, and maintenance of a proposed solar photovoltaic electric generating facility (the "Project"), with an output of approximately 3.99 megawatts[1] ("MW") located in the Town of Colchester, Connecticut (the "Town").

The Petitioner, 524 NLR LLC, is a wholly-owned subsidiary Clean DG CT LLC, which shares the same principals and development team as Independence Solar LLC ("Independence Solar"). Independence Solar has successfully developed and installed over 65 MW of commercial solar projects across New England and the Mid-Atlantic since 2007.

The Connecticut Siting Council's (the "Council") approval of this Petition would allow the Petitioner to assist the State of Connecticut in achieving its goal of energy conservation and sustainability. The Project was selected in the Year 3 solicitation for the Shared Clean Energy Facility ("SCEF") program and awarded a SCEF contract by Eversource, which was approved by the Public Utilities Regulatory Authority ("PURA") on June 23, 2022. Projects participating in the SCEF program not only provide the state with clean energy generation under a twenty-year, fixed price agreement, but also provide utility bill savings credits to Connecticut ratepayers, particularly low- and moderate-income customers ("LMI"). If approved, the Project will commence with financing, detailed engineering, procurement, and construction in 2023, and with commercial operation planned for the first half of 2024.

The Project 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. Further, the proposed

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

Project is neither defined as an "affecting facility"[2] nor located within an "environmental justice community"[3] under Connecticut General Statutes § 22a-20a.

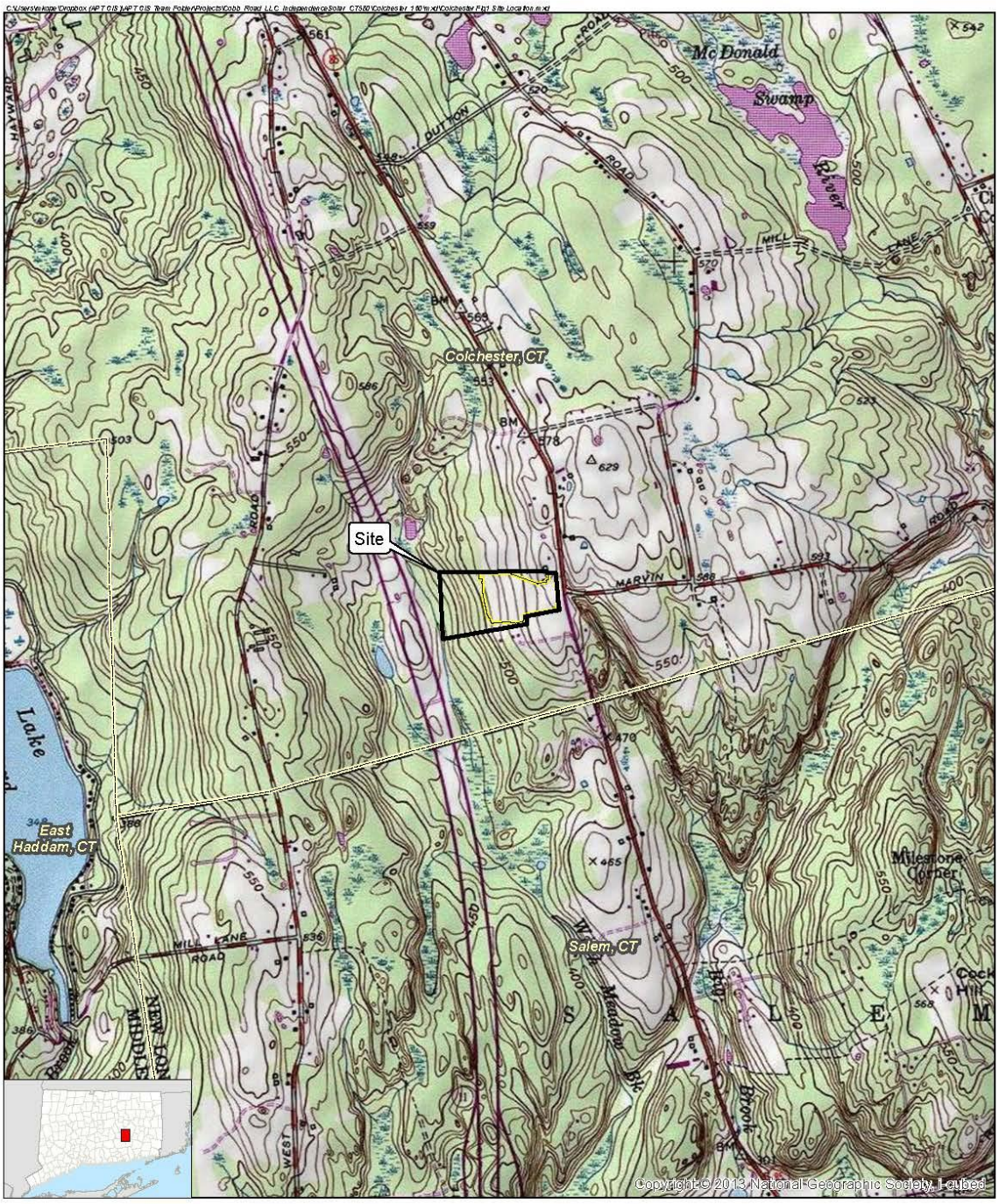
The Project will be located on a 35.56-acre property on the west side of New London Road (State Route 85) in Colchester, Connecticut (referred to herein as the "Site"). The eastern portion of the Site contains an automotive salvage yard. The western portion is undeveloped. The Site is within the Rural zoning district. The portion of the Site nearest Route 85 is also within the Route 85 Arterial/Commercial overlay district.

The current owner of the Site, Five J LLC, (the "Property Owner") will lease the Project Area (as defined herein) to Petitioner for a term of twenty-five (25) years with a ten-year renewal option term (the "Lease"). Pursuant to the Lease, the Property Owner will remove all salvage vehicles prior to Petitioner taking possession of the leased premises, and the Project will be decommissioned at the end of the Operations Period, as defined in the Lease.

Figure 1, *Site Location Map*, located on page 3, depicts the location of the Site and the immediate surrounding area.

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

[3] "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 § 32-9p.



Legend

- Site
- Project Area
- Municipal Boundary

Map Notes:
Base Map Source: USGS 7.5 Minute Topographic Quadrangle Map: Colchester, CT (1984)
Map Scale: 1 inch = 2,000 feet
Map Date: January 2023

2,000 1,000 0 2,000 Feet

Figure 1
Site Location Map

Proposed Solar Energy Facility
524 New London Road
Colchester, Connecticut

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2 Proposed Project

2.1 Project Setting

The Project will occupy ±16.49 acres in the eastern portion of the Site (the "Project Area"). The Project Area is entirely within the footprint of the developed portion of the Site (see Section 3.4.1), which is currently being used for the automotive salvage yard operations. The electrical service interconnection line will extend to New London Road at the northeastern corner of the Site. Access will be over an existing access drive from New London Road.

