

**Petition of C-Tec Solar, 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 3.984 MW, to be Located at Hartford  
Landfill, 180 Liebert Road Hartford, Connecticut**

**Prepared for The Connecticut Siting Council  
February 2024**

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# **1 Introduction**

Pursuant to Conn. Gen. Stat. §§ 4-176 and 16-50k(a) and Regs. Conn. State Agencies § 16-50j-38 et seq., C-Tec Solar, LLC (the “Petitioner”; or “C-Tec”) respectfully requests that the Connecticut Siting Council (the “Council”) approve, by declaratory ruling, C-Tec’s proposed installation and development of a solar-based electric generating facility, with an output of approximately 3.984 megawatts<sup>1</sup> (“MW”) (the “Project” or “Facility”), located in the City of Hartford, Connecticut (“City”) on the Hartford Landfill (the “Project Site” or the “Site”).

Conn. Gen. Stat. § 16-50k(a) provides,

“Notwithstanding the provisions of this chapter or title 16a, the council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling. . . (B) the construction or location of any. . . grid-side distributed resources project or facility with a capacity of not more than sixty-five megawatts, as long as such project meets air and water quality standards of the Department of Energy and Environmental Protection[.]”

In accordance with Conn. Gen. Stat. § 16-50k(a), C-Tec respectfully requests that the Council approve this Project by declaratory ruling.

The proposed Project will comply with the Connecticut Department of Energy and Environmental Protection’s (“DEEP”) air and water quality standards and will not have an undue adverse effect on the existing environment and ecology. The City is identified as a “distressed municipality” and therefore qualifies as an “environmental justice community”<sup>2</sup>. The proposed Project is not defined as an “affecting facility”<sup>3</sup> under Connecticut General Statutes § 22a-20a. Therefore, the Project is not subject to the requirements of that section.

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<sup>1</sup> The output referenced is Alternating Current (AC).

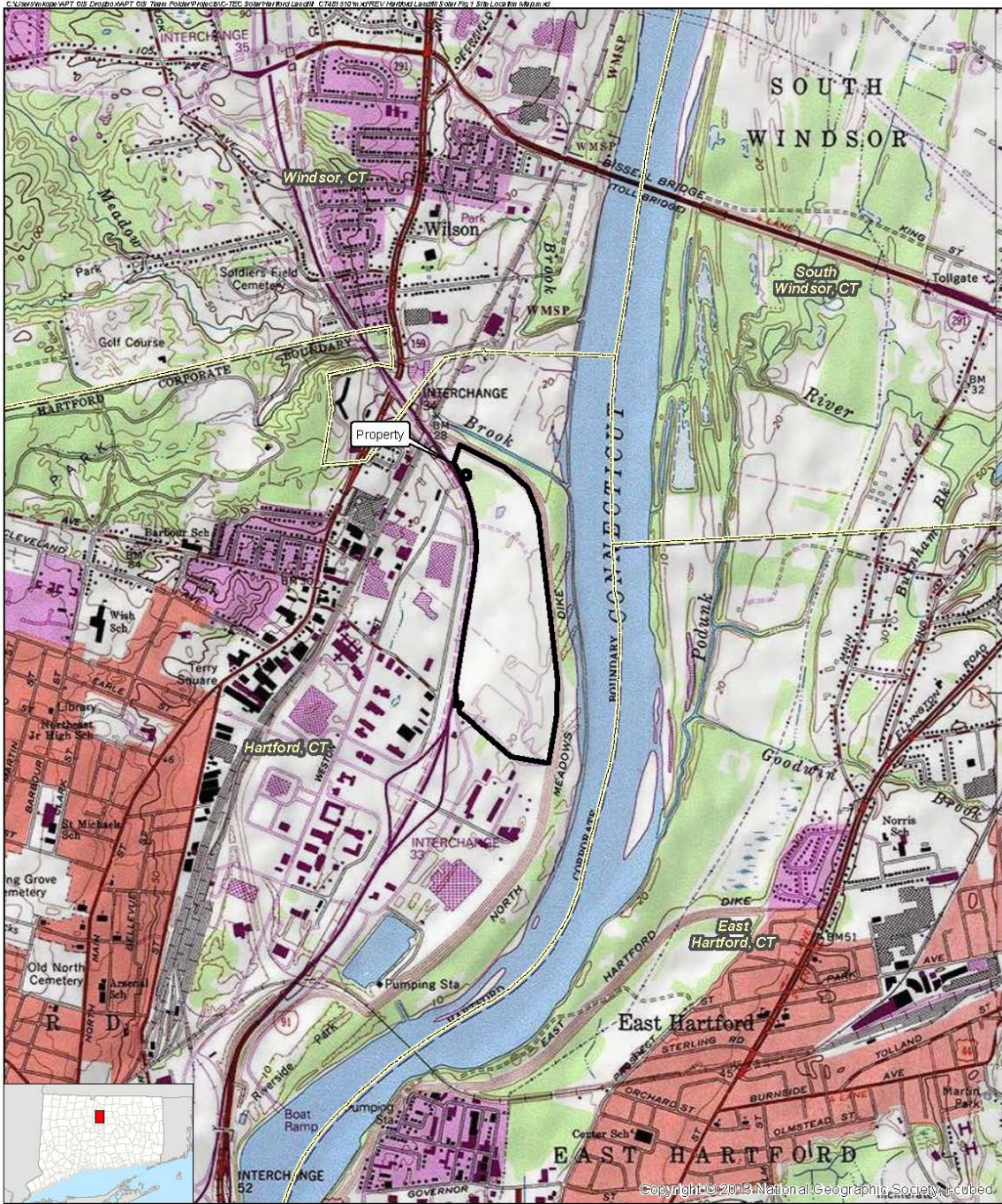
<sup>2</sup> “Environmental justice community” means (A) a United States census block group, as determined in accordance with the most recent United States census, for which thirty per cent or more of the population consists of low income persons who are not institutionalized and have an income below 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.

