



City of Bristol
Planning Commission

REGULAR MEETING - MONDAY, DECEMBER 23, 2024
CITY HALL COUNCIL CHAMBERS
111 NORTH MAIN STREET
6:00 P.M.

INFORMATION FOR THE PUBLIC TO ACCESS THIS MEETING

Zoom Meeting link:

<https://bristolct-gov.zoom.us/j/87902393613?pwd=cncbeO01Qu2b74jJEv2pYCANaIYeIw.1>

Meeting ID:

879 0239 3613

Meeting Passcode:

123456

Join by phone

1-929-205-6099

AGENDA

1. Call to Order
2. Public Participation
3. Approval of Minutes
 - a. Regular Meeting - November 25, 2024
4. City Council and Other Referrals
 - a. C.G.S. 8-24 Referral:
685 Lake Ave - Map 4, Lot 17
(Continued review from November 25, 2024)
5. New Business
6. Old Business
7. Staff Reports
 - a. Update on the current Zoning Regulation Re-Write Process

- b. Review of recommended parking regulation amendments
 - c. Review of recommended environmental regulation amendments
 - d. Subdivision Status Report
- 8. Communications
 - 9. Adjournment

REMINDER: The next Regular Meeting of the Planning Commission is Monday, January 27, 2025.

**BRISTOL PLANNING COMMISSION
MINUTES
REGULAR MEETING OF MONDAY NOVEMBER 25, 2024**

By: Chairman Veits

Time: 6:00 P.M.

Place: City Hall
Council Chambers
111 North Main St.
First Floor

MEMBERS	NAME	PRESENT	ABSENT
REGULAR MEMBERS:	Chairman William Veits (Chairman)	X	
	John Soares (Vice Chairman)	X	
	Jon Pose (Acting Secretary)	X	
	Tracey Bacchus		X
	Christopher Nardi (Acting Secretary)	X	
ALTERNATE MEMBERS:	Kenneth Rasmussen-Tuller	X	
	Kristen O'Donnell	X	
	Kiana Small	X	
STAFF:	Robert M. Flanagan, AICP, City Planner	X	

1. Call to Order

Per the order of Chairman Veits, the meeting was called to order at 6:00 P.M.

2. Public Participation

There was no public participation.

3. Approval of Minutes

a. Regular Meeting - September 23, 2024

1. Minutes from the September 23, 2024, Regular Meeting

Chairman Veits designated regular Commissioners Nardi, Pose, Soares and Veits to vote on the minutes of the September 23, 2024, regular meeting.

MOTION: Move to approve the minutes of the September 23, 2024, regular meeting.

By: Pose

Seconded: Soares.

For: Nardi, Pose, Soares and Veits.

Against: None.

Abstain: None.

Chairman Veits designated regular Commissioners Nardi, Pose, Soares and Veits with alternate Commissioner Rasmussen-Tuller as voting Commissioners this evening.

4. City Council and Other Referrals

- a. C.G.S. 8-24 Referral:
685 Lake Ave - Map 4, Lot 17

Staff explained the request was from the City Council that had a draft agreement with CTECH Solar, LLC, to use a portion of the closed landfill for solar arrays. Staff stated the request was to get guidance from the Commission. Staff noted there would not be a local Land Use Board review because the CT Siting Council would review the project.

Staff read into the record the letter dated October 23, 2024, from the Corporation Counsel Office. Staff indicated the C.G.S. 8-24 was provided to the Commission in their packets. Commission inquiries: Staff was unaware of any municipalities that used any properties similar to this request for any different uses.

Commissioner Pose had concerns about the solar panels being in the way if there were problems. In addition, he wanted to make the applicant responsible for any repairs under the surface of the solar panels. Commissioner Pose described how the layout of the panels was important for the plan. The Commission added that they had concerns of fire hazards on the property with the structures on top of the trash pile.

Staff noted that the request may be continued until next month if the Commission requires additional information. The Commission agreed to continue the request until next month and request the applicant's attendance at next month's meeting.

MOTION: Move that C.G.S. 8-24 Referral for 685 Lake Ave - Map 4, Lot 17, be continued to the December 23, 2024, regular meeting. The Commission requested the applicant's attendance at the December 23, 2024, regular meeting to make a presentation and answer questions for the Commission.

Commission Nardi explained his company does many solar installations on municipal buildings but never installed solar panels on an existing landfill. The Commission requested Staff to research any cities that have done these types of installations and any associated problems.

By: Rasmussen-Tuller

Seconded: Pose.

For: Nardi, Rasmussen-Tuller, Pose, Soares and Veits.

Against: None.

Abstain: None.

Items 4.d. and 4.e. were taken out of order

d. C.G.S. 8-24 Referral:
Candlewood Drive - Map 2, Lot 120-9

e. C.G.S. 8-24 Referral:
Violet Drive - Map 2, Lot 129-2

Attorney Jeffrey Steeg of Corporation Counsel, City of Bristol, 111 North Main St., representing the applicant, requested Items 4.d and 4.e. to be withdrawn from the agenda. Attorney Steeg represented the items for Candlewood Dr. and Violet Dr. were just withdrawn at the Special City Council Meeting this evening.

The item 4.d. was withdrawn.

The item 4.e. was withdrawn.

The Commission resumed Item 4.b.

b. C.G.S. 8-24 Referral:
125 Frederick St., Map 43, Lot 99B-1

Staff described the request to acquire the property by the City because of the pending foreclosure on the property. Staff noted the applicant has inquired if the City would want to purchase the property.

Staff read into the record the e-mail dated November 21, 2024, regarding the request. Staff reviewed the property that was very limited by a floodplain and inland wetlands. Staff thought the best use for the property would be a passive park of some type.

MOTION: Move to send a positive referral to the City Council for the C.G.S. 8-24 Referral for: 125 Frederick St. - Map 43, Lot 99B-1.

The Planning Commission finds that the C.G.S. 8-24 referral as presented, is generally consistent with the goals and policies of the 2015 Plan of Conservation and Development (POCD), amended to April 1, 2018.

By: Nardi

Seconded: Soares.

For: Nardi, Rasmussen-Tuller, Pose, Soares and Veits.
Against: None.
Abstain: None.

- c. C.G.S. 8-24 Referral:
Century Drive - Eversource Easement

Staff read into the record the memorandum dated November 5, 2024, from Raymond Rogozinski, P.E., Director of Public Works. Staff briefly described the plan to construct a switch gear in the right of way on Century Dr. across the street from the hotel.

MOTION: Motion to send a positive referral to the City Council for the C.G.S. 8-24 Referral for: Century Drive - Eversource Easement

The Planning Commission finds that the C.G.S. 8-24 referral as presented, **is generally consistent** with the goals and policies of the 2015 Plan of Conservation and Development (POCD), amended to April 1, 2018.

By: Soares

Seconded: Nardi.

For: Nardi, Rasmussen-Tuller, Pose, Soares and Veits.
Against: None.
Abstain: None.

5. New Business

There was no new business.

6. Old Business

There was no old business.

7. Staff Reports

Staff informed the Commission the New Britain Water Co. had applications with the Inland Wetlands & Watercourses Agency of the Conservation Commission, Zoning Commission and Aquifer Protection Area applications. Staff gave the Commission an overview of the 303-acre project on Maltby St. Staff explained the new facility would be constructed above the flood zone.

Commission inquiries: Staff explained if the applicant's plan works as it is supposed to work, the applicant was required to conduct a study of the effects of the aquifer after the wells are constructed.

8. Communications

There were no communications.

9. Adjournment

Motion was made by Commissioner Soares to adjourn.
Motion seconded by Commissioner Nardi.
Motion carried 5-0.

The meeting adjourned at 6:35 P.M.

These minutes represent the proceedings of the meeting.
This meeting was taped.

Respectfully submitted,
Nancy King

William Veits
Chairman
City Planning Commission



685 Lake Ave. Solar Request

City of Bristol
Office of Town and City Clerk
111 North Main Street
Bristol, Connecticut 06010
(860) 584-6200 ext. 0

October 9, 2024

Planning Commission
c/o Land Use Office
City Hall
111 North Main Street
Bristol, Connecticut 06010

Dear Members:

At a meeting of the City Council on October 8, 2024 it was unanimously voted that the City of Bristol enter into a Site Lease and Easement Agreement with CTEC Solar, LLC for use of a portion of the closed City landfill at 685 Lake Avenue under the terms as presented, and that the Mayor or Acting Mayor be authorized to execute the agreement on behalf of the City; and to refer this matter to the Office of Corporation Counsel for review. It was further voted that the proposed lease and easement agreement be referred to the Planning Commission for its review and report pursuant to CGS Sec. 8-24.

Very truly yours,

A handwritten signature in black ink that reads "Erica Cabiya". The signature is fluid and cursive.

Erica Cabiya, CCTC
Town and City Clerk

EC/mb

cc: Noelle Bates
Thomas Conlin, Asst. Corporation Counsel
Raymond A. Rogozinski, Dir. of P.W.



City of Bristol

BRISTOL, CONNECTICUT 06010

Planning Commission

Continuation to December 2024 Meeting

DATE: November 26, 2024

TO: City Council (c/o Erica Cabiya, Town and City Clerk)

FROM: Bristol Planning Commission

RE: C.G.S. 8-24 Review – 685 Lake Avenue – Map 4, Lot 17

Pursuant to the Connecticut General Statutes Section 8-24, the Bristol Planning Commission, at its meeting of November 25, 2024, voted to continue the C.G.S. review to the December 23, 2024, regular meeting. The Bristol Planning Commission requested the applicant's attendance at the December 23, 2024, regular meeting to make a presentation and answer questions for the Commission.

For questions or additional information, please contact:

City Planner – Robert M. Flanagan, AICP – City of Bristol Land Use Office at 860-584-6225.

c: Attorney J. Steeg (via email)

EDWARD C. KRAWIECKI, JR.
CORPORATION COUNSEL



THOMAS W. CONLIN
ASSISTANT CORPORATION COUNSEL

JEFFREY R. STEEG
ASSISTANT CORPORATION COUNSEL

SCOTT MATNEY
ASSISTANT CORPORATION COUNSEL

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LEGAL ADMINISTRATOR

MARIA THEAM
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CITY HALL
111 NORTH MAIN STREET
BRISTOL, CONNECTICUT 06010
Tel. (860) 584-6150
Fax (860) 584-6152

City of Bristol
Office of the Corporation Counsel

MEMORANDUM

TO: Robert Flanagan, City Planner

FROM: Thomas W. Conlin, Assistant Corporation Counsel *TWC*

DATE: October 23, 2024

RE: Request for C.G.S. Section 8-24 Planning Commission Review
City Lease of 685 Lake Avenue Closed Landfill site to CTEC, LLC
Solar Power Generation

Robert, the City recently approved a Lease between the City of Bristol and CTEC, LLC contingent upon C.G.S. 8-24 review, for lease of approximately 7.5 acres of property within the existing Bristol solid waste transfer site, in particular the closed and capped landfill portion which is no longer in use but subject to a Stewardship Permit provided and approved by CT Department of Energy and Environmental Protection. CTEC's proposal is to place solar voltaic panels on top of the closed landfill in what is called a "ballast system", which will not disturb the cap, or the transfer station operations. The solar voltaic panels will collect solar energy which is then converted into electrical energy and transmitted on to the electrical grid. It is estimated that approximately 2 megawatts DC of electrical energy will be generated (2,823,380 Kilowatts) annually. Attached is a map depicting the proposed area for placement of the solar voltaic panels.