The Site's existing topography ranges from approximately 424 feet above mean sea level ("AMSL") to 578 feet AMSL. Grades within the Project Area slope downward from the east to the west, with ground elevations ranging from approximately 560 feet AMSL to 510 feet AMSL.

Figure 2, *Existing Conditions*, along with a few accompanying photographs, depict current conditions on the Site. As is discussed in greater detail below, the subject property is a brownfield by virtue of its current operation as an automobile salvage yard.

The surrounding area includes wooded areas and sparse residential development, with commercial development immediately to the south and agricultural fields to the east. State Route 85 borders the Site on the east. State Route 11 is to the west beyond the woodlands.

2.1.1 Project Benefits

The State of Connecticut has committed to develop its renewable energy market and mitigate the negative environmental impacts associated with traditional electric power generation. In so doing, it has set aggressive targets to reduce greenhouse gas ("GHG") emissions and to increase the deployment of Class I renewable energy.

The recommendation from the Governor's Council on Climate Change ("GC3") is that Connecticut's Renewable Portfolio Standard ("RPS") reach a target of 40 percent Class I renewable energy sources by 2030, with an aim to reduce the carbon intensity of the RPS to achieve the State's decarbonization goals. Additionally, Governor Lamont has set a 100 percent zero carbon target for the energy sector by 2040. Owners of renewable-electricity generation projects receive one renewable energy certificate (REC) for every megawatt-hour of renewable electricity they produce. Those RECs are traded in a regional market for state RPS compliance.

Connecticut establishes required annual REC percentages from three classes of renewable energy resources.

If approved, the Project will provide the following wide range of environmental and economic benefits to the State of Connecticut and the Town: (1) once operational, the Project will generate approximately seven thousand five-hundred and seventy-five (7,575) MWh per year and would effectively offset approximately five-thousand three-hundred and sixty-eight (5,368) metric tons of carbon dioxide annually (as estimated by the US EPA's Greenhouse Gas Equivalencies Calculator – March 2022 Update Version) and generate more RECs in Connecticut; (2) a reduction in energy demand during peak usage will decrease energy costs for ratepayers Statewide; (3) utility bill savings for Connecticut ratepayers, particularly LMI customers, via the SCEF program; (4) the creation of construction jobs in the region; (5) the adaptive re-use of an existing salvage yard; and (6) the construction of a new renewable energy site without the need for any tree clearing.

Figure 2
Existing Conditions Map

Proposed Solar Energy Facility
524 New London Road
Colchester, Connecticut

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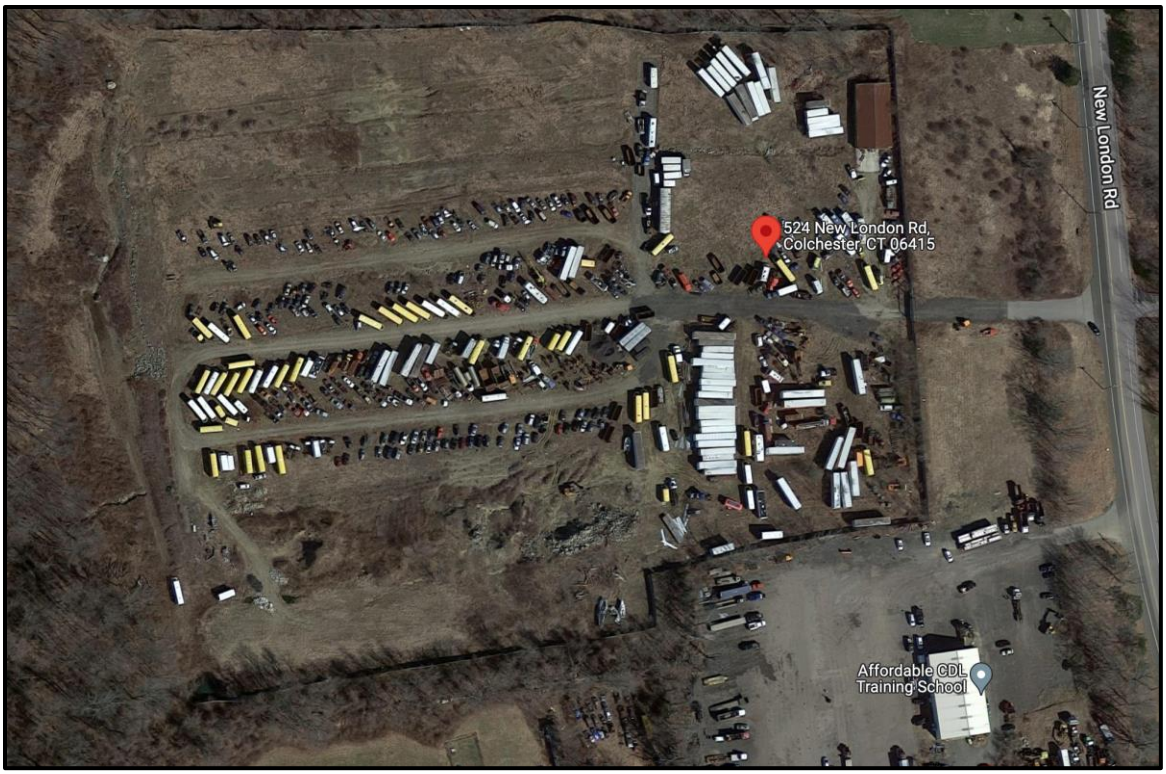

524 New London Rd,
Colchester, CT 06415
New London Rd
Affordable CDL
Training School

2.2 Project Development and Operation

The solar electric energy generating facility (the "Facility") will consist of a total of 7,655 665W photovoltaic modules ("panels"), 24 string inverters, 2 power transformers, and associated equipment. The total number of panels may be adjusted based on the available panel wattage and form factors once the Project is ready to begin material procurement after receiving the necessary approvals, however, the total panel area is expected to stay approximately the same. A ground-mounted single-axis tracker racking system will be used to secure the panel arrays. The perimeter of the Facility will be surrounded by a solid nine (9)-foot tall solid fence along New London Road (similar in appearance to the current fence at the Site for the automotive recycling operation) and would transition to a seven (7)-foot tall chain link fence west of the northeast and southeast corners of the Facility. The current salvage yard operation has an existing solid perimeter fence on the eastern, northern and southern sides, which, after construction of the Project will remain on the northern and southern sides and is located outside of the proposed chain link fencing for the Project in those areas. The Project will also require one (1) electrical service interconnection that will extend from the existing Eversource distribution system along the west side of New London Road. The interconnection route will run overhead on four (4) utility poles to the northeast corner of the Facility and from there to pad-mounted electrical equipment.