<sup>3</sup> “Affecting facility” is defined, in part, as any electric generating facility with a capacity of more than ten megawatts.

The Project will be located at 180 Liebert Road, in Hartford, Connecticut atop the former, closed City landfill on property owned by the City Public Works. An existing solar facility occupies the southern portion of the landfill.

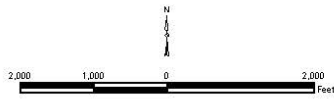
The Facility will be located north of the existing solar facility and occupy approximately 13.75 acres. Upon completion, the Facility will consist of a total of 7,956 photovoltaic modules ("panels"); 24 inverters; 2 pad mounted switchgears; 2 1,000 kVA transformers on concrete pads; and 1 service interconnection line. A ballast-mounted racking system will be used to mount the panel arrays.

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



**Legend**  
 [Black Outline] Property  
 [Yellow Outline] Municipal Boundary

**Map Notes:**  
 Base Map Source: USGS 7.5 Minute Topographic  
 Quadrangle Map, Hartford North, CT (1992)  
 Map Scale: 1:24,000  
 Map Date: November 2023



**Figure 1**  
**Location Map**  
 Proposed Solar Facility  
 Hartford Landfill  
 180 Liebert Road  
 Hartford, Connecticut



## **2 Proposed Project**

### **2.1 Project Setting**

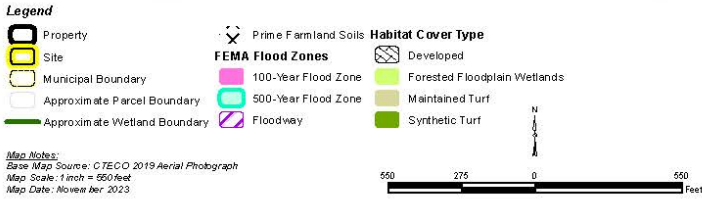
The Property is located between Interstate 91 to the west and the North Meadows dike and Connecticut River to the east, north of Jennings Road. The Facility will be located within the central portion of the Property, on the synthetic turf capping north of the existing solar facility. Access will be via existing service drives within the Landfill. The interconnect route will extend from the end of Liebert Road at the southwest portion of the Property in an easterly direction, then northeast to the access drive, which it will then follow to the Facility. The Project, in its entirety, will occupy approximately 13.75 acres of the Property ("Site").

The Property's existing topography, which is typical of a capped landfill, is relatively flat on top with steep slopes falling away in all directions. Ground elevations range from approximately 135 feet above mean sea level ("AMSL") on top of the Landfill to 13 feet AMSL at the base along the western property boundary.

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

The surrounding land use is characterized primarily by a mix of commercial and industrial development associated with the I-91 corridor to the west and south of the Property. The Connecticut River and the associated dike system and service drive are located to the east; undeveloped wooded land and open fields are located to the north.





**Figure 2**  
**Existing Conditions Map**  
 Proposed Solar Facility  
 Hartford Landfill  
 180 Liebert Road  
 Hartford, Connecticut



## 2.2 Project Development and Operation

Upon its completion, the Facility will consist of a total of 7,956 photovoltaic modules (“panels”); 24 inverters; 2 pad mounted switchgears; 2 1,000 kVA transformers on concrete pads; and 1 service interconnection line. A ballast-mounted racking system will be used to mount the panel arrays while ensuring the integrity of the Landfill’s capping system.

The proposed electrical interconnection will require the installation of four (4) new utility poles. Once within the Landfill proper, the interconnection will transition from overhead and extend along the ground surface to the Facility via cable trays. No clearing is required and ground disturbance, which will be limited to the installation of the utility poles, is anticipated to be minimal. Construction activities within the Site will include the installation of ballast mount racking systems, cable trays, and equipment pads. No grading or resurfacing is required for this Project.

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

The leading edge of the panels will be approximately thirty-six (36) inches 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.

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 inspection/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.

CTEC anticipates construction hours will be from 7:00 am to 5:00 pm, Monday through Saturday and the Facility will be completed in accordance with the schedule listed below. It should be noted, however, that while this schedule is a reasonable approximation of construction activities given current knowledge, it is possible that the schedule may change somewhat depending on continuing supply chain and/or labor issues.

- Apply for Landfill Post Closure Use/Landfill Disruption Permit Approval – February 2024

- Receive Siting Council Declaratory Ruling - on or before October 2024
- Receive Landfill Post Closure Use/ Landfill Disruption Permit Approval - on or before October 2024
- Complete Procurement of Long Lead Equipment – January 2025
- Site mobilization – beginning November 2024
- Delivery of racking and PV modules – November 2024 through December 2024
- Racking installation completion – February 2025
- PV module installation completion – March 2025
- DC electrical installation completion – April 2025
- AC electrical installation completion – May 2025
- Cold commissioning – May 2025
- Mechanical completion – June 2025
- Hot commissioning – June 2025
- Commercial operation date – July 2025
- Final punch list and site demobilization – from July 2025 through August 2025

### **2.2.1 Access**

The Facility will utilize the existing Landfill access road originating off of Liebert Road to the south for construction access and maintenance vehicles to access the Facility. No regrading or resurfacing of the existing access road is proposed.

### **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 utilize the Landfill's existing gated chain-link security fence to limit access to authorized personnel only. All City emergency response personnel will be provided access to the Facility via the existing Landfill's main entrance gate. The Facility will be remotely monitored and will have the ability to remotely de-energize in the case of an emergency.