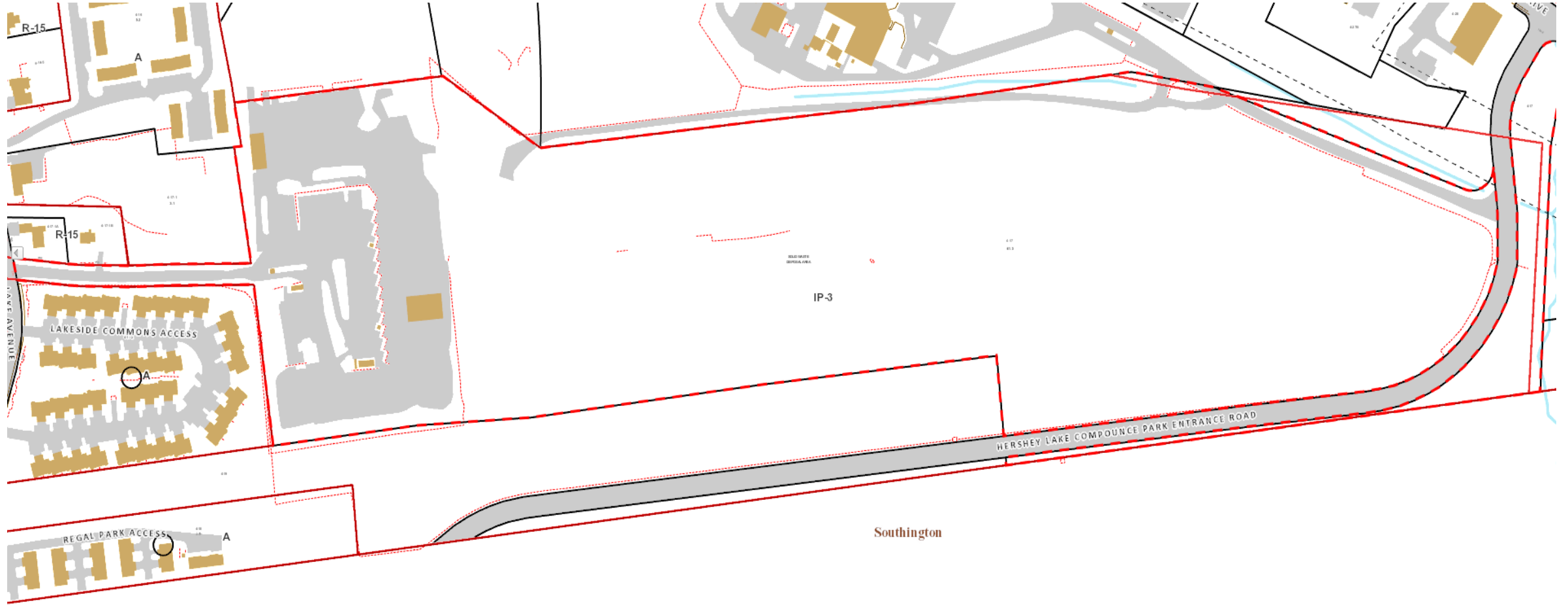
Conn. Gen. Stat. § 8-24

Section 8-24 - Municipal improvements

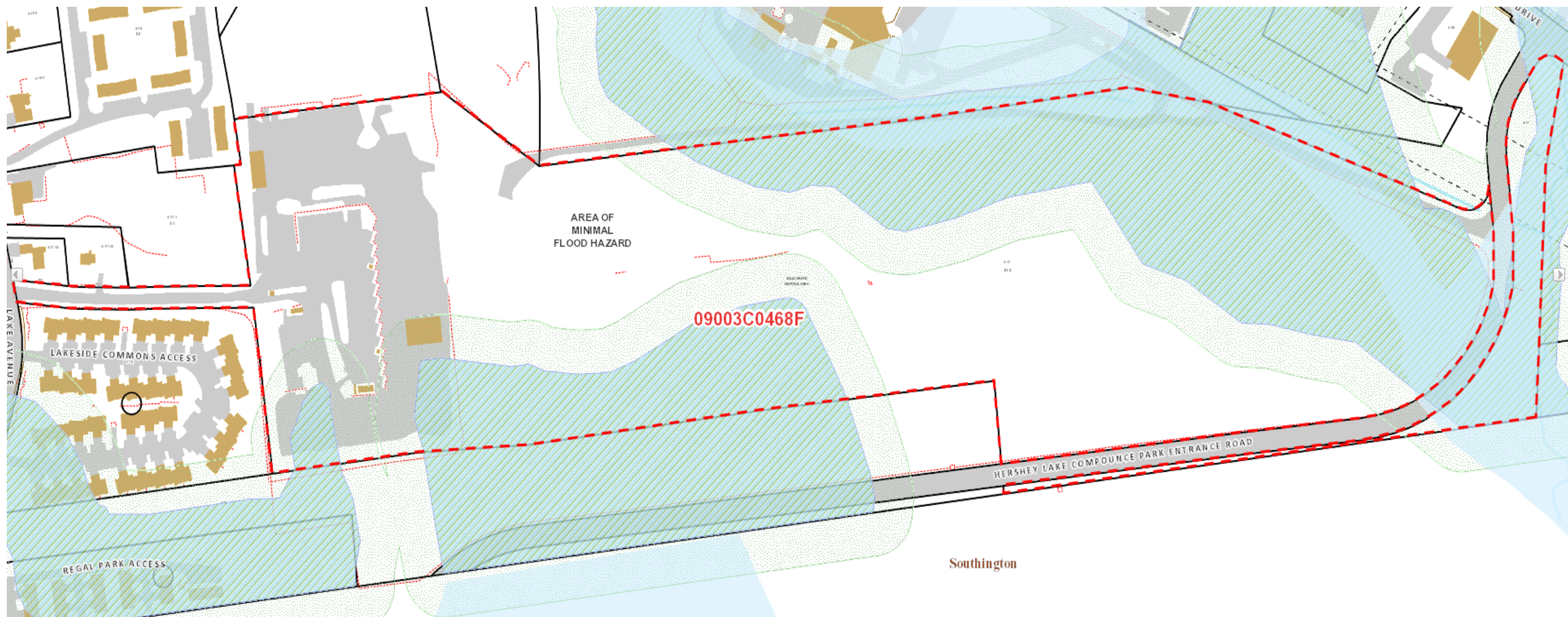
No municipal agency or legislative body shall (1) locate, accept, abandon, widen, narrow or extend any street, bridge, parkway or other public way, (2) locate, relocate, substantially improve, acquire land for, abandon, sell or lease any airport, park, playground, school or other municipally owned property or public building, (3) locate or extend any public housing, development, redevelopment or urban renewal project, or (4) locate or extend public utilities and terminals for water, sewerage, light, power, transit and other purposes, until the proposal to take such action has been referred to the commission for a report. Notwithstanding the provisions of this section, a municipality may take final action approving an appropriation for any proposal prior to the approval of the proposal by the commission pursuant to this section. The failure of the commission to report within thirty-five days after the date of official submission of the proposal to it for a report shall be taken as approval of the proposal. In the case of the disapproval of the proposal by the commission the reasons therefor shall be recorded and transmitted to the legislative body of the municipality. A proposal disapproved by the commission shall be adopted by the municipality or, in the case of disapproval of a proposal by the commission subsequent to final action by a municipality approving an appropriation for the proposal and the method of financing of such appropriation, such final action shall be effective, only after the subsequent approval of the proposal by (A) a two-thirds vote of the town council where one exists, or a majority vote of those present and voting in an annual or special town meeting, or (B) a two-thirds vote of the representative town meeting or city council or the warden and burgesses, as the case may be. The provisions of this section shall not apply to maintenance or repair of existing property, buildings or public ways, including, but not limited to, resurfacing of roads.



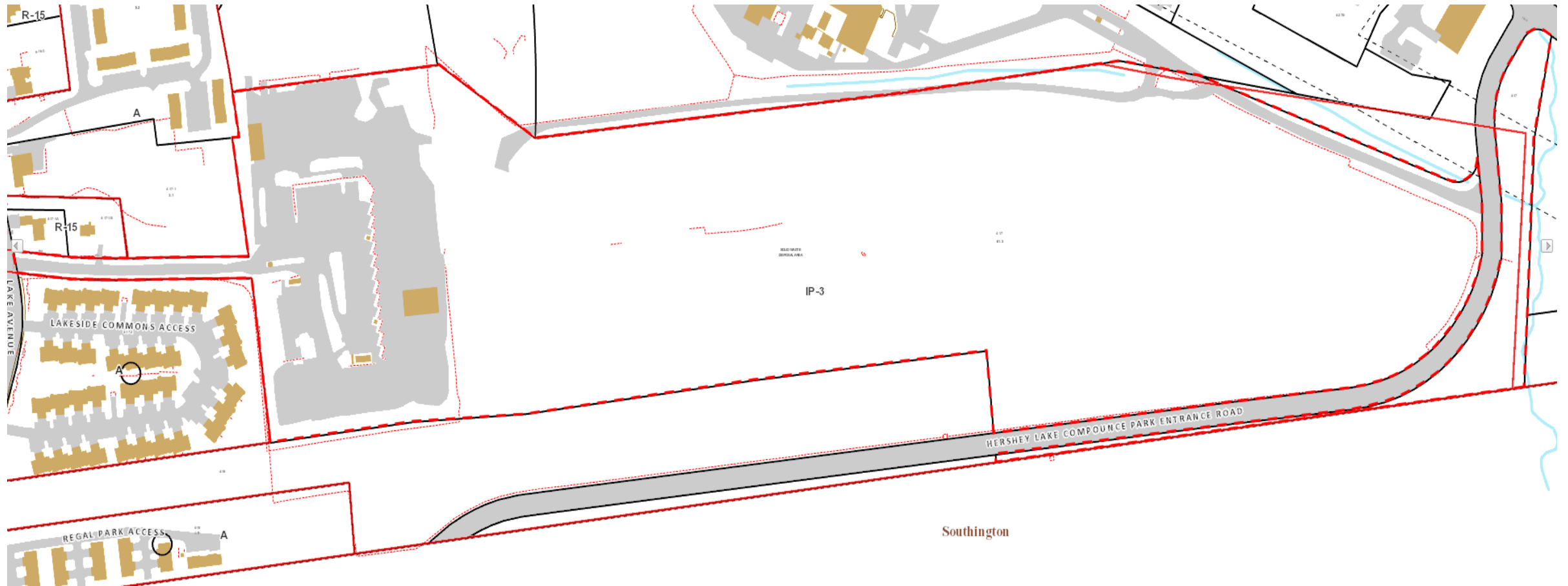
685 Lake Avenue
Map 4 – Lot 17
Aerial
IP-3 zone



685 Lake Avenue
Map 4 – Lot 17
Location
IP-3 zone



685 Lake Avenue
Map 4 – Lot 17
IWWA
IP-3 zone



685 Lake Avenue
Map 4 – Lot 17
Zoning
IP-3 zone

**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
1.625 MW AC, to be Located at the Bristol Landfill,
685 Lake Avenue, Bristol, Connecticut**



**Prepared for:
The Connecticut Siting Council**

September 30, 2024

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APPENDIX F PUBLIC OUTREACH

APPENDIX G ENVIRONMENTAL IMPACT ANALYSIS

APPENDIX H SITE DRAWINGS

LIST OF ABBREVIATIONS

<u>Abbreviation</u>	<u>Term/Phrase/Name</u>
ACOE	Army Corps of Engineers
AMSL	Above mean sea level
APA	Aquifer Protection Area
BMP	Best Management Practice
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
CLEAR	Center for Land Use Education and Research
CSC	Connecticut Siting Council
CT-DEEP	Connecticut Department of Energy and Environmental Protection
CT-DOT	Connecticut Department of Transportation
CT-ECO	Connecticut Environmental Conditions Online
CTEC	CTEC Solar, LLC
ConnCRIS	Connecticut Cultural Resources Information System
E&S	Erosion and sedimentation
EIA	Environmental Impact Analysis
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Act
FIRM	Flood Rate Insurance Map
IPaC	Information for Planning and Consulting Database
LOC	Limit of construction
NHD	National Hydrography Dataset
NLEB	Northern long-eared bat
NOAA	National Oceanic and Atmospheric Administration

<u>Abbreviation</u>	<u>Term/Phrase/Name</u>
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
Project	Bristol Landfill Solar Project
SHPO	State Historic Preservation Office
SSURGO	Soil Survey Geographic Database
UConn	University of Connecticut
USDA	United States Department of Agriculture
USFWS	United States Fish & Wildlife Service

1.0 PROJECT 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 ballast mount fixed tilt solar-based electric generating facility, with an output of approximately 1.625 megawatts (“MW”) alternating current (“AC”) (the “Project” or “Facility”), located in the City of Bristol, Connecticut (“City”) on the Bristol 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 results of the analyses and investigations, presented below for each environmental resource, demonstrate that the Project will comply with the Connecticut Department of Energy and Environmental Protection (“CT-DEEP”) environmental quality standards such that the Project will not have an adverse effect on the environment.