The Facility entered into an Interconnection Agreement with Eversource on April 15, 2022 and received its ISO-NE I.3.9 determination of no significant adverse effect letter in March of 2022. Electrical connections will then extend underground into the Facility. Once complete, the fenced Facility will occupy approximately 13.44 acres of the Site with an additional ±3.05 acres of improvements beyond the fenced limits, for a total Project Area of ±16.49 acres.

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

The leading edge of the panels will be at least 3.0 feet 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 anticipate a need for any "snow removal" operations; rather, the snow will be allowed to melt or slide off.

Construction activities within the Project Area will require the following:

- installing erosion and sedimentation control measures;
- creating four (4) temporary sediments traps and associated grading;
- installing racking and modules;
- trenching for electrical service and interconnection;
- installing four (4) overhead utility poles for interconnection to the existing electrical distribution system along New London Road; and
- Performing earthwork 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* (the "General Permit"), including the creation of a perimeter drive, the grading associated with the required drainage and erosion and sedimentation control features, such as cuts or fills), the removal and/or re-use of existing material stockpiles, including gravel, rock, and soil from the construction and operation of the current automotive salvage facility within the Project Area, and the construction of temporary sediment traps.

Construction activities would be expected to occur between 7:00AM to 6:00PM Monday through Friday and possibly Saturday between the same hours if necessary. After construction is complete and the Facility is operable, traffic at the Site will be minimal. The Facility would be unstaffed. It is anticipated that the Facility will require routine maintenance of the electrical equipment and

tracker system four (4) times per year. Annual maintenance will typically involve two (2) technicians for one (1) 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 and maintain a meadow environment. Depending on site-specific conditions, additional mowing (e.g., 2 to 3 times annually) may be required to prevent taller species from shading the panels.

2.2.1 Access

The Facility will be accessed from New London Road via an existing driveway. An eighteen-foot (18-ft) wide gravel drive will extend around the perimeter of the Facility to provide access within 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. In addition, although panel selection has not been finalized, the Project is aware of the Council's desire to have all panels installed in solar facilities to be compliant with US EPA's Toxicity Characteristic Leaching Process ("TCLP") test. Thus, any panels selected for the Project will meet TCLP standards. The Facility will not consume any raw materials or produce any by-products and will be unstaffed during normal operating conditions.

Most of the Facility will be enclosed by a seven (7)-foot tall chain link fence. Along New London Road, and at the northeast and southeast corners of the Site, the fence will be a solid nine-foot (9-ft) tall fence, which matches the fence currently in place. 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 de-energize via a main disconnect switch located outside of the fenced area near the Project entrance in the case of an emergency.

2.2.3 Public Outreach

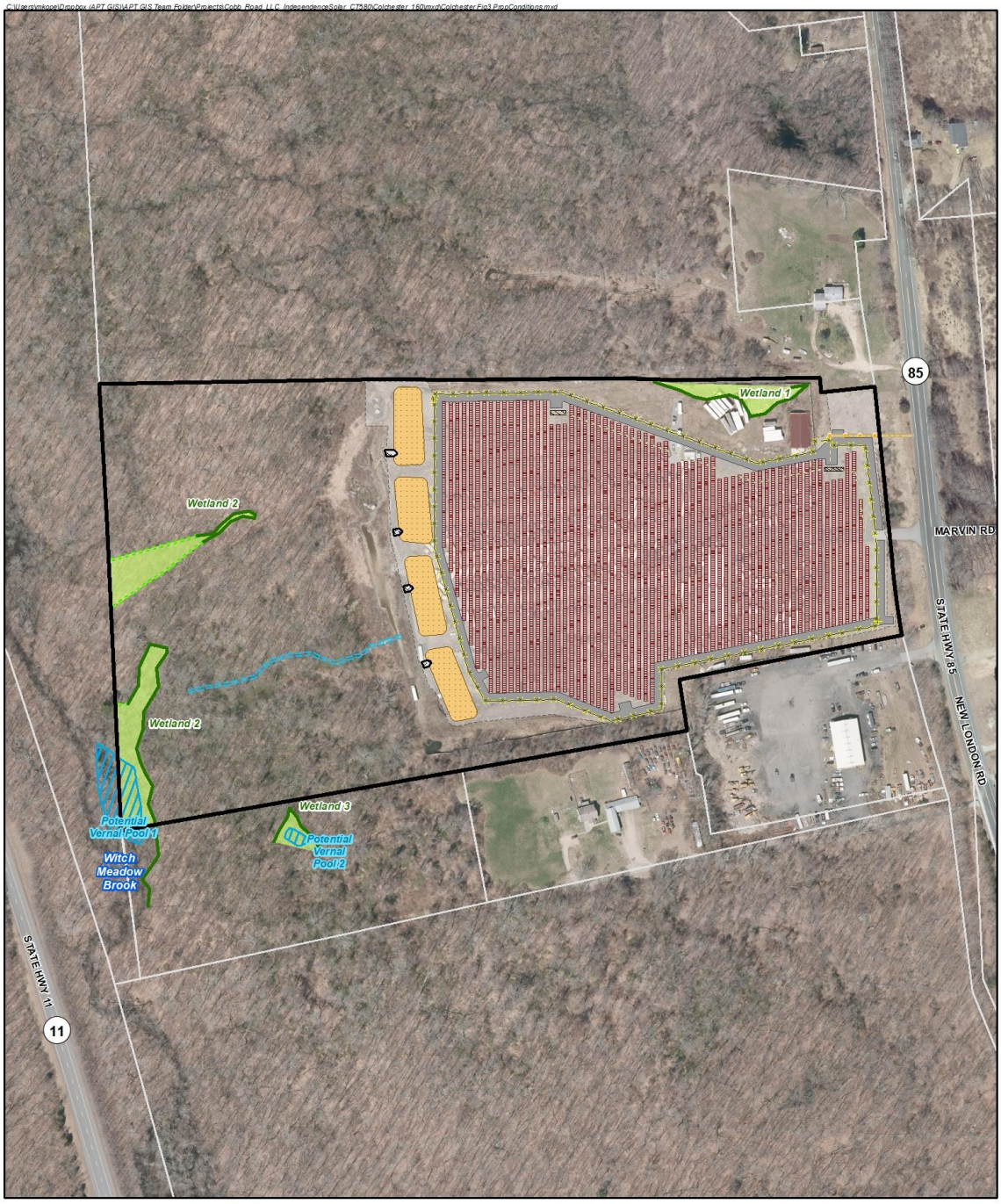
Petitioner has initiated discussions with direct abutters to the Site, residents of the community, and local business owners in the Town to inform them about the Project and respond to any questions they had. Petitioner has provided all abutters to the Site with notice of the Project as well. A summary of the notices that were sent to the public is included as Appendix E.