### **2.2.3 Land Use Plans and Project Benefits**

The Project is consistent with state and federal policies and will support the state's energy goals by developing a renewable energy resource while not having a substantial adverse environmental effect. Although local land use requirements do not apply to this Project, it has been designed to meet the intent of the City's land use regulations, to the extent feasible. The proposed Facility is consistent with the existing uses of the Landfill and the surrounding area and puts the existing Landfill to productive re-use.

Additionally, the Project conforms to the City of Hartford's 2011 Plan of Conservation and Development ("POCD"), Chapter 9, which established significant and aggressive goals for the City's use of renewable energy. "The City should strive to increase annually the percentage of its energy needs supplied by clean and renewable energy sources, with an ultimate target of achieving 100% attainment from clean energy sources by the year 2030". POCD, Chapter 9, page 5.

The Project will benefit the local community by improving electrical service for existing and future development through the availability of enhanced local generating capacity that does not rely solely on the congested regional electrical transmission network.



## **2.2.4 Community Relations**

CTEC has been in communication with and has had both formal and informal interactions with City officials since being the successful respondent to a 2019 Request for Proposals issued by the City. Discussion on design and development of the Project has been ongoing with both the City and DEEP. In addition, on February 12, 2024, CTEC sent notices to all abutters of the project as well as the appropriate governmental officials notifying them of the filing of the instant Petition. Copies of that correspondence are included as Exhibit B.

## **2.3 Petitioner Information**

The legal name of the Petitioner is C-Tec Solar, LLC. C-Tec Solar, LLC is a Connecticut limited liability company with its principal place of business at 1 Griffin Road South, Suite 200, Bloomfield, Connecticut 06002.

Correspondence and other communications concerning the Project are to be addressed to, and notices, orders and other papers may be served upon, the following:

Michael Morrison  
CTEC Solar  
1 Griffin Road South, Suite 200 Bloomfield, CT 06002  
[michael.morrison@ctecsolar.com](mailto:michael.morrison@ctecsolar.com)  
(860) 580-7174 ext. 121

Lee D. Hoffman  
Pullman & Comley, LLC  
90 State House Square  
Hartford, CT 06103-3702  
[lhoffman@pullcom.com](mailto:lhoffman@pullcom.com)  
(860) 424-4315

Both individuals consent to electronic mailings of all Council and Petition-related correspondence.

CTEC has successfully developed over 100 MW of commercial solar projects in the Northeast. CTEC's portfolio of projects range from rooftop to ground-mounted power plants, and several notable projects include:

1. **The Agawam Corporate Center** (Agawam, MA): Ballasted Roof Mount using Ecolibrium and DCE racking, 456.28 kW;
2. **Thompson Farm** (Thompson, CT): Virtual Net Metering Driven Post Ground Mount Project, which sells power to the Town of West Hartford and the City of Hartford through Power Purchase Agreements ("PPA"), 3.74 MW;
3. **All Granite Charlton** (Charlton, MA): Ballasted Roof Mounted Solar Array under SREC 2,108.2 kW;
4. **Hartford Distributors, Inc.** (Manchester, CT): Metal Roof Mount - Financed as PPA through Connecticut Green Bank, 748 kW;
5. **Brewport** (Bridgeport, CT): Roof Mount, 105 kW;
6. **Klingberg** (New Britain, CT): Roof Mount, 129 kW;
7. **Board of Education** (Bloomfield, CT): The first project under Connecticut's Shared Clean Energy Facility Pilot Program, 2 MW;
8. **Voluntown Road** (Griswold, CT): a Virtual Net Metering ("VNM") facility, providing power to municipalities throughout Connecticut, 2.4 MW;
9. **Bilton Road** (Somers, CT): VNM facility, providing power to municipalities throughout Connecticut, 3.6 MW;
10. **Lesro Industries** (Bloomfield, CT): Ballasted Roof Mount, 998 kW;
11. **NE Tool** (Manchester, CT): Solar Carport, 100 kW; and
12. **Mitchell** (Simsbury, CT): Installation at the Mitchell Automotive Group's Simsbury location, 130 kW.
13. **Thompson Family Farm** (Ellington, CT): VNM Facility, 2.8 MW
14. **New Britain Landfill** (Berlin, CT): VNM Facility, 1.3 MW