2.0 PROJECT INFORMATION

2.1 Project Location

The Project will be located on an approximately 58.8-acre parcel on Lake Avenue in Bristol, Connecticut. The location of the parcel is shown in Appendix A, Exhibit 1. The Bristol Transfer Station currently operates at the Site, with the transfer station in the western portion of the parcel and a capped landfill in the eastern portion of the parcel.

The topography at the Site slopes down in all directions from the landfill. The elevation ranges from approximately 290 feet above mean sea level (“AMSL”) in the east to 230 feet AMSL in the southwest. A topographic map of the site is shown in Appendix A, Exhibit 2.

The parcel is surrounded to the north and to the east by commercial and industrial facilities, to the south by parking lots, and to the west by neighborhoods and forested land. The land use surrounding the Site is shown in Appendix A, Exhibit 3. The parcel is zoned Industrial.

2.2 Project Construction, Operation, and Maintenance

The Project will be constructed on approximately 7.72 acres of the transfer station and capped landfill that is located on the parcel (“Project Area”). These 7.72 acres represent the approximate limit of construction (“LOC”). Within the LOC, there will be no ground disturbance on the capped landfill as the solar arrays will be ballast mounted, and the electrical conduits will be located on cable trays. There will be minimal ground disturbance in the southern portion of the transfer station, as the solar array system will be interconnected to: an existing utility pole on the southwest portion of the site, underneath the pavement below the building, four new utility poles and an overhead electric line. Because construction activities will result in minimal ground disturbance, construction impacts are considered *de minimis*. More detailed information regarding the Project can also be found in Appendix H, Site Drawings.

When constructed and fully operational, the Project is anticipated to contain 3,724 540W Heliene 144HC M10 SL photovoltaic modules (or panels) and 13 CPS 125kW inverters, with a DC/AC ratio of 1.23. The Site will be unstaffed once it is operational; the only visits Project personnel will make to the Site will be for maintenance activities, which are anticipated to occur twice a year. The Site will be monitored remotely to ensure proper operation, and should difficulties arise, the Project can be shut down remotely.

It is anticipated that construction hours will be from 7am to 5pm, Monday through Saturday. The Council will be notified when Saturday work is deemed necessary. It is anticipated that 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 – on or before Q4 2024 (if deemed necessary)
- Receive Siting Council Declaratory Ruling - on or before Q1 2025
- Receive Landfill Post Closure Use/ Landfill Disruption Permit Approval - on or before Q2 2025 (if deemed necessary)
- Complete Procurement of Long Lead Equipment - Q2 2024 - Q2 2025
- Site mobilization – beginning Q3 2025
- Delivery of racking and PV modules – Q3 2025
- Racking installation completion – Q3 2025
- PV module installation completion – Q3 2025
- DC electrical installation completion – Q4 2025
- AC electrical installation completion – Q4 2025
- Cold commissioning – Q4 2025
- Mechanical completion – Q4 2025
- Hot commissioning – Q4 2025
- Commercial operation date – Q4 2025
- Final punch list and site demobilization – from Q4 2025 through Q4 2026

2.2.1 Access

The Project Area will be accessible using an existing gravel access road. The access road begins in the western portion of the parcel and runs generally west to east along the northern edge of the capped landfill. No new access roads will need to be developed for this Project.

2.2.2 Compliance with Health and Safety Standards

The Project will maintain compliance with all applicable codes and health and safety standards related to electric power generation. The Project will not consume raw materials, will not produce by-products, and will be unstaffed during normal operating conditions.

The Bristol Transfer Station is fenced and gated, so no new fencing is proposed for the Project.

2.2.3 Compliance with Local, State, and Federal Land Use Plans

The Project is consistent with local, state, and federal land use plans and policies. As stated previously, the Project will be located within an Industrial zone, and although local land use requirements will not apply, the Project has still been designed to meet the City of Bristol’s land use regulations for Industrial zones to the extent feasible. The proposed Project is consistent with the existing uses of the landfill and the surrounding area and puts the existing landfill to productive re-use.

The Project will benefit the City of Bristol by increasing the local energy generation capacity that does not rely on the congested regional electrical transmission networks to improve electrical reliability.

Additionally, the Project will support the City’s and the State’s goals to develop renewable energy resources. In the City of Bristol’s 2015 Plan of Conservation and Development, the City identified “[encouraging] energy-efficient patterns of development and land use, the use of solar and other renewable forms of energy, and energy conservation” as ways to protect the natural resources in the City of Bristol. The development of the Project progresses the City towards this goal.

2.2.4 Community Relations

C-Tec has been in communication with and has had informal interactions with City officials regarding the design and development of the Project. C-Tec contacted City officials regarding the Project as early as July 2020, when C-Tec and the City signed a letter of intent to participate in the State’s VNM and LREC/ZREC Programs and submitted an interconnection application request. In December 2020, C-Tec obtained the City’s signatures for its utility impact study. In March 2021, C-Tec and the City discussed the incentive programs and signed the VNM agreements. In June 2021, C-Tec and the City conversed regarding execution of the ZREC agreements.

In December 2021, C-Tec and the City discussed Project status updates. Such updates and next steps were discussed in January and February 2022 as well, and in February, the City and C-Tec executed an NRES bid form. In March 2022, the City signed an option to lease in connection with the NRES application. In September 2022, C-Tec and the City withdrew their VNM application. In December 2022, C-Tec and the City discussed lease rates and strategies for participation in the NRES program. C-Tec and the City negotiated their lease option forms and discussed the 2023 NRES bid submittal between January and April 2023.

After receiving their NRES award, C-Tec and the City then discussed their lease agreement and scheduled a Topographical Survey and Wetland Delineation in September 2023. In November 2023, C-Tec and the

City conducted a site visit to the Project Site. Lease negotiations ensued following the site visit, and in May 2024, the parties agreed on a value proposition of the solar array based upon review by the City’s consultant. This month, the parties are finalizing their lease to present to the City Council for final approval during the City’s October meeting.

On September 25, 2024, notices of this Petition were sent to all abutters and governmental officials in accordance with Council regulations. A copy of the information related to these notices is included as Appendix F.

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. C-Tec Solar, LLC has successfully developed over 100 MW of commercial solar projects in the Northeast. C-Tec’s portfolio of projects range from rooftop to ground-mounted power plants, and several notable projects of C-Tec 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;

12. Mitchell (Simsbury, CT): Installation at the Mitchell Automotive Group's Simsbury location, 130kW;

13. Thompson Family Land Farm (Ellington, CT):VNM Facility, 2.8MW; and

14. New Britain Landfill (Berlin, CT): VNM Facility, Ballasted Ground Mount, 1.3MW

C-Tec 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 Commonwealth of Massachusetts.

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

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
C-Tec Solar, LLC
1 Griffin Road South, Suite 200
Bloomfield, CT 06002
michael.morrison@ctecsolar.com
(860) 580-7174 ext. 121

Lee D. Hoffman
Liana Feinn
Pullman & Comley, LLC
90 State House Square
Hartford, CT 06103
lhoffman@pullcom.com
lfeinn@pullcom.com
860-424-4300

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

3.0 NATURAL AND CULTURAL RESOURCES

3.1 Habitats

As previously discussed, the Bristol Transfer Station currently operates at the parcel on which the Project will be located. The transfer station is located on a gravel lot in the western portion of the parcel, and a capped landfill is located in the eastern portion of the parcel. The landfill is covered by grass. A wetland, discussed further in Section 3.3.2, flows from two culverts to the south of the transfer station. Land cover is illustrated in Appendix A, Exhibit 4.

Because the Site is already developed, vegetative and habitat diversity has been reduced, and only species that are habitat-generalists or that are adapted to disturbed habitats are likely to be present at the Site.

3.1.1 Protected Habitats

3.1.1.1 Core Forests

Because the Project will be constructed entirely on an existing transfer station and capped landfill, no tree clearing will be required. Further, as the Project's capacity is less than 2.0 MW AC, prior approval pursuant to P.A. 17-218 from CT-DEEP Forestry is not required for submission of this Petition. However, the Petitioner still assessed the Project's potential impacts on forests, specifically core forests, as there is forested land surrounding the parcel where the Project will be located. Core forests are defined by the University of Connecticut's Center for Land Use Education and Research ("CLEAR") as forests greater than 300 feet from non-forested habitat. CLEAR identifies three categories of core forest: small (< 250 acres); medium (250-500 acres); and large (>500 acres). Based on the 2015 CLEAR data, the Project Area does not contain any forested habitats identified as core forests; the nearest core forest is approximately 0.28 miles to the west of the Project Area. This is consistent with the Petitioner's independent analysis, based on field observations and professional experience, which indicated that no forested habitat is located on-site.

The forested habitat surrounding the Site is likely influenced by what are called edge effects. In the 300-foot zone between forested and non-forested habitats, there are often edge effects, such as decreased forest quality, increased levels of disturbance, and increased rates of nest predation and brood parasitism for forest birds. Since the Project will be constructed on an existing transfer station and capped landfill, no new impacts to forested habitats, specifically core forests, are anticipated.

3.2 Rare, Threatened, and Endangered Species

3.2.1 State-Listed Species

The CT-DEEP Natural Diversity Database (“NDDB”) program reviews proposed development projects to assess their potential impacts on state-listed rare, threatened, and endangered species. CT-DEEP also maintains publicly available NDDB maps to be used as an initial assessment tool to show the approximate locations of the state-listed species and their habitats. The NDDB maps were reviewed and based on the July 2023¹ data, the Project Site overlaps with an NDDB area in the northwest corner of the Site. This is shown in Appendix A, Exhibit 6. *See also*, Appendix G.

C-Tec submitted a request for NDDB state listed species review on December 12, 2023, in accordance with CT-DEEP and Council requirements. The request is included in Appendix B. It is not anticipated that the Project will impact state-listed species or state-listed species’ habitats as the Project Site is already developed.

3.2.2 Federal-Listed Species

The United States Fish & Wildlife Service (“USFWS”) maintains the Information for Planning and Consulting Database (“IPaC”) to assist in the assessment of proposed development projects’ potential impacts on federal-listed species.

A USFWS IPaC review identified one Endangered Species, the Northern Long-eared Bat (*Myotis septentrionalis*) (“NLEB”), as potentially present in the vicinity of the Project Site. It identified 10 migratory birds that may be present in the vicinity of the Project, including 8 species that are a Bird of Conservation Concern, and the Bald Eagle and the Golden Eagle, which are covered by the Bald and Golden Eagle Protection Act. It also identified the Monarch Butterfly, a Candidate species, as potentially present in the vicinity of the Project Site. The IPaC report is included in Appendix B.

Federally-Listed RTE Species Potentially Occurring: Project Site

Common Name (Scientific Name)	Status
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Endangered
Monarch Butterfly (<i>Danaus plexippus</i>)	Candidate

No take² of a federal-listed species, in this case the NLEB, is anticipated during the construction, operation, and maintenance of the Project. The NLEB utilizes caves, called hibernacula, as their winter habitat and

¹ NDDB maps are updated bi-annually.

² Under the Endangered Species Act, to “take” means “to harass, harm, pursue, hunt, shoot, wound, kill, trap,

live in dead trees, called snags, as their summer habitat. The NLEB can be found throughout the northeastern United States, including the entire State of Connecticut, and within Connecticut, areas of concern for the NLEB are shown in the *Northern long-eared bat areas of concern in Connecticut to assist with Federal Endangered Species Act Compliance map* (March 6, 2019). There are no NLEB areas of concern around the Project Site; the nearest NLEB area of concern is in Morris, Connecticut, approximately 15 miles from the Site. Furthermore, as previously discussed, the Project will not require the removal of any trees. Therefore, the Project will likely not result in a take of NLEB or any other federally listed threatened and/or endangered species.

C-Tec submitted a request for a determination of compliance with Section 7 of the Endangered Species Act from the USFWS on December 11, 2023. The request is included in Appendix B.

3.3 Wetlands and Watercourses

3.3.1 Desktop Review

The Petitioner has consulted the following databases related to wetlands and watercourses: the USFWS's National Wetlands Inventory ("NWI"), the United States Department of Agriculture ("USDA") Natural Resource Conservation Service's ("NRCS") Soil Survey Geographic Database ("SSURGO"), the National Hydrography Dataset ("NHD"), and CT-DEEP hydric soils and hydrography data. The results are shown in Appendix A, Exhibit 7. *See also*, Appendix G.