In addition, Petitioner has met with the Town's First Selectman in January of 2023, to review the Project and propose a Tax Stabilization Agreement with the Town. The First Selectman indicated that he didn't have any further questions or comments about the Project for the Petitioner at that time but would be in touch if the Town wished to discuss the Tax Stabilization Agreement further.

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 Project will comply with the DEEP air and water quality standards and will not have an 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.



Legend

- Site
- Approximate Parcel Boundary
- Fence
- Overhead Utilities
- Underground Utilities
- Utility Pole
- Solar Modules
- Concrete Pad
- Temporary Sediment Rip-Rap Overflow Weir
- Gravel Access Drive
- Temporary Sediment Trap
- Limit of Distrubance
- Potential Vernal Pool
- Eroded Channel
- Approximate Wetland Boundary
- Delineated Wetland Boundary
- Wetland Area

Map Notes:
Base Map Source: 2019 Aerial Photograph (CTECO)
Map Scale: 1 inch = 300 feet
Map Date: January 2023

N

300 150 0 300 Feet

Figure 3
Proposed Conditions Map

Proposed Solar Energy Facility
524 New London Road
Colchester, 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 and, therefore, the operation of the Facility will have no adverse effects on air quality and no permit is required.

Temporary, 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 by limiting idling times of equipment, properly maintaining 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 (the "EPA").

3.2 Water Resources

3.2.1 Wetlands and Watercourses

All Points Technology ("APT") Registered Soil Scientists identified portions of three (3) wetlands on or proximate to the Site during a field inspection and wetland delineation completed on August 11, 2022. The results of this investigation are summarized below. The location of these resources is depicted on Figure 2, *Existing Conditions*.

Wetland 1 is located in the northeastern corner of the Site within a heavily disturbed area consisting of altered/filled material and containing abandoned vehicles/debris. Draining north off-Site, this wetland contains bordering emergent vegetation consisting predominantly of common reed, soft rush, sensitive fern, and bladder sedge, transitioning to an interior scrub/shrub complex dominated by speckled alder, bebb willow, and eastern cottonwood saplings. Historic grading and filling associated with the current and former salvage yard operation has resulted in a perched water table within this disturbed wetland feature. Off-Site undisturbed portions of this wetland consist of bordering scrub-shrub, transitioning to an interior forested red maple-dominant wetland.

Wetland 2 is located in the far western extents of the Site and consists of a forested wetland dominated by red maple and yellow birch overstory. This resource is removed from the salvage yard, with seasonally saturated hillside seeps that drain west off-Site over rocky soils, eventually

discharging into seasonally-flooded backwater channels associated with a perennial watercourse identified as Witch Meadow Brook. These backwater channels contain buttressed roots, micro-depressions with sparse vegetation, and moss trim lines that are indicative of seasonal inundation that potentially supports vernal pool habitat, identified as potential vernal pool 1 ("PVP 1").

Wetland 3 is off-Site, south of the western portion of the Site. It is comprised of seasonally saturated soils with seepage outbreaks that form along shallow densic contacts (dense glacial till) resulting from a shallow, seasonally perched water table. This resource is predominantly forested, dominated by red maple. An interior pocket of emergent vegetation displays physical evidence of seasonal inundation that may support vernal pool breeding habitat, identified as PVP 2. If breeding habitat is supported, it may be limited due to apparent shallow depth of inundation (6 inches or less).

3.2.2 Vernal Pools

PVPs 1 and 2 are potential cryptic-style vernal pools. Surveys for breeding of obligate vernal pool species were not performed because the 2022 breeding season had passed, however, because the entire Project Area is within Developed Habitat that provides suboptimal terrestrial habitat and there is substantial distance between these features and the Project Area, the following analysis assumes both PVPs support productive vernal pool breeding by obligate species.

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 conservation of adjacent habitat up to 750 feet from the vernal pool edge for obligate pool-breeding amphibians (Calhoun, Klemens, 2002; "BDP").[4] Although construction activity will be taking place within this 750-foot area (the Project Area limits are ±713 feet from PVP 1 and ±425 feet from PVP 2), disturbance will be limited to previously developed areas that are suboptimal vernal pool terrestrial habitat. Off-Site undisturbed wetland and forested habitats to the north and southwest of the Project offer higher quality terrestrial habitat that would support possible migratory vectors for vernal pool obligate species. Construction and operation of the Facility would not result in a direct physical impact to either vernal pool nor would it impact higher quality terrestrial habitat or intercept principal migratory vectors. The Facility would be built well outside

[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.

the 100-foot Vernal Pool Envelope and no clearing of forested habitat is associated with the Project. Although the Project Area would be within the Critical Terrestrial Habitat zone, development of the Facility does not increase already-developed areas within said zone associated with either vernal pool. Therefore, the Project is not likely to result in an adverse impact to the two PVPs or obligate vernal pool species populations that could be utilizing these pools and the surrounding forested habitats.

3.2.3 Wetland Impacts

The Project will not result in any direct impacts to wetland resources. The nearest activity to wetland resources would be landscape plantings which will be installed within ±47 feet of Wetland 1 to provide a vegetated buffer between the development and New London Road. A small portion of the perimeter fencing and the road will be located ±95 feet from Wetland 1 with solar modules maintaining a 100-foot minimum buffer. Significant buffers of ±313 feet and ±415 feet, respectively, would exist between the Project and Wetlands 2 and 3. Construction activities are not expected to result in an adverse impact to the Site's wetland resources based on these buffers and the existing disturbed condition of Wetland 1, in addition to the fact that the Project will not require clearing of any mature vegetation within those buffers. Table 1, *Summary of Project Wetlands*, provides the distances to wetland resources.

Table 1: Summary of Wetlands

Distance to Wetlands	
Distance from Wetland 1 (± ft.)	47
Distance from Wetland 2 (± ft.)	313
Distance from Wetland 3 (± ft.)	415

3.2.4 Floodplain Areas

The Facility will not be located within a 100- or 500-year flood zone. APT reviewed the United States Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Map ("FIRM") covering the Site. A FIRM is the official map of a community on which FEMA has delineated both the special hazard areas and risk premium zones applicable to the community. The area inclusive of the Site is mapped on FIRM PANEL #09011C 0168 G, dated July 18, 2011. Based upon the reviewed FIRM Map, the Site is located in an area designated as Zone X, which is defined as an area of minimal flooding, typically above the 500-year flood level.