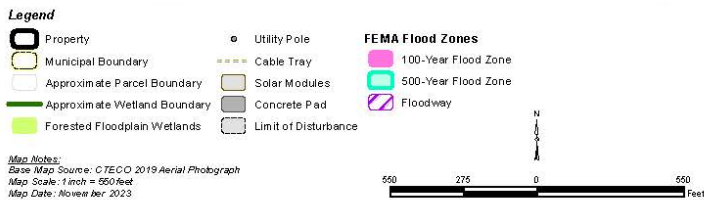
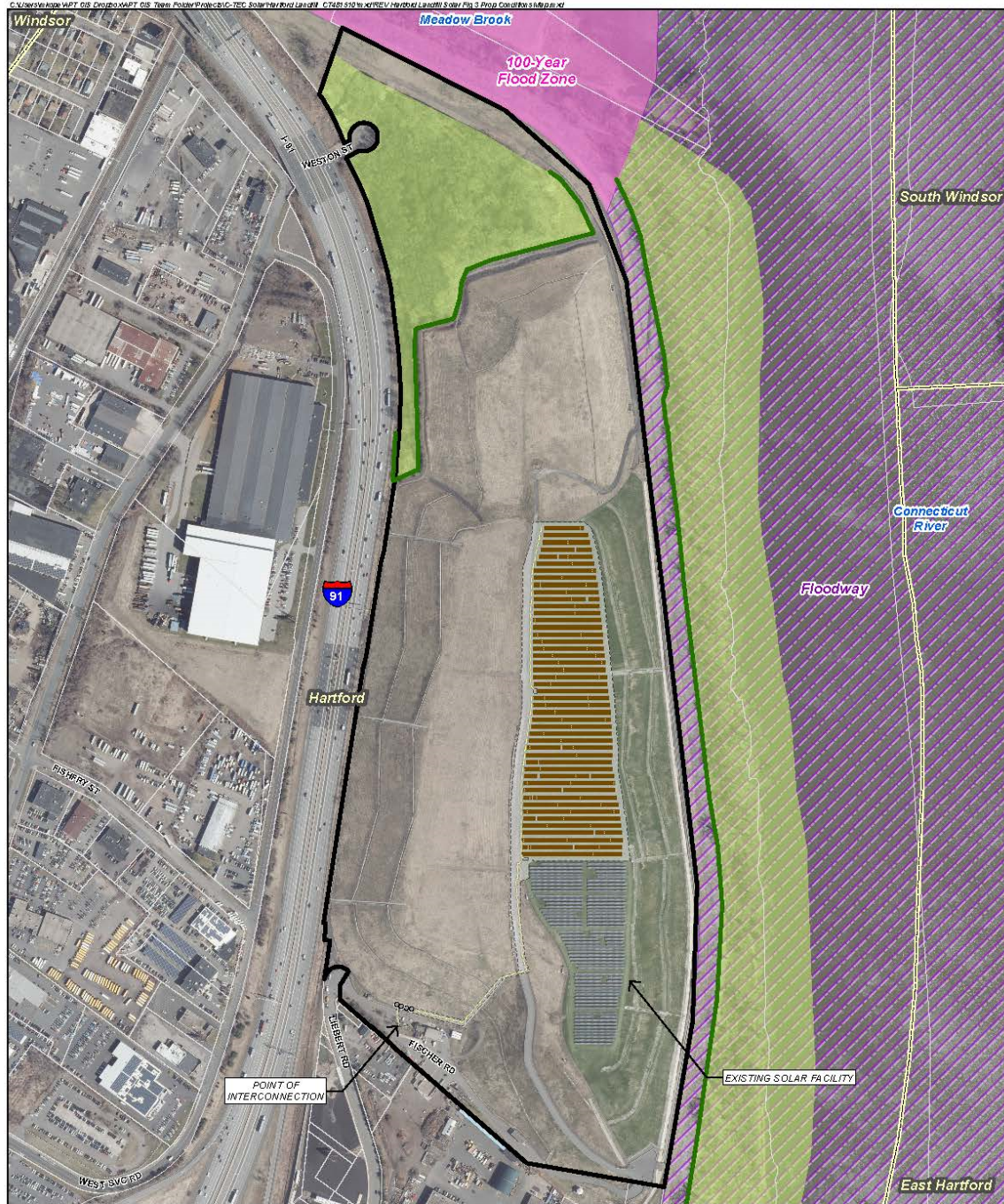
CTEC is also regarded as a leader in Solar-Plus-Storage, currently developing several battery-powered projects in the states of Connecticut and Massachusetts, while also being awarded one of the first Solar Massachusetts Renewable Target Program (“SMART”) projects in the State of Massachusetts.

As a fully integrated solar development company, CTEC manages all aspects of the solar development and implementation process—including design and engineering to procurement and installation. CTEC brings its years of industry knowledge and experience to bear on every project pursued.

### **3 Environmental Conditions**

This section provides an overview of the current environmental 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 compatibility with the Site resources discussed herein.



**Figure 3**  
**Proposed Conditions Map**

Proposed Solar Facility  
 Hartford Landfill  
 180 Liebert Road  
 Hartford, Connecticut



## **3.1 Air Quality**

The Site is currently developed as a capped landfill. Due to the nature of a solar energy generating facility, no air emissions will be generated during operations and, therefore, the operation of the Project 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, nonetheless, be mitigated using available measures, including, inter alia, 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 conducted a review of previously filed documents, publicly available data and client provided resources associated with the Project location that identified one (1) wetland within the northern limits of the Property. An extensive boundary survey, wetland delineation and documentation have been completed as a part of various approvals attained through the DEEP for the landfill closure. APT reviewed the provided wetland delineation and determined it was substantially correct. The location of these resources is depicted on Figure 2, *Existing Conditions*.

### **3.2.2 Wetland Impacts**

No direct impacts to wetlands or watercourses are proposed in association with developing the Facility. The nearest construction activity to wetland resources would occur within approximately 350 feet to Forested Floodplain Wetlands associated with the Connecticut River, consisting of ballast mounts, solar modules, and cable tray installations. All of these appurtenances will be installed above grade and do not require surface disturbances.

To further promote protection of wetlands and watercourses during construction, safeguards have been developed to avoid unintentional impacts to these resources, including the installation and maintenance of E&S controls in accordance with DEEP's *Connecticut Guidelines for Soil Erosion*



*and Sediment Control*, dated September 30, 2023, effective March 30, 2024. By implementing these management techniques throughout the duration of construction, potential adverse impacts to wetland resources will be mitigated.

As such, it is not likely that the Project would have an adverse impact to wetland resources.

### **3.2.3 Floodplain Areas**

The United States Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Map ("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 that includes the Property is mapped on FIRM PANEL #09003C 0367 G, dated September 16, 2011. Based upon this FIRM Map, the Property is located in an area designated as Area with Reduced Flood Hazard Risk due to Levee - Zone X, indicating that the area is protected from the 1-percent-annual-chance or greater flood hazard by a levee system. The referenced levee system is the North Meadows dike, which extends along the entire length of the Property's eastern boundary.

The Site is not located within a 100- and 500-year flood zone and as such, no special considerations or precautions relative to flooding are required for the Project.

## **3.3 Water Quality**

Once operative, the Facility will be unstaffed, and no potable water uses or sanitary discharges are anticipated. No liquid fuels are associated with the operation of the Facility. Stormwater generated by the proposed development of the Project will be properly handled by existing Landfill stormwater management features.