CT-DEEP data shows a possible marsh in the south of the Site, approximately 106.3 feet south from the approximate LOC, and possible wetland soil in the southwest corner of the Site, approximately 157.4 feet west from the approximate LOC. NWI data shows a possible palustrine wetland, which includes bogs, fens, marshes, and forested wetland swamps, in the southwest of the Site, approximately 301.99 feet northwest from the approximate LOC.

CT-DEEP data also shows unnamed watercourses in the western portion of the Site within the LOC and Grannis Brook in the northeastern portion of the Site, approximately 226.9 feet from the LOC; it also shows Mix Brook approximately 597.8 feet to the southwest of the LOC.

3.3.2 Field Investigation

A field investigation and wetland delineation has been conducted in accordance with the 1987 U.S. Army Corps of Engineers ("USACE") *Wetland Delineation Manual*, other USACE jurisdictional guidance,

capture, or collect, or to attempt to engage in any such conduct."

Connecticut Inland Wetlands and Watercourses regulations, and Connecticut Tidal Wetlands regulations. A certified soil scientist conducted the investigation and delineation on November 28, 2023. The results of the investigation are summarized below and are included in Appendix C. Delineated wetland resources at the Site include two areas located predominantly in the Town-owned parcel south of the active landfill nearest to Lake Avenue and the Lake Compounce Campground access road. The locations of the resources identified during the investigation are shown in Appendix A, Exhibit 8. *See also*, Appendix G.

The area identified as Wetland W1 is located south of the transfer station portion of the Site. It is hydrologically supported by stormwater runoff, primarily from two culverts that discharge into the wetland. The underlying substrate and an otherwise restrictive layer retain water resulting in the development and establishment of hydric soils, vegetation, and hydrology. The wetland is dominated by non-native vegetation such as common reed (*Phragmites australis*) and invasive vegetation such as Asiatic bittersweet (*Celastrus orbiculatus*), autumn olive (*Elaeagnus umbellata*), and multiflora rose (*Rosa multiflora*).

The second delineated area, Mix Brook, flows from west to east southwest of the Project Area. The substrate of the brook is primarily sand and gravel. At the time of the delineation, the water level ranged from 4 to 12 inches, but the Brook is likely influenced by stormwater runoff that results in highly variable flows throughout the year. The Brook is classified by CT-DEEP as a Class 2 watercourse, meaning it has the potential to support the drinking water supply, the agricultural and industrial water supply, fish and wildlife habitat, and recreational use.

3.3.3 Impacts to Wetlands and Watercourses

No impacts to wetlands or watercourses are anticipated in the construction, operation, and maintenance of the Project. The Project will require construction activity, specifically the installation of four utility poles and an overhead electric line, near Wetland W1. The proposed work will be isolated to areas of existing impacts within the buffer of Wetland W1, and no new impervious areas are proposed.

Best Management Practices (“BMPs”) will also be employed to avoid any unintentional impacts to the wetland during construction. Project-specific BMPs will be outlined in full in Erosion Control Plan within the Civil Permitting Plan and will likely include stormwater control measures such as compost filter sock and silt fence. These BMPs will ensure that any potential adverse impacts to the wetland are mitigated.

Any potential long-term impacts to the wetland associated with the operation and maintenance of the Project are minimized by several design and operational factors. The Project will be unstaffed once it is operational, meaning it will generate almost no additional traffic. Those who do visit the Project Site once it is operational for maintenance will use an existing gravel road, which eliminates the creation of new

impervious surfaces and decreases the potential for gravel erosion into the wetland. Additionally, the ground below the solar arrays will remain vegetated, which allows ample opportunity for water to infiltrate or slow prior to discharge to surrounding wetlands and watercourses.

Therefore, the Project is not anticipated to have an adverse impact to wetlands and watercourses.

3.3.4 Impacts to Vernal Pools

Under the Connecticut Inland Wetland and Watercourses Act, vernal pools, or seasonal wetlands that are typically wet from winter to spring and dry from summer to fall, are considered watercourses. Therefore, vernal pools were also assessed during the wetlands and watercourses delineation. No vernal pools were identified on or around the Project Site, and therefore, no impacts to vernal pools are expected.

3.4 Floodplains

The Federal Emergency Management Agency (“FEMA”) describes a base flood as the flood that has a 1-percent chance of being equal to or exceeded each year, also known as a 100-Year Floodplain. Based on a review of the FEMA Flood Insurance Rate Map (“FIRM”), the Project is located within FIRM Panel #09003C0468F, effective September 26, 2008, and most of the Project Area is not located within a 100-Year Floodplain. The Project property does overlap with a 100-Year Floodplain at the north and east property boundary. However, the Project Area does not overlap with the floodplain, so no considerations regarding developing in floodplains were required. This is shown in Appendix A, Exhibit 7. *See also*, Appendix G.

3.5 Water Quality

No impacts to water quality are expected during the construction, operation, and maintenance of the Project. The Project will be unstaffed once it is operational, so there will be no potable water uses or sanitary discharges. Naturally occurring rainfall should be sufficient to keep the panels clean, so no water usage is anticipated for such cleaning. There will also be no liquid fuels required to operate the Project. Should liquid fuels be required to be stored at the Project during the Project’s construction, a spill prevention plan will be prepared, and such fuels will be stored in accordance with that plan. Any stormwater generated by the development of the Project will be properly managed according to the 2023 *Connecticut Stormwater Quality Manual* and CT DEEP’s General Permit Appendix I. Stormwater management is discussed further in Section 3.5.3.

3.5.1 Groundwater

CT-DEEP classifies the groundwater at the Project Site as “GB,” meaning the groundwater is assumed to

have some degradation, making it not suitable to drink without treatment. Based on CT-DEEP data, the Project Site is not within a regulated Aquifer Protection Area (“APA”). The nearest APA, the “Well 9” APA, is approximately 3.1 miles to the east of the Site. Therefore, the Project is not expected to have an adverse impact on groundwater quality. *See*, Appendix G.

3.5.2 Surface water

Based on CT-DEEP data, the Project is located in the South Central Coast Major Drainage Basin, the Quinnipiac Regional Drainage Basin, and the Eight Mile Subregional Drainage Basin, and Local Drainage Basin 5201-02 in the western portion of the parcel and 5201-00 in the eastern portion of the parcel. *See*, Appendix G.

As discussed in Section 3.3.1 and 3.3.2, CT-DEEP data shows unnamed water resources in the western portion and Grannis Brook in the northeastern portion of the Project Area; these resources were not observed in the field. There are no other surface water resources on-site. The nearest surface water resource is Mix Brook, which is approximately 597.8 feet to the southwest of the Project Area.

The Project is not expected to have an adverse impact on surface water quality. There are sufficient setbacks established from surface water resources near the Project, and during construction, erosion and sedimentation (“E&S”) controls will be installed and maintained according to the *Connecticut Guidelines for Soil Erosion and Sediment Control*. Any stormwater generated from the Site will be managed according to the 2023 *Connecticut Stormwater Quality Manual*.

3.5.3 Stormwater

In addition to the 2023 *Connecticut Stormwater Quality Manual* and *Connecticut Guidelines for Soil Erosion and Sediment Control*, the Project has been designed to meet CT-DEEP’s General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (“GP”), including the requirements found in Appendix I of the GP. Combined, these address three (3) main concerns: stormwater runoff peak attenuation, water quality volume treatment, and E&S control during construction.

3.5.3.1 Stormwater Runoff Peak Attenuation

The Project will utilize ballast mounted solar modules and concrete equipment pads on gravel. No ground disturbance or penetrations are proposed on the landfill to maintain the integrity of the existing landfill cap. The capped landfill is considered impervious. As such, no increase in stormwater runoff is anticipated for this Project. The landfill has existing stormwater management features that will be maintained and are anticipated to be sufficient. *See*, Appendix G.

3.5.3.2 Water Quality Volume Treatment

The Project is not anticipated to increase the effective impervious cover of the Site. As such, it would not require additional water quality volume treatment.

3.5.3.3 Erosion and Sediment Control During Construction

Since the Project is not anticipating any ground disturbance or penetration on the capped landfill, no protective measures are anticipated to be needed on the cap as no sediment should be generated during construction. A construction entrance is proposed along the existing gravel access road, and a stockpile area is shown in an existing paved area associated with the transfer yard. Additionally, the phased erosion control plans show a compost filter sock sediment barrier on the downstream sides of the Project along the cap if additional protections are needed. With the incorporation of these protective measures, stormwater runoff from the Project development is not anticipated to result in adverse impacts to water quality. *See, Appendix G.*

3.6 Air Quality

The Project will be located entirely on an existing transfer station and capped landfill. No air emissions will be generated during the operation of the Project, as it will be a solar energy generation facility, and therefore, no adverse impacts on air quality are expected. *See, Appendix G.*

During the construction of the Project, there may be temporary mobile source emissions associated with construction vehicles and equipment; such air quality impacts can be considered *de minimis*. Even though there will be minimal adverse impacts, these impacts will be mitigated to the extent practicable through measures like limiting idling, maintaining vehicles and equipment, and spraying to minimize dust and particulate releases. Additionally, all on-site and off-road equipment will meet the standards for diesel emissions prescribed by the United States Environmental Protection Agency.

3.7 Soils

The soils below the Project Area are classified by the NRCS Soil Survey Geographic Database (“SSURGO”) as smoothed Udorthents, a well-drained soil derived from human-transported material which has been disturbed by cutting, filling, or grading. The soils surrounding the Project Area are classified as Udorthents-Pits complex, Udorthents-Urban land complex, Saco silt loam, Hinckley loamy sand, Windsor loamy sand, and Scarboro muck. *See, Appendix G.*

Because the Project will be located almost entirely on a capped landfill, there will be almost no soil disturbance associated with the Project. The solar panels will be ballast mounted on concrete blocks on the

surface of the landfill. The electrical cable connecting the solar arrays will sit in a cable tray also on the surface of the landfill. Therefore, there will be no soil disturbance associated with the installation of the solar panels. There will be minimal soil disturbance associated with the installation of the utility poles; however, these poles will be installed in an already disturbed area associated with the transfer station. Therefore, any soil disturbance impacts can be considered *de minimis*.

During construction, precautionary E&S controls will be installed and maintained according to the *Connecticut Guidelines for Soil Erosion and Sediment Control* to ensure any exposed soils resulting from construction activities will be properly and promptly treated.

The bedrock beneath the Project Area is New Haven Arkose, which is described as a reddish poorly sorted arkose. Because there is no earth disturbance associated with the Project, no bedrock is likely to be encountered.

3.7.1 Prime and Important Farmland Soils

Connecticut Environmental Conditions Online (“CT-ECO”) defines farmland soils as land that is prime, unique, or of state or local importance based on the soil type. Based on a review of the CT-ECO data, there are no prime, unique, or important farmland soils on the Site. Further, as the Project’s capacity is less than 2.0 MW AC, no consultation with the Department of Agriculture is required pursuant to P.A. 17-218 for the filing of a petition. The locations of the farmland soil relative to the Site are shown in Appendix A, Exhibit 5. *See also*, Appendix G.

3.8 Cultural Resources

Data from the National Register of Historic Places (“NRHP”), Connecticut State Historic Preservation Office (“SHPO”) Connecticut Cultural Resources Information System (“ConnCRIS”), CT-DEEP, and Connecticut Department of Transportation (“CT-DOT”) was reviewed to identify cultural resources and historic properties within two miles of the Site. *See*, Appendix G.

3.8.1 Historical and Archaeological Resources

Based on a review of NRHP data, there is one NRHP-listed building within two miles of the Project Site, the Terry-Hayden House, which is approximately 1.62 miles to the north of the Site. There are also two NRHP-listed historic districts within two miles of the Site: the Sound End Historic District and the Federal Hill Historic District, which are approximately 2 miles and 2.58 miles northwest of the Site, respectively. There is also one NRHP landmark, the Charles H. Norton House, which is approximately 2.16 miles to the northeast of the Site.

Based on a review of ConnCRIS data, the closest state-inventoried resource is the Otis Elevator Co., which is approximately 0.38 miles to the north of the Site. The closest state-registered resource is the Bugryn-Terry-Ball Farmhouse, which is approximately 0.95 miles to the north of the Site.