No special design considerations or precautions relative to flooding are therefore required for the Facility. As no portion of the Project Area is proposed to be located in or impact 100- or 500-year flood zones, no impacts are anticipated to floodplain or downstream areas.

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".[5] This classification indicates groundwater within the area is presumed to be suitable for human consumption without treatment.

Based upon a review of available DEEP mapping, the Site is not located within a mapped (preliminary or final) DEEP Aquifer Protection Area. The nearest Aquifer Protection Area is located approximately 0.48 miles northwest of the Site.

No public water system serves the area surrounding the Site; it is therefore presumed that neighboring developed properties are served by private wells. Typical construction techniques for installation of the Facility do not require blasting or other similar measures. Construction and operation of the Facility should have no impact to groundwater resources. 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 48 (Eightmile River), Subregional Drainage Basin 4802 (East Branch Eightmile River), and Local Drainage Basin 4802-02 (Witch Meadow Brook above unnamed brook).

[5] Designated uses in GA classified areas include existing private and potential public or private supplies of drinking water and base flow or hydraulically connected surface water bodies.

Based upon DEEP mapping, Witch Meadow Brook is located downgradient and approximately 50 feet west of the Site and approximately 870 feet west of the Project area. Witch Meadow Brook is classified as a Class A surface waterbody by the DEEP.[6] The Project will have no effect on this surface waterbody.

Based upon DEEP mapping, the Site is not located within a mapped Public Drinking Supply Watershed. The nearest Public Drinking Supply Watershed is located approximately 0.35 miles to the east.

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*.

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 comply with Appendix I. Combined, these address three (3) main concerns: (1) stormwater runoff peak attenuation; (2) water quality volume treatment; and (3) E&S control during construction. The Petitioner will apply for a General Permit from DEEP. Technical details, mapping, and HydroCAD modeling results will be included in a Stormwater Management Report to be provided to DEEP. A copy of the Stormwater Management Report is included in the Project's Environmental Assessment. Information regarding stormwater management at the Project is provided below.

Stormwater Runoff Peak Attenuation

The potential for changes in runoff from the Site as a result of Project construction has been evaluated and addressed in compliance with Appendix I. The Project will require the installation of solar racking and panels, utility poles for interconnection, underground utilities, equipment pads, and a perimeter access drive. Stormwater conditions post-construction will be improved due to the elimination of interior impervious access drives, and the establishment of competent ground cover vegetation throughout the Facility.

[6] Designated uses for A classified waterbodies include potential drinking water supply, fish and wildlife habitat, recreational use, agricultural and industrial supply and other legitimate uses including navigation.

The stormwater calculations for the Project predict that the post-development peak discharges to the waters of the State of Connecticut for the 2-, 25-, 50- and 100- year storm events are less than the pre-development peak discharges. Therefore, the Project is not anticipated to result in any adverse conditions to the surrounding areas and properties.

Water Quality Volume Treatment

As noted above, the Project would result in a net reduction of impervious cover on the Site. In addition, the Project Area will be stabilized and planted with a seed mix tailored to nutrient-poor soils, which will result in a meadow-type cover. As a result, the amount of stormwater runoff would be reduced. Water quality is expected to improve without any additional stormwater management features.

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"), which will be submitted to DEEP Stormwater Management as part of the General Permit application process. The SWPCP will include the 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* and Appendix I.

To meet the requirement of the General Permit, four (4) temporary sediment traps will be installed prior to the start of Facility construction. Perimeter erosion controls (silt fence) will be placed on portions of the Project Area, as indicated in the Project drawings, to capture sediment potentially mobilized during site work. The traps will be cleaned of deposited sediment as needed during construction to maintain sufficient sediment storage capacity. Upon final site stabilization, they will be removed, and the area will be regraded and stabilized.

At the start of construction, open areas will be temporarily stabilized with appropriate seed mixes and soil amendment as necessary. The Project Area will be seeded with a permanent seed blend tailored to the amended soil condition upon completion of construction. The phased erosion control plan and details are provided in Appendix A, *Project Plans*.

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

Three (3) distinct habitat types (vegetative communities), separated by transitional ecotones, are located on the Site. These habitats were assessed using remote sensing and publicly available datasets and were physically inspected during the August 11, 2022 field evaluation.

The habitats occupying the Site are as follows.

- Developed;
- Upland Forest; and
- Forested Wetland

3.4.1 Habitat Types

Developed

Developed areas encompass most of the eastern-half and central portions of the Site. Currently utilized as a salvage yard, the ±21.17-acre Developed area consists of a combination of gravel and udorthents (moderately well-drained to excessively well-drained soils that have been disturbed through historic cutting and/or filling) with an assortment of immobile vehicles, debris, and trailers. The entire Project Area will be located within this Developed habitat. These soil surfaces are disturbed, nutrient-poor, compacted, and impacted from routine vehicle movement and prolonged storage of metal, debris, and scrap salvage, which has inhibited the growth of vegetation. This habitat is characterized by sparsely vegetated areas with autumn olive, speckled alder, goldenrod, black-eyed susan, red clover, and mugwort; autumn olive and mugwort are classified as non-native invasive species. The intensive land use and lack of vegetation has resulted in the Developed habitat providing minimal wildlife habitat value. As described in Section 3.1.1, Wetland 1 is within this Developed area and has experienced historic alteration.

An existing, approximately nine-foot (9-ft) tall security fence encompasses three sides of the salvage yard, which also restricts wildlife movement and further degrades the quality of the resource from a habitat perspective. The open and unfenced western boundary contains an

existing stormwater basin and swale with evidence of woody debris along the transitional interface to the upland forest. This transitional scrub/shrub area is dominated by autumn olive, honeysuckle bush, and multiflora rose, separating this habitat from surrounding Upland Forest habitats. Honeysuckle bush and multiflora rose are classified as non-native invasive species.

Upland Forest

The Upland Forest habitat occupies a large portion of the western half of the Site and serves as a transitional area between the Developed and Forested Wetland habitats. This habitat is characterized by mixed-aged hardwood forest with a dense shrub understory. It is part of a larger forested block that includes off-Site habitat to the north and south and adjacent Forested Wetland habitats. The Upland Forested habitat differs from the adjacent Forested Wetland habitats in that it occurs entirely within well-drained upland areas and has a significantly different vegetative species composition. Dominant species within the Upland Forest habitat include American beech, sugar maple, and black birch. These areas are characterized by a moderately dense understory dominated by hornbeam, American hophornbeam, and Japanese barberry. Japanese barberry is classified as a non-native invasive species. The forest floor consists of hayscented fern, cinnamon fern, and Christmas fern.