### **3.3.1 Groundwater**

Groundwater underlying the majority of the Property, including the entire Site, is classified by DEEP as "GC". Designated uses in GC-classified areas are assimilation of discharges that are authorized by the Commissioner pursuant to Section 22a-430 of the Connecticut General Statutes. Groundwater underlying the extreme northern portion of the Property is classified as "GB", where designated uses are industrial process water and cooling waters and baseflow for hydraulically-connected water bodies. This classification is presumed not suitable for human consumption without treatment. Based upon DEEP mapping, the Property is not located within a mapped

(preliminary or final) DEEP Aquifer Protection Area (“APA”). The nearest APA is more than 4.5 miles to the east in Manchester.

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

### **3.3.2 Surface Water**

Based upon DEEP mapping, the Property is located in Major Drainage Basin 4 (Connecticut River), Regional Drainage Basin 40 (Connecticut River), and Sub-regional Drainage Basin 4000 (Connecticut River). The majority of the Property and Site is located in Local Drainage Basin 4000-26 (Unnamed Brook at Mouth above Connecticut River). The southeastern portion of the Property and the extreme eastern portion of the Site appear to be located in Local Drainage Basin 4000-00 (Connecticut River above Raspberry Brook).

The nearest named surface waterbody is the Connecticut River. The Connecticut River is located downgradient and approximately 300 feet east of the Property and 530 feet east of the closest portion of the Site. In the vicinity of the Property, the Connecticut River is classified as a Class SB surface waterbody by DEEP, with designated uses that include habitat for marine fish and other aquatic life and wildlife; commercial shellfish harvesting; recreation; industrial water supply; and navigation.

The Project will be sufficiently setback from water resources proximate to the Site and will have no adverse environmental effect on surface water quality. During construction, E&S controls will be installed and maintained in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control, dated September 30, 2023, effective March 30, 2024. Once operative, stormwater will be managed in accordance with the Connecticut Stormwater Quality Manual, dated September 30, 2023, effective March 30, 2024.

### **3.3.3 Stormwater Management**

The Project will utilize the existing stormwater management features approved and installed in connection with closure of the Landfill and in accordance with the 2004 Connecticut Stormwater Quality Manual. Throughout the design of this Project, DEEP’s Appendix I, Stormwater Management at Solar Array Construction Projects, was taken into consideration where applicable.

The solar array will be located within the synthetic turf portion of the Landfill cap, and will not involve any changes to the overall and underlying makeup of the Landfill cap and current



stormwater management systems. The Project is not expected to generate any additional runoff. Therefore, Project development will not 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) are located within the Property; three (3) of them are found within the Site. These habitats were assessed using remote sensing and publicly available datasets in addition to reviewing previous documentation associated with former and on-going activities at the Property.

The habitats occupying the Property are:

- Developed
- Forested Floodplain Wetlands
- Maintained Turf
- Synthetic Turf

The habitats occupying the Site are:

- Developed
- Maintained Turf
- Synthetic Turf

#### **3.4.1 Habitat Types**

##### **Developed**

Developed habitat is located along the southern and eastern Property boundaries and through the central portion of the landfill area. It primarily consists of paved parking areas and access roads utilized for access to the Landfill, parking and general operations. Outbuildings and equipment storage areas are also located within these developed areas. With the exception of the Facility's proposed utility interconnection to electrical distribution lines, no impact to Developed areas is proposed.

## **Forested Floodplain Wetlands**

The Property is bound by the Connecticut River to the east and Meadow Brook to the north. Historically, prior to construction of the United States Army Corps of Engineers flood control dike, the entire Site was located within the Connecticut River floodplain. Construction of the dike allowed for the construction and utilization of the Hartford Landfill. Currently, the northern portion of the Property is occupied by forested floodplain wetlands. Interstate 91 abuts the Property to the west and disturbance associated with the Landfill abuts the Property to the north/east. Forested Floodplain Wetlands are characterized by heavy disturbance with minimal bordering upland vegetation.

No work is proposed within or in proximity to this habitat, with the Project's limit of disturbance generally maintaining an approximately 532-foot buffer. Any potential secondary effects to this habitat will be mitigated as the Project will not involve any ground disturbance activities that might otherwise compromise the integrity of the capped landfill. An existing vegetated buffer of established grasses also separates this habitat from the Project, further mitigating potential secondary impacts to the Forested Floodplain Wetlands.

## **Maintained Turf**

Maintained Turf habitat encompasses the north-central and western half of the capped Landfill area. This habitat consists of a regularly mowed/maintained grass field associated with the capped Landfill. Routine maintenance of this field suppresses other herbaceous and shrub species. This habitat is dominated by cool season grasses and typical forbs.

State-listed grassland bird species savannah sparrow, grasshopper sparrow, bobolink, and eastern meadowlark are known to use the Landfill for breeding habitat, particularly in the Maintained Turf west of the Project. The Project has been designed to avoid impacts within this area. To avoid long term disturbance to the grassland habitat and State-listed birds, a 50-foot buffer has been provided between the Project and Maintained Turf habitat.

The proposed overhead electrical interconnection on new utility poles would be located along the southern sloped portion of the Maintained Turf habitat, with limited resulting impacts. That area supports limited breeding habitat for the State-listed grassland bird species, as the breeding

habitat is focused at the top of the Landfill west of the existing and proposed solar projects. The Project will not impact this critical area of the Maintained Turf habitat.

## Synthetic Turf

Synthetic Turf (ClosureTurf™) occupies the southeastern half of the Property and was specifically installed as a landfill cap. The system includes engineered turf infilled with a one-half inch layer of sand, placed on a 50-mil synthetic geomembrane liner covering 6 inches of cap base material (controlled fill) placed directly on existing waste or intermediate cover material. Nearly all of the Facility will occupy this area. Due to the lack of ground disturbance and man-made nature of this material, no adverse impacts are anticipated with the proposed Project.