The locations of these resources are shown in Appendix A, Exhibit 9. *See also*, Appendix G.

C-Tec requested confirmation from SHPO regarding the absence of any cultural resources at the Project Site. The request is included in Appendix B. It is not anticipated that there will be any impacts to cultural resources associated with the Project.

3.8.2 Recreational Resources

Based on a review of CT-DEEP data, no designated recreational areas will be impacted, physically or visually, by the construction, operation, and maintenance of the Project. The nearest recreational area is the Compounce Cascade Trail, a CT Blue Blaze Hiking Trail located approximately 0.23 miles west of the Project Area. The locations of the recreational resources surrounding the Project are included in Appendix A, Exhibit 3. *See also*, Appendix G.

3.8.3 Scenic Resources

Based on a review of CT-DOT data, no designated scenic roads will be impacted, physically or visually, by the construction, operation, and maintenance of the Project. The nearest scenic road is approximately 5 miles northwest of the Project Area. *See also*, Appendix G.

3.9 Noise

All noise currently generated at the Site is associated with the operation of the Bristol Transfer Station. No unusual noise sources are present. During the Project's construction, there will likely be a temporary increase in noise immediately at and around the Project Site. The noise will be primarily generated by construction equipment, such as bulldozers, cranes, and trucks. The highest noise level from this equipment is approximately 88 dBA at the source. Noise generated by construction equipment is exempt from the regulations in City of Bristol Code of Ordinances Chapter Fifteen Article II – Noise if the equipment is operated during the daytime (7:00a.m. to 10:00p.m. Monday through Saturday, 9:00a.m. to 10:00p.m. Sunday).

Once the Project is operational, only minimal noise associated with the Project will be generated at the Site. Any noise generated will meet applicable City of Bristol noise standards for a Residential Daytime/Nighttime zone and an Industrial zone. The Project (the emitter) is located within an Industrial (IP-3) zone; the receptors could be located within the same Industrial (IP-3) zone or within the neighboring

Industrial (IP-1) or Multi-family Residential (A) zones. As such, the strictest standards the Project could be subject to would be 61 dBA during the daytime at the property line and 51 dBA during the nighttime at the property line.

The only noise associated with the Project will be generated by the Project's inverters and transformers. Based on the most conservative information provided by specified equipment manufacturers, the loudest piece of proposed equipment is a 2,000 kVA transformer that will generate a maximum sound level of approximately 65 dBA at one (1) meter away and 25 degrees Celsius. Equipment specifications can be found in Appendix D.

Sound reduces with distance, and the inverters and transformers are inactive at night. The closest property line relative to the nearest inverter/transformer is approximately 242 feet to the south, associated with the Hershey Lake Compounce Park Entrance Road. Based on the Inverse Square Law, the anticipated noise level of this transformer from that distance drops well below applicable noise regulations at the closest property line.

3.10 Lighting

Light sources associated with the Bristol Transfer Station are currently installed on-site. No exterior lights will be installed on-site associated with the Project. Small, non-intrusive lights will be installed on the Project equipment for visibility during maintenance activities. Therefore, no impacts from light sources are anticipated by the development of the Project.

3.11 Visibility and Reflectivity

The Project will require installing 3,724 solar panel modules, each measuring approximately 6 feet above final grade, in two arrays. The western array will contain 1,372 models, and the eastern array will contain 2,352 modules. The proposed electrical interconnection for the Project will also require the installation of four new utility poles in the western portion of the Site. *See*, Appendix G.

Because of the topography at the Site, the Project will likely be visible from the roads and residences immediately surrounding the Site, specifically Enterprise Drive to the east, Lake Avenue to the west, the unnamed roads to the north and south, and the residential community to the west. There are, in almost all places along the road and near the residences, vegetative buffers between the Project Site and the nearby residences and roads. Little to no visibility of the Project is anticipated from immediate abutters due to the existing vegetative buffers.

The solar panel modules are designed to minimize reflectivity. It is anticipated that only a small amount of light will be reflected off the panels, less than the amount of light reflected off the surface of smooth water. The panels will also be tilted up toward the southern sky at a fixed angle of 20 degrees, thereby further reducing reflectivity.

A visual simulation of the Project is included in Appendix E.

3.12 FAA Determination

The Federal Aviation Administration (“FAA”) Notice Criteria Tool was used to assess the Project’s potential impacts on air navigation. The results are included in Appendix B. The Petitioner does not anticipate any impacts to air navigation associated with the Project.

4.0 CONCLUSION

As discussed in this Petition, the Project will not have an adverse effect on the natural and cultural resources in and around the Project Site. The Project will comply with the CT-DEEP environmental quality standards, and furthermore, the Project will benefit the City of Bristol and the State of Connecticut by increasing the local energy generation capacity, improving electrical reliability, and advancing the City’s and the State’s goals to develop renewable energy resources.

The Bristol Transfer Station currently operates at the Site where the Project will be located. The solar arrays and electrical conduits will be constructed on a capped landfill in the eastern portion of the parcel, and the utility poles and overhead electric line will be constructed on a gravel lot in the western portion of the parcel.

The Project is not expected to have an impact on the habitats at and around the Project Site. Because the Site is already developed, habitat diversity and quality has already been reduced, and only species that are habitat-generalists or that are adapted to disturbed habitats are likely to be present. There is forested land around the Site, but these forests are not core forests, and their quality as habitats is also likely reduced due to the nearby development.

The Project is also not expected to have an impact on state or federal-listed threatened and endangered species. The Project Site overlaps with an area identified as an approximate location of the state-listed species or state-listed species’ habitat, but this area is outside the limit of construction. As such, no impacts to state-listed species are expected. The NLEB, a federal-listed species, was identified as being potentially present at the Project Site, but because the Site is not within an NLEB area of concern, and because the

Project will not require the removal of any trees, no impacts to NLEB or other federal-listed species are expected.

Field investigations identified one wetland and one watercourse within the vicinity of the Project Site. There will be construction near the wetland, but the work will be minimal, as it is limited to the installation of the four utility poles and the overhead electric line, and it will be contained to areas of existing impacts. BMPs will also be installed to avoid any unintentional impacts to the wetland during construction.

The installation of the utility poles and the overhead electric line will be the only ground disturbance associated with the Project, and as such, no impacts to surface or ground water quality are expected. No impervious surfaces will be created, erosion and sedimentation controls will be installed and maintained, and stormwater will be managed. Furthermore, the Site will be unstaffed once it is operational, meaning there will be no potable water uses or sanitary discharges, and no liquid fuels are required to operate the Project.

Because there will be minimal ground disturbances, limited to an already developed area, no impacts to soil are expected.

There may be increased emissions and noise during the construction of the Project, but any impacts will be mitigated to the extent practicable by following federal, state, and local guidelines. Once the Project is operational, there will be no emissions generated, and any noise generated will be below the limit permissible by the City of Bristol.

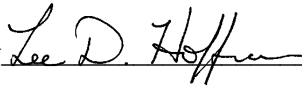
There may also be impacts associated with lighting, visibility, and reflectivity, but these impacts can be considered *de minimis*. Small light sources will be installed within the solar arrays, but these lights will be non-intrusive. The Project itself will be visible from the roads immediately surrounding the Site, but it will likely not be visible from the residences near the Site as there are vegetative buffers already in place. The Project has also been designed to minimize reflectivity, such that the amount of light reflected from the solar panels will, at most, be comparable to the amount of light reflected off the surface of still water.

There are no cultural resources, including historical, archaeological, recreational, and scenic resources, immediately surrounding the Project Site; the nearest is the Compounce Cascade Trail, which is about a quarter mile away. The Project will likely not be visible from the trail, and therefore no impacts to this resource or other resources are expected.

As demonstrated by the foregoing, the Project satisfies the standards set forth in C.G.S. § 16-50k(a). More importantly, the siting of this Project on a former landfill shows an intelligent plan for the siting of

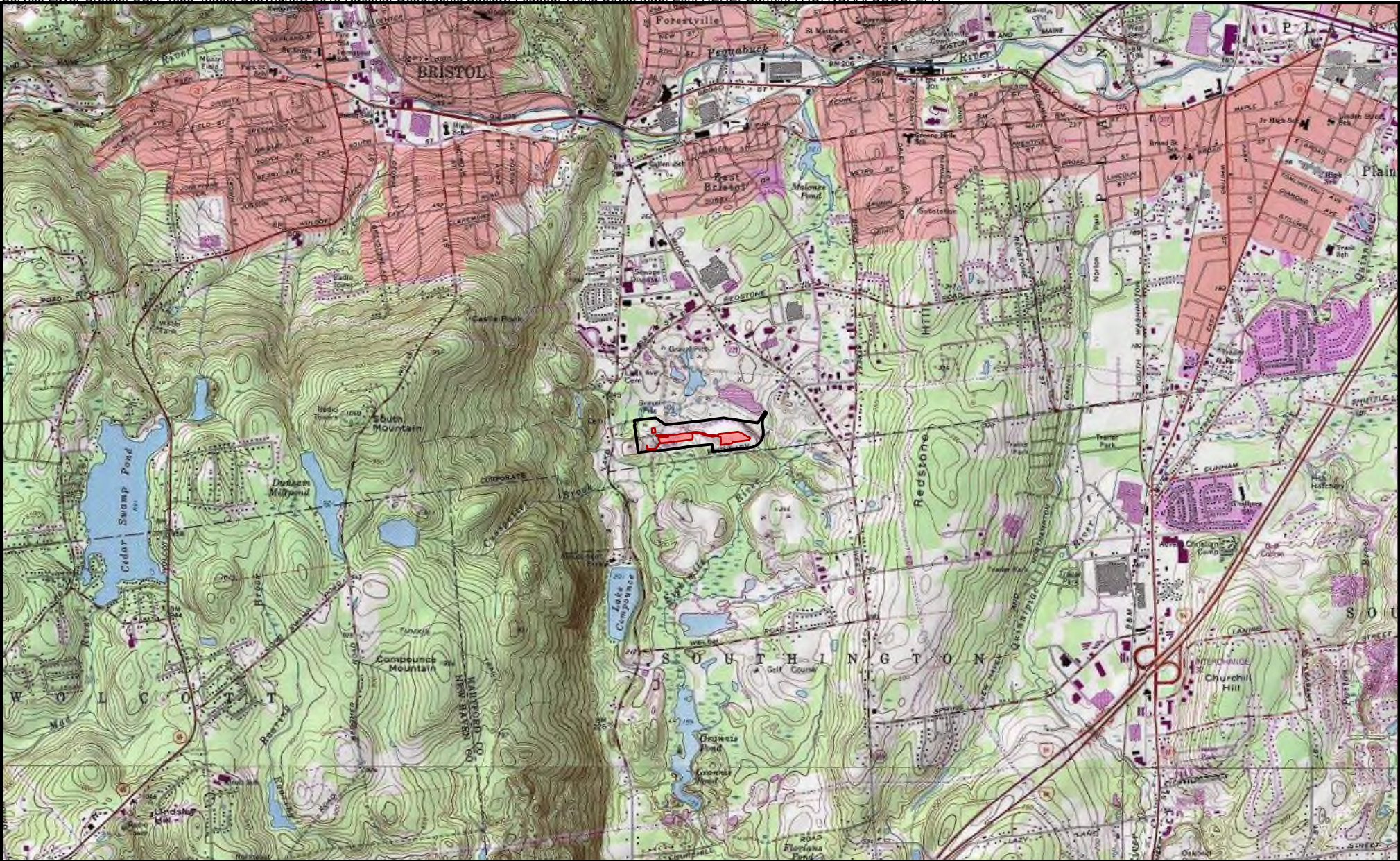
renewable energy resources that will have minimal, if any, adverse impacts to the surrounding area. In light of its anticipated benefits, C-Tec Solar, LLC respectfully requests that the Siting Council approve this Petition for the Project, as it is currently designed.