Development of the Facility will not result in any impacts to the Upland Forest habitat-type. Any potential short-term indirect impacts during the Project's construction phase will be minimized through the proper stabilization of soils in accordance with the 2002 *Connecticut Guidelines for Soil Erosion and Sediment Control*.

Forested Wetland

As introduced in Section 3.1.1, Forested Wetland habitat occupies areas along the western property boundary. The on-Site wetlands in this portion of the Site consist of seasonally saturated seeps dominated by a mixed hardwood forest draining west into a broad backwater riparian complex with pockets of seasonally flooded and/or semi-permanent flooded depressions. Dominant species within this habitat include red maple, yellow birch, spicebush, Japanese barberry, cinnamon fern, skunk cabbage, jewelweed, Japanese stilt grass, and sphagnum moss. Japanese stilt grass is classified as a non-native invasive species.

With the exception of a minor encroachment into the 100-foot buffer to Wetland 1 associated with landscaping and perimeter fencing and road, a minimum 100-foot setback from surrounding

Wetland habitat will be maintained throughout the Project. There is no proposed tree clearing within this habitat, and erosion and sediment control measures will be installed and maintained as part of the Project to avoid potential secondary impacts. As such, no significant impacts are anticipated to the Forested Wetland habitat.

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

Table 2: Habitat Areas

Habitat Areas		
Habitat Type	Total Area On-Site (± ac.)	Area Occupied by Project (±ac.)
Developed	21.17	16.49
Edge Forest	13.45	0.00
Forested Wetland	0.90	0.00

3.4.2 Core Forest Determination

The entire Project Area is cleared and developed; no tree removal is required for development of the Facility. As a result, the Project will not affect core forest resources.

In accordance with General Statutes §16-50k(a), the Petitioner consulted with the DEEP Forestry Division in August 2022, regarding Site information and the Project. DEEP responded on September 26, 2022, confirming that the Project "**will not** materially affect the status of such Site as core forest." (Emphasis in original) See Appendix C of the Environmental Assessment, DEEP and DOA correspondence.

3.4.3 Wildlife

Project-related impacts within on-Site habitats are limited and are not anticipated to adversely affect wildlife.

Project development will occur within only one of the Site's three habitats, the Developed habitat. Developed habitat areas currently provide limited value from a wildlife utilization standpoint due to the lack of vegetation and site disturbance associated with the existing use as a salvage yard.

Based on the surrounding land uses, the adjacent edge upland forest located in proximity to the Project Area is likely utilized by species that are more tolerant of human disturbance and habitat fragmentation. Generalist wildlife species, including several songbirds and mammals, including raccoons, striped skunks, grey squirrels, Virginia opossums, white-tailed deer, and eastern chipmunks could be expected to use this area. Due to the relatively small size of this habitat block, lack of direct impacts, and the abundance of similar habitat surrounding the Site, the Project is not anticipated to result in a significant impact to wildlife.

The Project Area will not encroach into the western Upland and Forested Wetland habitats. Project development will occur entirely in areas with existing development and disturbance. As a result, wildlife utilization within these habitats is expected to continue relatively uninterrupted. Noise and associated human activities during construction may result in limited, temporary disruption to wildlife using nearby Forested Wetland habitat. Any wildlife that may be temporarily displaced are expected to relocate deeper into existing wetland habitats of similar character to the west, north, and south. Post-construction, operation of the Facility will not result in a likely adverse effect on wildlife using these habitats because it will be unoccupied and does not generate any significant noise or traffic.

In addition, pollinator-friendly seed mixes will be incorporated into the final plantings throughout the Project Area, including beneath the panels and between the panel rows, replacing sparsely vegetated areas currently in use for automotive salvage operations. This blend will have a mix of shade tolerant and sun tolerant seeds so that full coverage can be expected. Moreover, because a significant portion of these plantings will take place on land that was previously used as an automotive scrap yard, it is anticipated that this seed blend will be a net gain for the area's wildlife.

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 developers determine potential project-related impacts 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. This data is 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 landowners' rights whenever species exist on private property.

APT reviewed the most recent DEEP NDDB mapping (December 2022), which revealed that the nearest existence of state-listed species is located ±0.99 mile west/southwest from the Site. Because no state-listed species or communities are documented on the Site, consultation with NDDB is not required in accordance with their review policy.

3.5.2 USFWS Consultation

Federal consultation was conducted 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[7] endangered species occurs within the vicinity of the Site, known as the northern long-eared bat ("NLEB"; *Myotis septentrionalis*). 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 ("DBH") of three (3) inches or greater. Effective March 31, 2023, NLEB will be reclassified from threatened to endangered. As a result, a change to the consultation process for this species is expected.

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

[7] Listing under the federal Endangered Species Act

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 North Branford, ±25.3 miles to the southwest.

APT completed a "determination of compliance" pursuant to Section 7 of the Endangered Species Act of 1973 under the previously allowed 4(d) determination key consultation process. In compliance with the USFWS criteria for assessing NLEB which is in effect until January 30, 2023, the Project will not likely result in an adverse effect or incidental take[8] of NLEB and does not require a permit from USFWS. A USFWS letter, dated August 23, 2022, confirmed compliance at the time of consultation. Once the new NLEB consultation process is made available by USFWS, the project will be reassessed under the new compliance tools. Since the Project does not require tree clearing, no likely adverse effect to NLEB is anticipated even with the reclassification of this species.

A full review of the *Endangered Species Act (ESA) Compliance Determination* and USFWS's Response Letter is provided in Appendix B of the Environmental Assessment, *USFWS and NDDB Compliance Statement*.

3.6 Soils and Geology

Surficial materials on the Site are classified as thin and thick deposits of glacial till. Bedrock beneath the Site is identified as Brimfield Schist. Brimfield Schist is described as a gray, rusty-weathering, medium to coarse-grained, interlayered schist and gneiss, composed of oligoclase, quartz, K-feldspar, and biotite, and commonly garnet, sillimanite, graphite, and pyrrhotite. K-feldspar partly as augen. The Petitioner does not expect to encounter bedrock during Project development.

Soil from the construction of the temporary sediment traps will be retained in stockpiles and reused upon the decommissioning of the sediment traps. Grading within the Facility is not anticipated to generate excess soil. See Appendix A*, Project Plans.*

[8] "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.

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*.