Table 1: Habitat Areas provides the total acreages of each habitat type located on the Site.

Table 1: Habitat Areas		
Habitat Type	Total Area On-Site (±ac.)	Area Impacted by Project (±ac.)
Developed	11.76	<0.10
Forested Floodplain Wetlands	14.95	0.00
Maintained Turf	68.95	1.63
Synthetic Turf	28.76	12.11

### 3.4.2 Wildlife

Development of the Project will occur within portions of three (3) habitats that do not support any significant wildlife habitat functions. Maintained Turf habitat experiences annual/bi-annual mowing events in order to suppress non-compliant vegetation under restrictions associated with the capped Landfill. This suppression of vegetation diminishes the potential for significant habitat utilization due to lack of food sources, habitat structure, and routine disturbances. Although this area is known to support breeding of Stated-listed grassland bird species, there will be no ground disturbance or placement of panels within these open grasslands; the solar array will be located solely within the Synthetic Turf habitat. As a result, adverse impacts to wildlife are not anticipated. Generalist wildlife species, common throughout Connecticut, have the potential for utilizing these habitat complexes. Generalist species are more tolerant of human disturbance and habitat fragmentation and thus are not anticipated to be adversely affected by the Project.

Short-term wildlife impacts to Maintained Turf habitat due to nearby construction-related noise may temporarily displace wildlife that are more sensitive to these types of disturbances. To avoid

disturbance from construction, the Project would restrict construction activities to the non-breeding season for the State-listed grassland bird species, between September 1<sup>st</sup> and April 30<sup>th</sup>. In addition, a 50-foot buffer between the Facility and adjacent grassland habitat has been incorporated into the proposed solar Facility design to avoid "edge effect" disturbances to any breeding activity by State-listed grassland bird species. Therefore, the Project is not anticipated to result in a significant impact to wildlife.

Post-construction, operation of the Facility will not likely result in an adverse effect to wildlife using these habitats since the Facility is unoccupied and would not generate any significant noise or traffic.

### **3.4.3 Core Forest Determination**

DEEP's Forestland Habitat Impact Mapping, does not depict an area mapped as core forest on the Property. Further, there is no tree clearing necessary or required to develop the Facility. Therefore, the Project will not affect core forest resources.

In accordance with Connecticut General Statutes § 16-50k(a) and based on the size of the proposed Facility (>2.0 MW), the Petitioner sent correspondence to DEEP Forestry on November 27, 2023 documenting that the Project will not materially affect core forest. In response, DEEP Bureau of Natural Resources provided a letter to the Council confirming that the Project "will not materially affect the status of [the Property] as core forest." See, Appendix D of Exhibit A.

### **3.4.4 Natural Diversity Data Base**

Publicly available information has been reviewed 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.

DEEP's 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, 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. The 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 occur on private property.

The most recent DEEP NDDB mapping (June 2023) revealed that an NDDB polygon is located within a portion of the Property. Prior consultation determined the Property may be classified as an Audubon Important Bird Area for grassland-dependent species. State-listed species known to potentially utilize this area include savannah sparrow, grasshopper sparrow, bobolink, and eastern meadowlark. A 50-foot buffer between the Facility and adjacent grassland habitat (Maintained Turf) has been incorporated into the Project design, which is intended to avoid "edge effect" disturbances to any breeding activity by State-listed grassland bird species. In addition, the Project would restrict construction activities to the non-breeding season for these grassland bird species, between September 1<sup>st</sup> and April 30<sup>th</sup>.

The most recent DEEP NDDB mapping (June 2023) revealed that an NDDB polygon extends onto the Property in the northern portion and just east of the Project. As a result, a request for NDDB review was submitted on November 13, 2023 through the eNDDB system, which included the 50-foot buffer from grassland habitat known to be used by State-listed grassland bird species along with a seasonal restriction for construction to be limited to the grassland bird's non-breeding season. NDDB responded with a Determination Letter on November 28, 2023 (NDDB Determination No. 202308708; see Appendix E of Exhibit A). The letter identified four State-listed grassland bird species: grasshopper sparrow (Endangered), eastern meadowlark (Threatened), savannah sparrow (Special Concern), and bobolink (Special Concern). DEEP concurred with the 50-foot buffer to suitable habitat (Maintained Turf) and the seasonal restriction limiting construction to the non-breeding season for these grassland bird species (September 1<sup>st</sup> – April 30<sup>th</sup>). Therefore, with these protection measures, the Project would not result in an adverse impact to grassland bird species.

### 3.4.5 USFWS Consultation

Federal consultation has been completed in accordance with Section 7 of the Endangered Species Act (“ESA”) through the U.S. Fish and Wildlife Service’s (“USFWS”) Information, Planning, and Conservation System (“IPaC”). Based on the results of the IPaC review, the federally-listed<sup>4</sup> Endangered species northern long-eared bat (“NLEB”; *Myotis septentrionalis*) habitat range includes the Property. 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.

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) determines 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 10.9 miles to the northwest.

Effective March 31, 2023, the NLEB is classified as Endangered under the ESA. The reclassification eliminates use of the previous 4(d) rule for the NLEB, which is applicable only to Threatened species. An NLEB Interim Consultation Framework has been developed by USFWS to facilitate transition from the 4(d) rule to typical Endangered species consultation procedures for activities that are reasonably certain to occur before April 1, 2024 (date on which the NLEB Interim Consultation Framework expires). The new NLEB Determination Key for this Project shows the Project will not likely result in an adverse effect or incidental take of NLEB and does not require a permit from USFWS. A USFWS letter dated October 25, 2023 confirmed the “No Effect” determination.