Respectfully Submitted,
C-Tec Solar, LLC

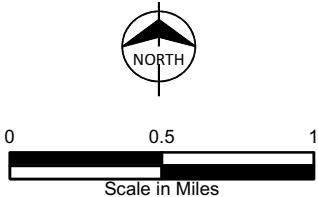
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APPENDIX A MAPS



- Legend**
- Approximate Project Construction Limit
 - Project Property Boundary



**BURNS
MCDONNELL**

Exhibit 1
General Site Location
Bristol Solar Site
Bristol, Connecticut

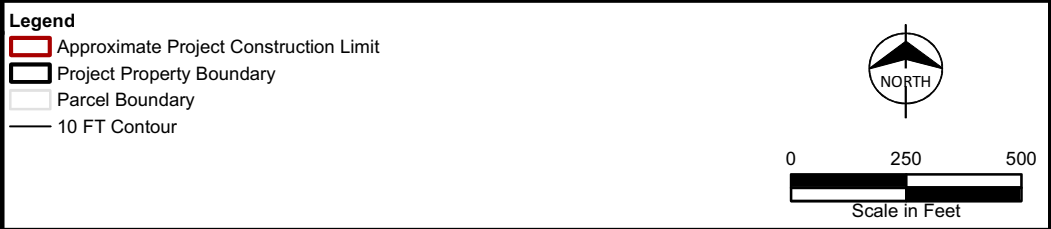
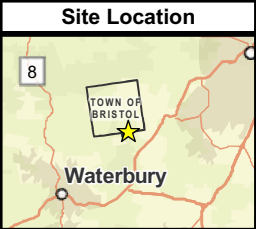
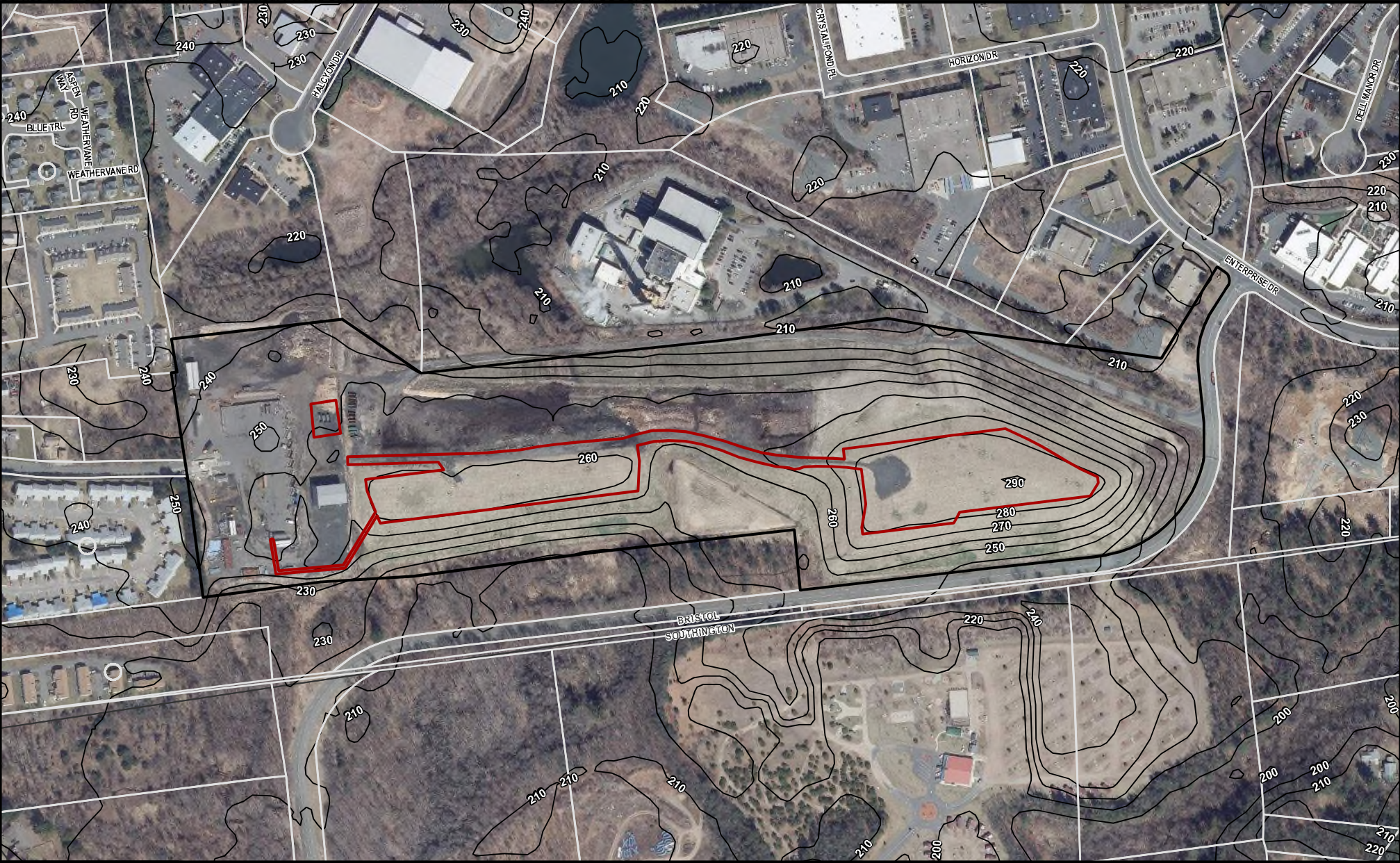
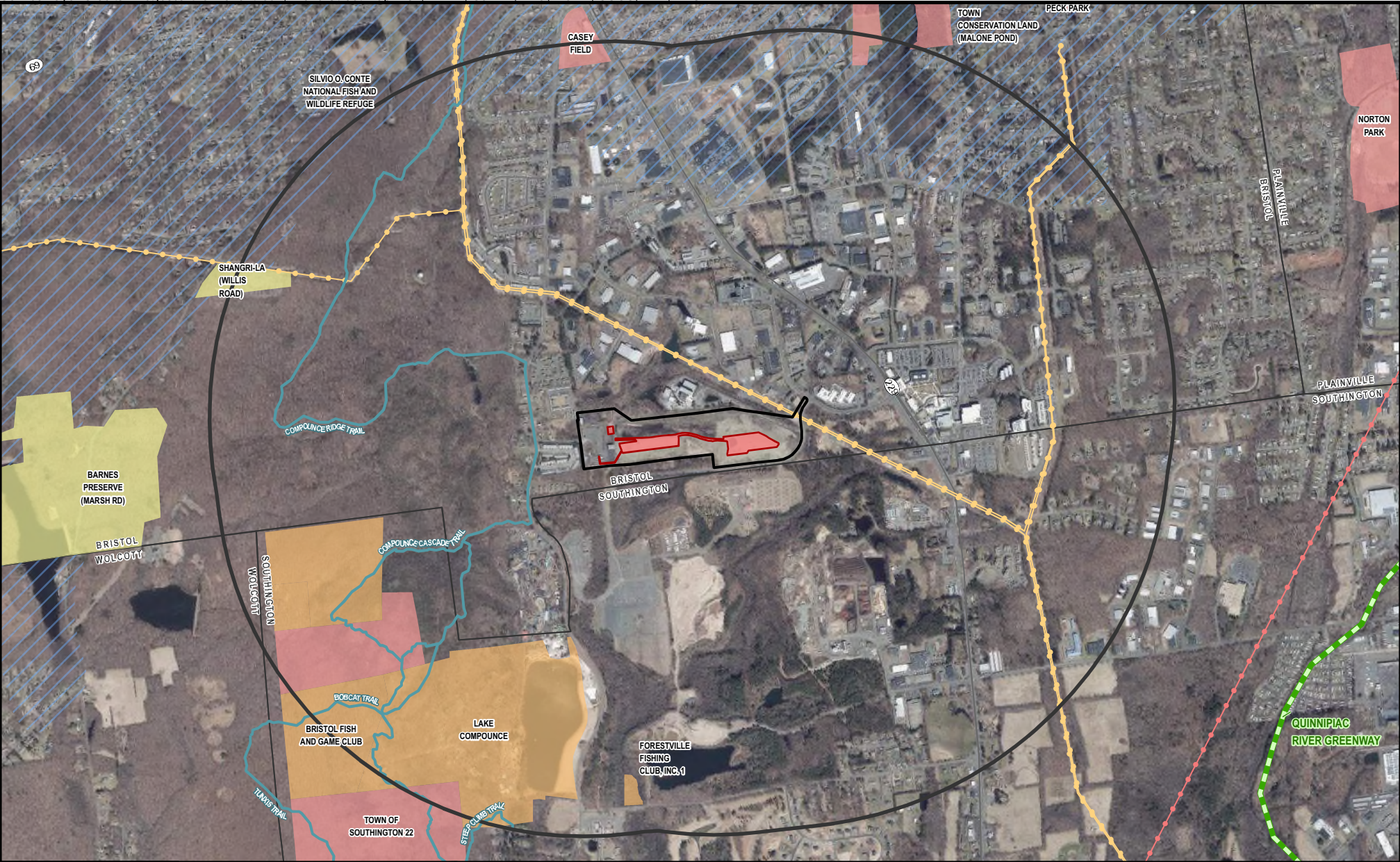
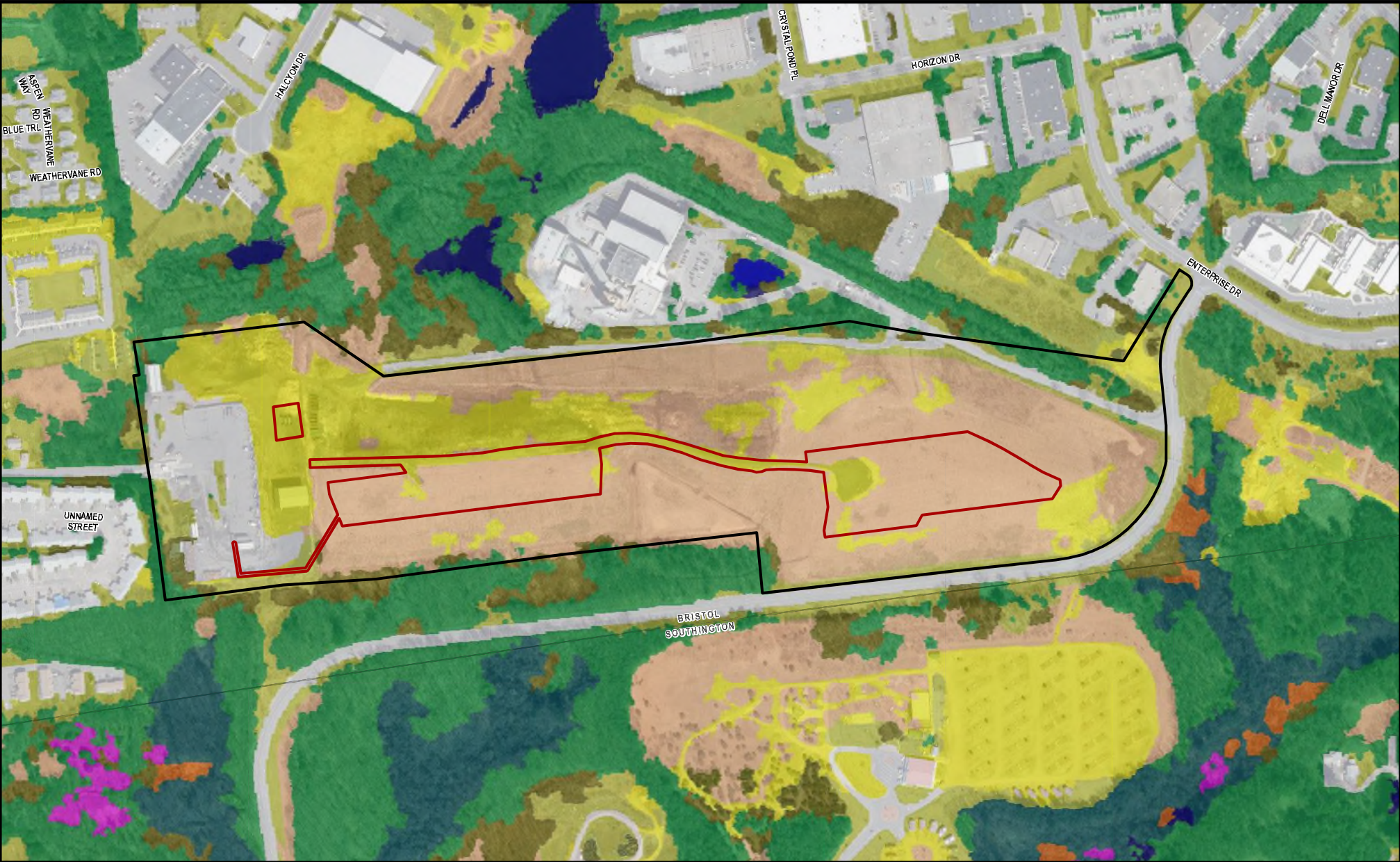