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[9], nearly all of the Project Area contains Prime Farmland Soils, with the remainder Statewide Important Farmland Soils (See Figure 2, *Existing Conditions Map)*. The Site is currently being used as a scrapyard, therefore, there is no agricultural use associated with the Site. Indeed, the Site's potential for agriculture has been adversely impacted by its prior use as an automotive scrap yard.

Connecticut's Department of Agriculture ("DOA") recognized these adverse impacts to agriculture at the Site. In accordance with General Statutes §16-50k(a), the Petitioner initiated consultation with the DOA in August 2022, providing the DOA with information on the Site and the Project. DOA responded on October 17, 2022, recognizing the impact that the automotive recycling operations had on the agricultural resources and concluded that "there will be no further material impact, beyond the existing impact" on prime farmland soils. See Appendix D of the Environmental Assessment, DEEP and DOA correspondence.

3.7 Historic and Archaeological Resources

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 two archaeological sites are located within one (1) mile of the Site and no National or Connecticut State Register of Historic Places properties were identified within one (1) mile of

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

the Site. Their pedestrian survey revealed that the Site has been subjected to extensive modern disturbance, and therefore the Site retains no/low potential to yield archaeological sites.

The SHPO concurred, stating that "no additional archaeological investigation of the project area is warranted and that no historic properties will be affected by the proposed undertaking."

The Phase 1A report and the SHPO response, dated September 23, 2022, are included in Appendix D of the Environmental Assessment.

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 located approximately 1.22 miles north of the Project Area; Dutton Road is designated as a local (Colchester) scenic road.

There are no Connecticut Blue Blaze Hiking Trails, municipal parks, or State parks or forests located proximate to the Site. The Project will have no effect on any scenic or recreational resources.

See Figure 4, *Surrounding Features Map,* for resources located within one mile of the Project Area.

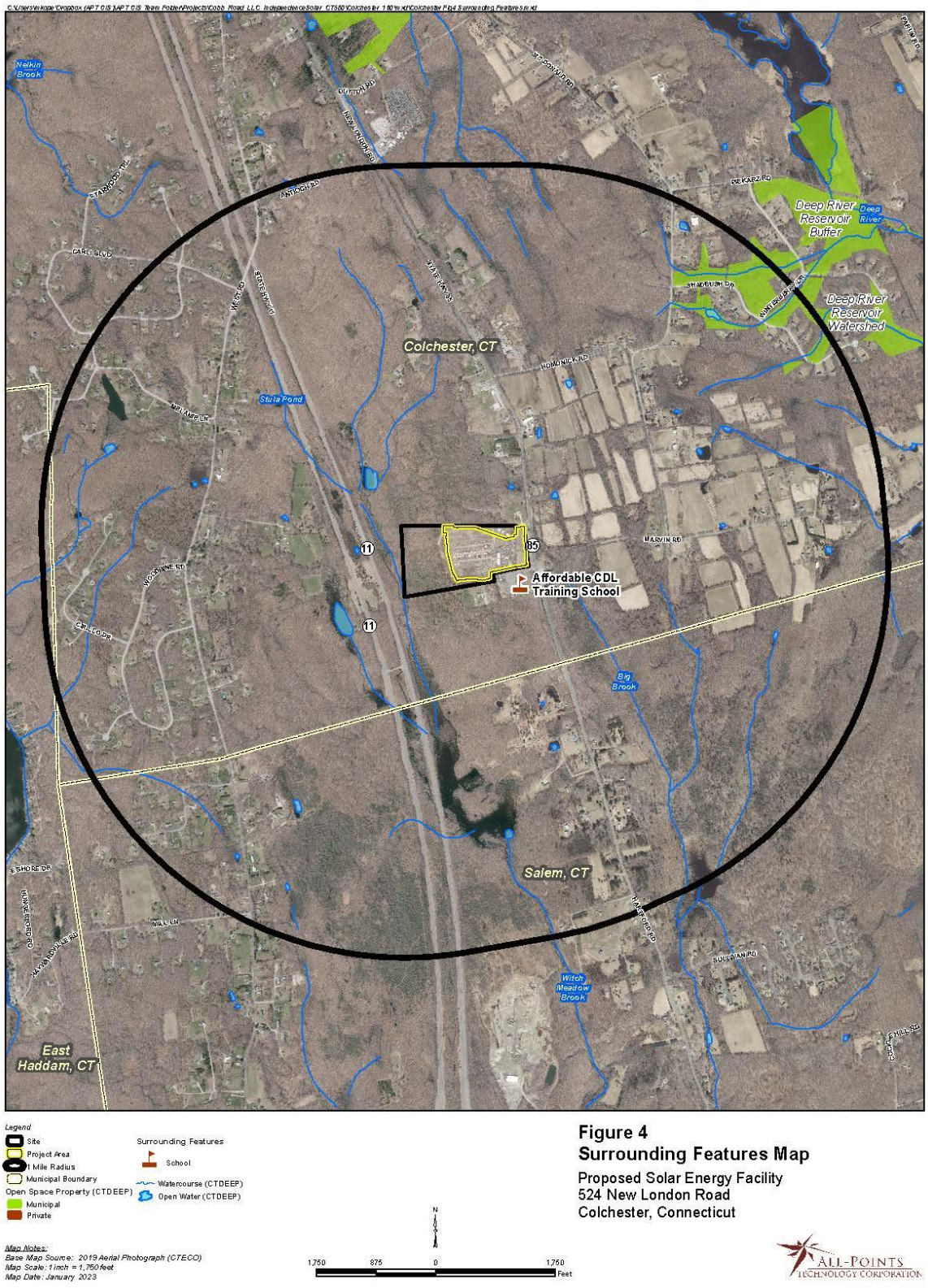

Figure 4
Surrounding Features Map
Proposed Solar Energy Facility
524 New London Road
Colchester, Connecticut

ALL-POINTS TECHNOLOGY CORPORATION

3.9 Noise

The Site contains an auto salvage yard and wooded land. Noise associated with human activities is currently generated on the Site.

Construction noise is exempt under Connecticut regulations for the control of noise, RCSA 22a-69-1.8(h)[10]. 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.