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

## 3.5 Soils and Geology

Surficial materials on the Property that have not been disturbed by the Landfill are comprised of deposits of alluvium overlying fines while soils are identified as Limerick and Lim soils, Winooski silt loam, smoothed udorthents and flood control udorthents. Limerick and Lim soils are poorly-

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<sup>4</sup> Listing under the federal Endangered Species Act

drained soils derived from coarse-silty alluvium parent material. Winooski silt loam is a moderately well-drained soil derived from coarse-silty alluvium parent material. Smoothed udorthents are moderately well-drained soils derived from drift parent material. Flood control udorthents are moderately well-drained soils derived from drift parent material.

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 which grades eastward into coarse conglomerate (fanglomerate).

### **3.5.1 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,<sup>5</sup> Prime Farmland Soils are located in the northern extent of the Property, well beyond the limits of the Site (See Figure 2, *Existing Conditions Map*). Therefore, the Project will not have any effect on Prime Farmland Soils.

In accordance with Connecticut General Statutes §16-50k(a), the Petitioner sent correspondence to the Connecticut Department of Agriculture (“DOA”) in November 2023 documenting that the Project will not materially affect prime farmland soils. By letter dated January 10, 2024, the DOA concurred that the Project “will not materially affect the status of project land as prime farmland.” See Appendix D of Exhibit A, DEEP Forestry and DOAG Correspondence.

## **3.6 Historic and Archaeological Resources**

Heritage Consultants LLC (“Heritage Consultants”) of Newington, Connecticut, completed an Archeological Desktop Assessment (“ADA”), which included a review of relevant historic and archaeological information, to determine whether the Site holds potential cultural resource significance. Their review of historic maps and aerial images of the Site and the examination of files maintained by the Connecticut State Historic Preservation Office (“SHPO”) revealed that no

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<sup>5</sup> Connecticut Environmental Conditions Online (CTECO) Resource Guide – [www.cteco.uconn.edu](http://www.cteco.uconn.edu).

properties or historic standing structures listed on or eligible for listing on the National Register of Historic Places (“NRHP”) are located on or proximate to the Site.

In terms of archaeological potential, the Site’s existing soils have been severely impacted by activities associated with the former Landfill and as a result, it was determined that the Site does not retain the potential to contain intact archaeological deposits in the subsoil. Therefore, no additional archaeological examination of this area is recommended prior to construction of the proposed solar Facility.

Heritage Consultants, on behalf of the Petitioner, submitted a Project Notification Form, Site historic/cultural information, as well as copies of the ADA, for agency review and comment in November, 2020. The SHPO responded on November 30, 2020, finding that “no historic properties will be affected by the proposed project.” See Appendix E of Exhibit A.

### **3.7 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. Additionally, there are no CT Blue Blaze Hiking Trails located proximate to the Site.

The nearest existing recreational area to the Project is Keney Park and Golf Course, the nearest point of which is located approximately 0.67 mile northwest of the Site. No impacts are anticipated to this resource.

The Connecticut River north of Hartford is used for boating and fishing. A trail system currently extends north from Riverside Park, which is approximately 1.0 mile south of the Site, and plans to extend the trail system north to Windsor are in preliminary implementation stages. The Project will have no direct impact on use of the river or the trail system, and visual impact will be minimal, as further discussed in Section 3.8 below.

See Figure 4, *Surrounding Features Map*, for this and other resources located within one mile of the Site.

### **3.8 Visibility**

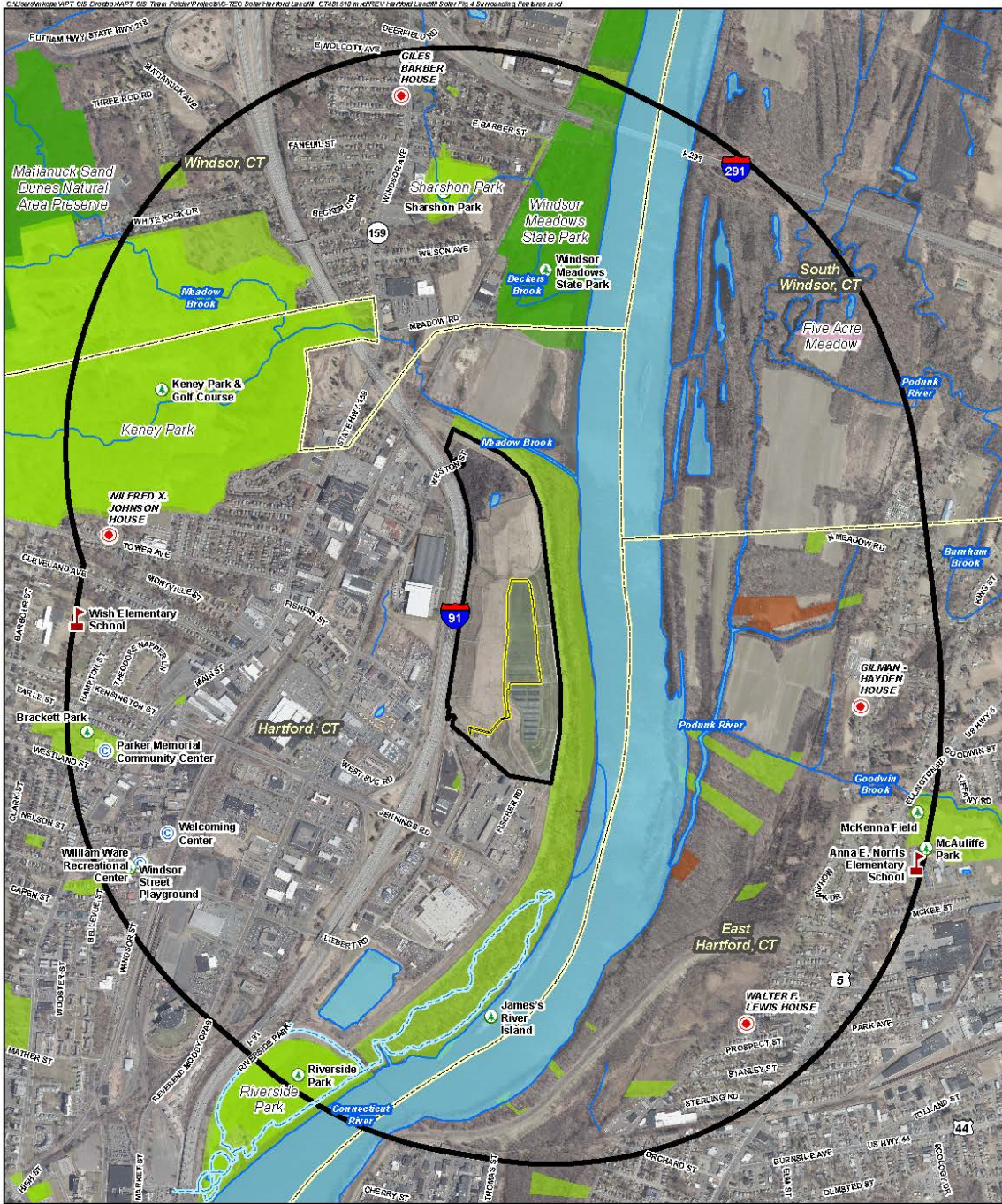
The capped Landfill is a prominent feature along the Interstate 91 corridor in the northeastern section of Hartford and areas along the Connecticut River northeast and southeast of the Landfill.