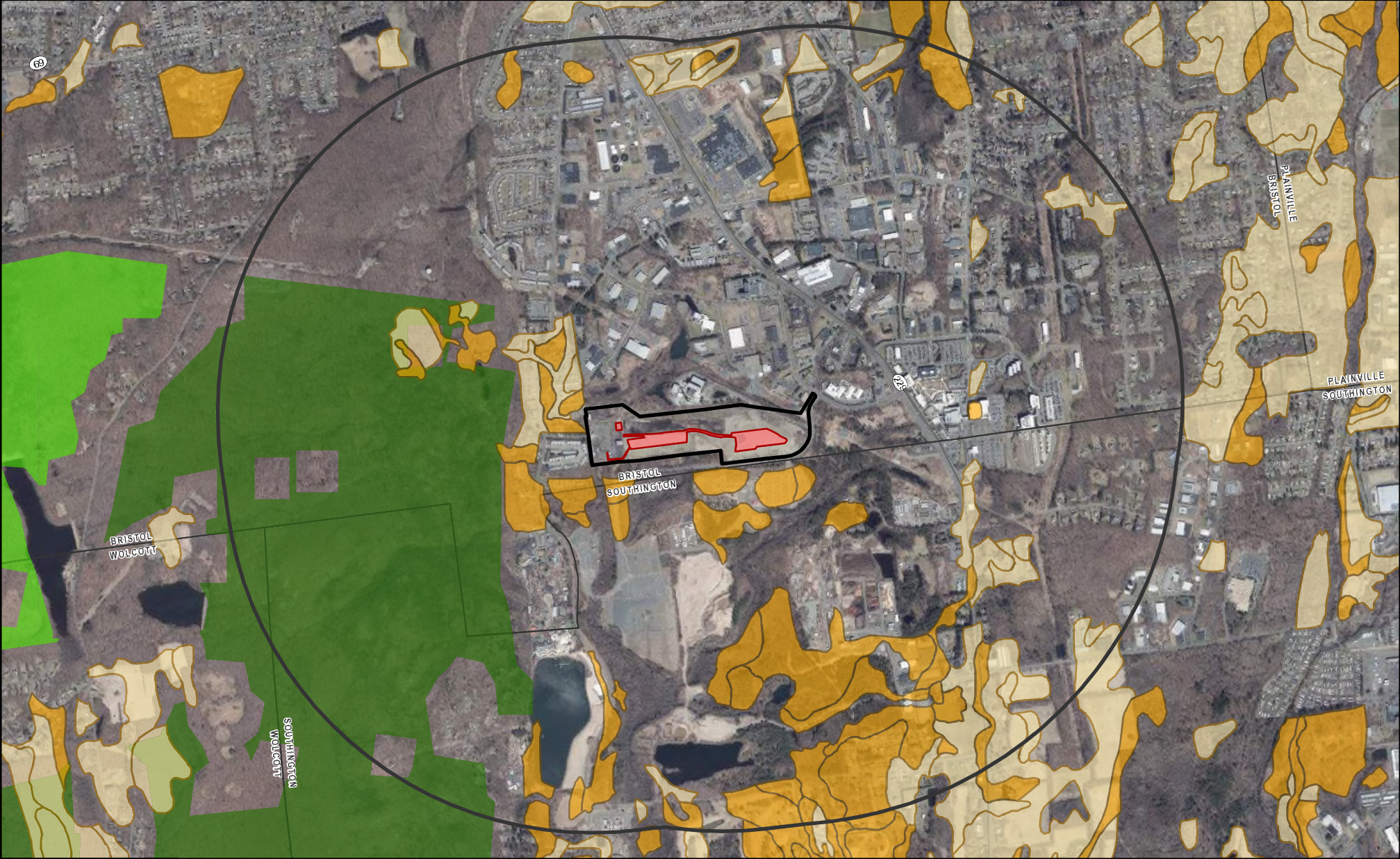
Exhibit 2
Site Topography
Bristol Solar Site
Bristol, Connecticut



Site Location 	Legend - Approx. Project Construction Limit - Project Property Boundary 1-Mile Property Buffer - Town Boundary - State Route - US Route	Protected Areas - Designation - Local Government - Private - Unknown	Infrastructure - Interstate - Transmission Line - Natural Gas Pipeline - Designated Connecticut Greenway - CT Blue Blazed Hiking Trail	 Scale in Miles		Exhibit 3 Land Use Bristol Solar Site Bristol, Connecticut
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Site Location		Legend		Scale in Feet		Burns & McDonnell		Exhibit 4 Land Cover Bristol Solar Site Bristol, Connecticut	
		Approx. Project Construction Limit	Developed Open Space	Palustrine Scrub/Shrub Wetland	 0 250 500 Scale in Feet				
Project Property Boundary	Grassland	Palustrine Emergent Wetland							
Town Boundary	Mixed Forest	Bare Land	Open Water						
CT C-CAP 1m Land Cover (2016)	Scrub/Shrub	Palustrine Forested Wetland	Palustrine Aquatic Bed						
Impervious									