Once operational, noise from the Facility will be minimal and generated from inverters (daytime only), transformers and tracker motors. The highest anticipated source of noise is the inverters, which will be located at the northern end of certain module rows. The inverters will generate a maximum sound level of approximately 73 dBA measured at 1-meter (3.281 feet) away. The Facility would, conservatively, be considered a Class C (Industrial) noise emitter. The nearest property line from the northern end of the rows is ±50 feet to the north, an undeveloped property on New London Road. That property is within the Town's Rural zoning district, which allows for activities within the Class B noise zone; noise standards of 66 dBA apply to the Class B receptor. The nearest residence to the northern end of the rows is at 504 New London Road, ±347 feet to the north. The residentially developed property would be considered a Class A noise zone; noise standards of 61 dBA during the daytime and 51 dBA at night apply to the Class A receptor.[11]

Sound reduces with distance, and the inverters are inactive at night. APT applied the Inverse Square Law[12] to evaluate the relative sound level of the inverters to the nearest receptors. At a distance of 50 feet, the sound level would reduce to 49.3 dBA. The calculations show that the sound generated from the inverters would reduce to 32.5 dBA at a distance of 347 feet. With increased distances from the source, the noise level would decrease even further. The two transformers comply with IEEE and ANSI standards for noise and tracker motors produce minimal noise. Thus, all off-Site receptors are located at sufficient distances from the proposed Project-

[10] The Town of Colchester does not have a municipal Noise Ordinance.

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

[12] Inverse Square Law states that *the intensity of a force is inversely proportional to the square of the distance from that force*. With respect to sound, this means that any a noise will have a drastic drop-off in volume as it moves away from the source and then shallows out.

related equipment that, once operational, noise levels during Facility operation will meet applicable State noise standards.

Please refer to the inverter specification sheet provided in Appendix C, *Product Information Sheets*.

3.10 Lighting

No exterior lighting is planned for the Project.

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 Skis Airport, located 3.06 miles to the north. The FAA provided "Determinations of No Hazard to Air Navigation" on January 17, 2023. See Appendix F of the Environmental Assessment, *FAA Determinations.* Based on this determination, there is no need to conduct a glare analysis.

3.12 Brownfield Redevelopment

The Project will also have the salutary benefit of converting a brownfield to productive re-use. Section 32-760 of Connecticut's General Statutes defines brownfield as "any abandoned or underutilized site where redevelopment, reuse or expansion has not occurred due to the presence or potential presence of pollution in the buildings, soil or groundwater that requires investigation or remediation before or in conjunction with the redevelopment, reuse or expansion of the property." Given the use of the Site as an automobile scrapyard, the Petitioner believes that the Site firmly qualifies as a brownfield under this definition.

On December 5, 2022, representatives of the Petitioner met with DEEP staff to discuss the Project. Representatives of DEEP's Remediation Division were present at that meeting to discuss any testing or remediation requirements that would be associated with the development of the Project. Representatives of the Petitioner confirmed with DEEP staff that no testing or remediation would be required for the installation of racking, panels, inverters, and associated equipment. If however, Petitioner wishes to excavate soil at the Site, testing of the soil, depending on where it is located may be required under applicable DEEP regulations. The Petitioner is not proposing to

remove soil from the Site. If, however, that should change and soil removal is required, Petitioner shall follow all applicable DEEP regulations associated with such removal.

3.13 Visibility

The Facility will consist of non-reflective solar panels measuring approximately 10 feet above grade. The proposed electrical interconnection will require the installation of four (4) new utility poles in the northeastern corner of the Site.

The solar modules are designed to absorb incoming solar radiation and minimize reflectivity, such that only a small percentage of incidental light will be reflected off the panels. This incidental light is significantly less reflective than common building materials, such as steel, or the surface of smooth water. The panels will be tilted up toward the southern sky, thereby further reducing reflectivity.

APT assessed the predicted visibility of the Facility with a Project-specific computer analysis of a one-mile radius around the Site. As depicted on the resulting viewshed maps, off-Site year-round visibility of the proposed Facility is limited to areas which are approximately 0.1 miles north and south of the Site and along portions of Route 85. Seasonal visibility and views of the interconnect utility poles may be experienced along Route 85, south of the Site. It should be noted that utility poles already exist along the western side of Route 85. Seasonal visibility is also predicted north and east of the Site up to approximately 0.25 miles away. Occasional visibility is predicted for the utility poles within a portion of that area. In addition, seasonal visibility is predicted surrounding the Facility in areas where visibility of the existing salvage yard is likely and is predicted along a portion of Route 11 northwest of the Project. Views along Route 85 and to the northeast will be mitigated by the proposed nine-foot (9-ft) tall solid fence, which will be placed closer to Route 85 than the existing nine-foot fence that borders the scrapyard. It is anticipated that once construction is complete, the fence will be approximately 120 feet from Route 85. The views along Route 85 will be further mitigated by an existing mature vegetative buffer along Route 85, and by proposed vegetative screening at the northeast corner of the Site. The incremental impact on views in comparison to the existing use is not anticipated to be significant.

Please see Appendix G, of the Environmental Assessment *Visibility Documentation* for viewshed maps and photo-simulations.

4 Conclusion

As demonstrated by this Petition, the Project will comply with the standards set forth in Conn. Gen. Stat. §16-50k(a). The DEEP air and water quality standards will be met. Further, it will not have an adverse effect on the existing environment and ecology or affect the scenic, historic, and recreational resources in the vicinity of the Project.

The Project Area will have no adverse effect on Prime Farmland Soils or Core Forest as the Project Area is already cleared and currently used as an automotive salvage yard. The Facility will convert areas of nutrient-poor soil to meadow-type vegetation. Once the Facility has reached the end of its useful life, the panels and equipment will be removed. See Appendix D, *Decommissioning Plan.* Development of the Project will have no significant impact on existing habitats and wildlife. The Northern long-eared bat was identified as potentially occurring within the vicinity of the Site, but the Project is not expected to result in an adverse effect or an incidental take.

There are no impacts, direct or indirect, to wetlands on the Site. Indeed, the ending of the automotive scrapyard, if anything, would be anticipated to have a beneficial impact to the wetlands and the environment at the Site. The nearest wetland boundary to the Project area is 47 feet away at the northeast corner of the Site, with distances of over 300 feet to the wetlands in the western portion of the Site. E&S controls will be installed and maintained throughout construction in accordance with the Project's Resource Protection Plan. 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, development of the Project will improve the environmental conditions at the Site by

decreasing impervious surfaces, stabilizing soils and improving vegetation. Grading and excavation will be required for the development of the Facility and the construction of the temporary sediment traps. 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.

Given the benefits the Project will provide to the State of Connecticut, the Petitioner respectfully requests that the Council approve the Project as currently designed and issue a ruling that a Certificate is not required.

APPENDIX A

PROJECT PLANS

APPENDIX B

ENVIRONMENTAL

ASSESSMENT

APPENDIX C

PRODUCT INFORMATION SHEETS

APPENDIX D

DECOMMISSIONING PLAN

APPENDIX E

SUMMARY OF

PUBLIC OUTREACH