In general, visibility of the proposed Project will be minimal due to its relatively small incremental height and lack of any clearing of trees and other vegetation.

Currently, a trail system associated with Riverside Park extends along the riverfront south of the Site. The Petitioner understands that plans provide for extension of the trail system north to the Windsor Meadows State Park and an adjacent property under development as recreational and open space by Riverfront Recapture. It is anticipated that the North Meadows dike and existing tree growth along the anticipated route will minimize visibility of the Project from the trail system. Visibility, primarily seasonal, is anticipated from portions of the Windsor Meadows State Park and adjacent Riverfront Recapture resource.

See Appendix G of Exhibit A.



**Figure 4**  
**Surrounding Features Map**  
 Proposed Solar Facility  
 Hartford Landfill  
 180 Liebert Road  
 Hartford, Connecticut



**Legend**

Property	Surrounding Features Community Center	Open Space Property (CTDEEP) Land Trust	Hiking Trail
Site	Park / Recreation / Open Space	Municipal	Watercourse (CTDEEP)
1 Mile Radius	School	Private	Open Water (CTDEEP)
Municipal Boundary		State	
National Register of Historic Places Resource			

**Map Notes:**  
 Base Map Source: 2019 Aerial Photograph (CTECO)  
 Map Scale: 1 inch = 1,000 feet  
 Map Date: November 2023

1,000 0 1,000 Feet

### **3.9 Noise**

With the exception of the existing structures associated with the Landfill located at the southern extent of the Site, the majority of the Site is undeveloped. Daily operations of the City's Public Works Department produce the only noise from the Property currently. Noise from Interstate 91 and activities on surrounding properties is experienced within the Property and in the surrounding area generally.

The nearest residential areas are more than one-half mile to the west along Main Street in the vicinity of Tower Avenue, Montville Street, and Cleveland Avenue. With the intervening traffic and industrial and commercial noise sources, no effect on noise in those areas from the Project should be anticipated.

During construction of the Facility, noise from construction equipment may temporarily increase sound levels immediately surrounding the Site. Construction noise is exempted under the City's Municipal Code, Chapter 23, Section 23.3 (f) Exemptions.

### **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. In light of existing ambient lighting within the area of the Property, any incremental effect of Project lighting will be minimal.

### **3.11 FAA Determination**

The Petitioner has submitted relevant Project information to the Federal Aviation Administration ("FAA") for an aeronautical study to evaluate potential hazards to air navigation. The FAA provided a Determination of No Hazard to Air Navigation on November 4, 2020. See Appendix G of Exhibit A, *FAA Determination*. An updated request for determination has been submitted; FAA review is pending.

## **4 Conclusion**

As demonstrated in this Petition, the Project will comply with 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.

More importantly, the Project's solar array will be located on the top of a Landfill, ballast-mounted on the synthetic turf habitat. No changes to the Landfill cap are proposed, and no changes to the existing stormwater management system are required. This is precisely the type of land use that both the City of Hartford and the State of Connecticut should be advocating. This provides for renewable energy resources on brownfield lands and does not have any adverse impacts on open spaces.

No wetlands or watercourses will be directly or indirectly impacted by the Project. The nearest wetland to the construction activities is approximately 532 feet away.

No core forest or prime farmland will be affected, as the capped Landfill has neither resource.

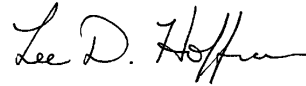
Grassland bird species are known to be utilizing the maintained turf habitat. A 50-foot buffer will be maintained from that habitat, and construction activities will be limited to the species' non-breeding season.

Portions of the Facility will be visible from the surrounding areas in areas where the Landfill and existing solar facility are also visible.

**CONCLUSION**

As demonstrated by the foregoing, the Project satisfies the standards set forth in C.G.S. § 16-50k(a) and in light of its anticipated benefits, C-Tec Solar, LLC respectfully requests that the Siting Council approve this Petition for the Project, as it is currently designed.

Respectfully Submitted,  
C-TEC Solar, LLC



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