Site Location

Legend

Project Property Boundary

Approx. Project Construction Limit

1-Mile Property Buffer

Town Boundary

Farmland Soils

Prime Farmland Soils

Statewide Important Farmland Soils

Locally Important Farmland Soils

2015 Core Forest

Large Core Forest

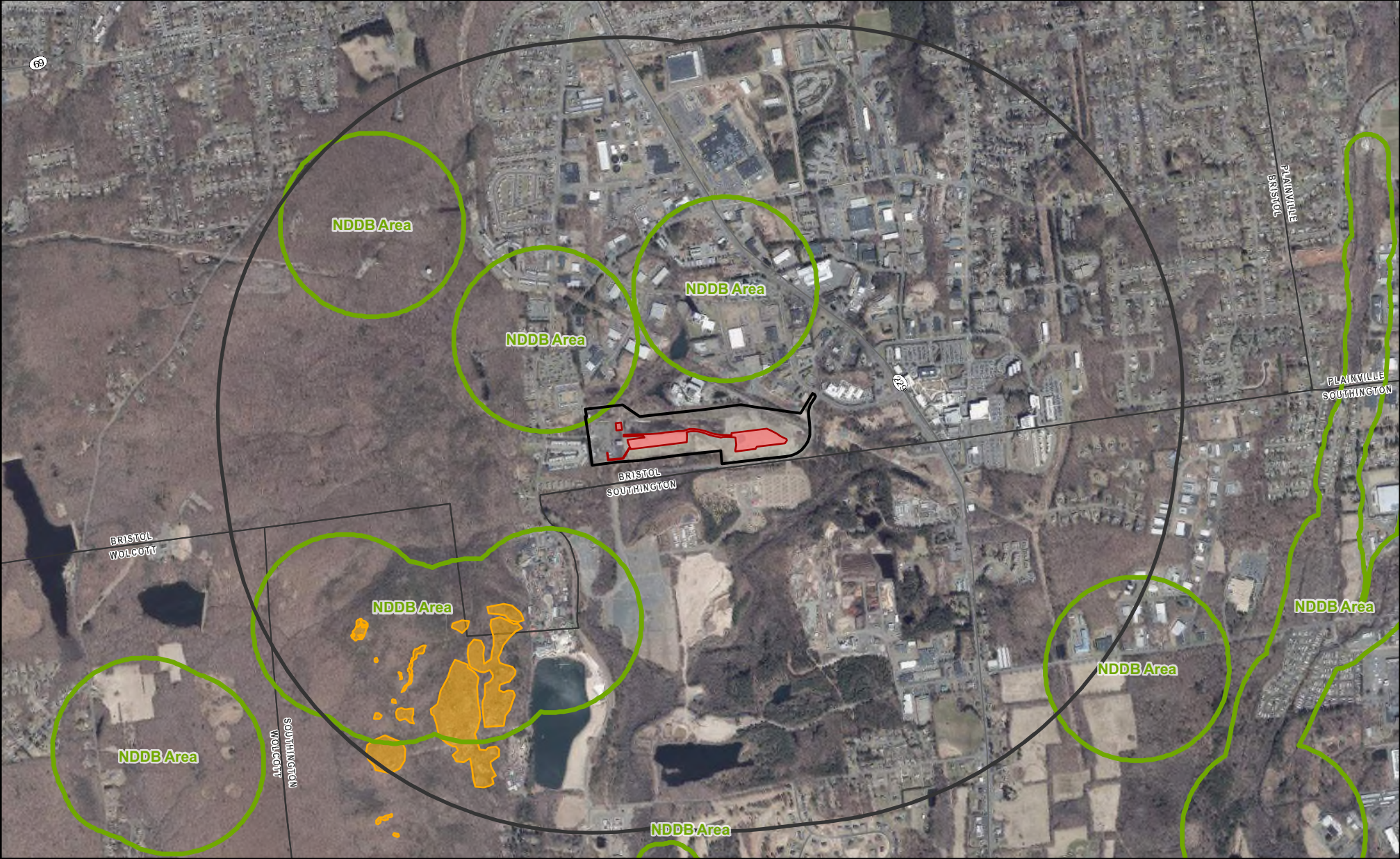
Medium Core Forest

Small Core Forest

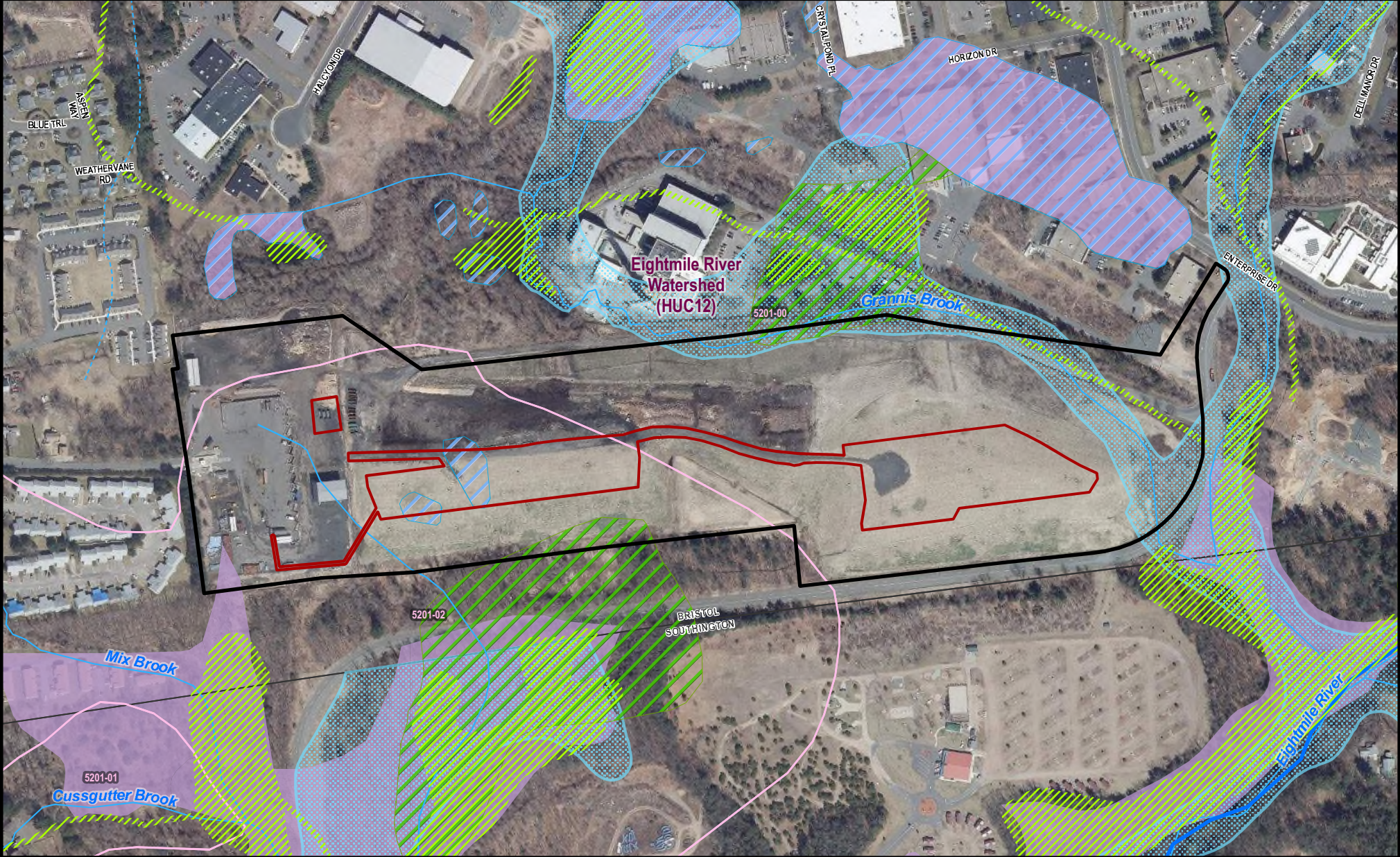
0 0.25 0.5

Scale in Miles

Exhibit 5
Farmland Soils and Core Forest
Bristol Solar Site
Bristol, Connecticut



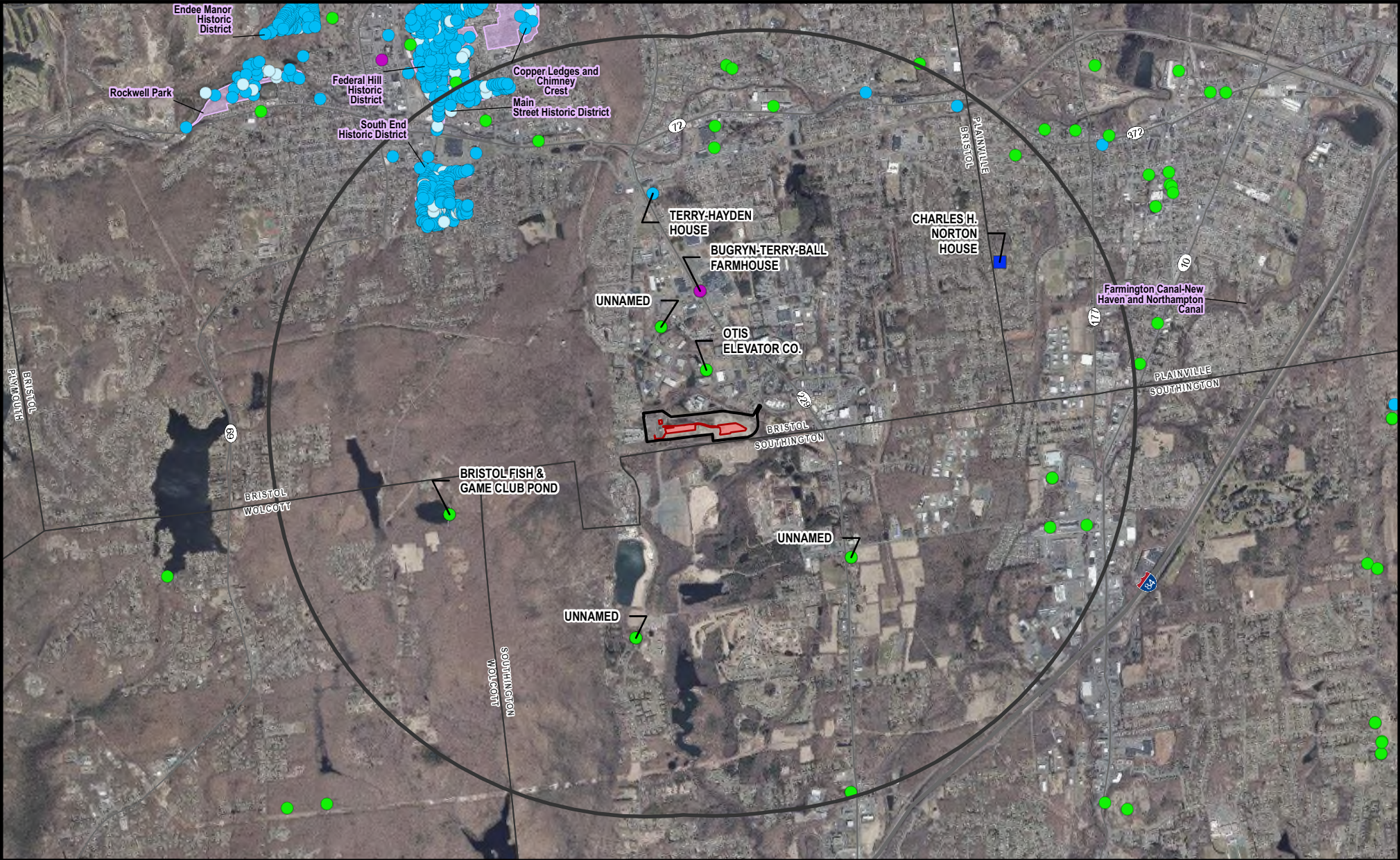
Site Location	Legend <table border="0"><tr><td> Project Property Boundary</td><td> US Route</td></tr><tr><td> Approximate Project Construction Limit</td><td> Interstate</td></tr><tr><td> 1-Mile Site Buffer</td><td> Natural Diversity Database Area</td></tr><tr><td> Town Boundary</td><td> DEEP Critical Habitat</td></tr><tr><td> State Route</td><td></td></tr></table>	Project Property Boundary	US Route	Approximate Project Construction Limit	Interstate	1-Mile Site Buffer	Natural Diversity Database Area	Town Boundary	DEEP Critical Habitat	State Route		 Scale in Miles	Exhibit 6 Species of Concern Bristol Solar Site Bristol, Connecticut
Project Property Boundary	US Route												
Approximate Project Construction Limit	Interstate												
1-Mile Site Buffer	Natural Diversity Database Area												
Town Boundary	DEEP Critical Habitat												
State Route													

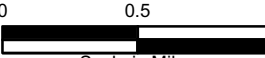


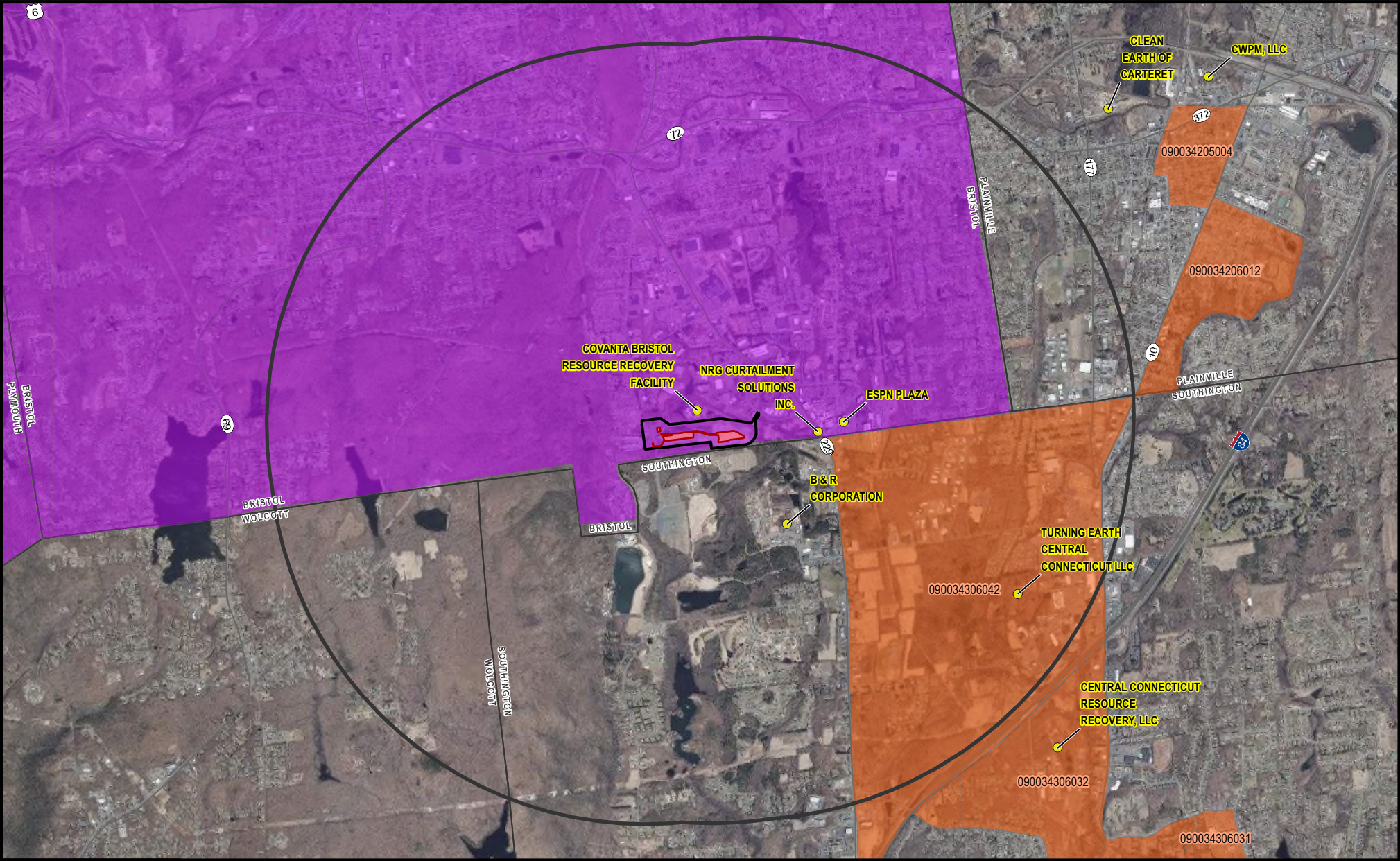
Site Location	Legend <table border="0"><tr><td> Project Property Boundary</td><td> FEMA 100-Year Floodplain</td><td>CT Hydro</td></tr><tr><td> Approximate Project Construction Limit</td><td>NWI Wetland</td><td> Water</td></tr><tr><td> CT DEEP Local Basin</td><td> Palustrine</td><td> Intermittent Water</td></tr><tr><td> NHD Hydrography</td><td> Lacustrine</td><td> Marsh</td></tr><tr><td></td><td> CT Inland Wetland Soil</td><td> Water</td></tr></table>	Project Property Boundary	FEMA 100-Year Floodplain	CT Hydro	Approximate Project Construction Limit	NWI Wetland	Water	CT DEEP Local Basin	Palustrine	Intermittent Water	NHD Hydrography	Lacustrine	Marsh		CT Inland Wetland Soil	Water		Exhibit 7 Wetlands/Jurisdictional Waters Bristol Solar Site Bristol, Connecticut
Project Property Boundary	FEMA 100-Year Floodplain	CT Hydro																
Approximate Project Construction Limit	NWI Wetland	Water																
CT DEEP Local Basin	Palustrine	Intermittent Water																
NHD Hydrography	Lacustrine	Marsh																
	CT Inland Wetland Soil	Water																



Site Location 	Legend - Project Property Boundary - Approximate Project Construction Limit - Culvert - Wetland Flag - Wetland Boundary 50-foot Wetland Buffer 100-foot Wetland Buffer Scale in Feet		Exhibit 8 Delineated Features Bristol Solar Site Bristol, Connecticut
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Site Location 	Legend - Project Property Boundary - Approximate Project Construction Limit 2-Mile Site Buffer - Town Boundary - State Route - US Route - Interstate	Cultural Resource - Historic District - National Historic Landmarks - National Register - National Register Non-Contributing - State Register - Inventoried   Scale in Miles		Exhibit 9 Cultural Resources Bristol Solar Site Bristol, Connecticut
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Site Location 	Legend - Project Property Boundary - Approximate Project Construction Limit 2-Mile Site Buffer - Town Boundary - State Route - US Route - Interstate - Affecting Facility 2022 - Environmental Justice Block Groups 2022 - Environmental Justice Distressed Municipalities 2022 Scale in Miles		Exhibit 10 Environmental Justice Bristol Solar Site Bristol, Connecticut
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City of Bristol



Zoning Regulations

Effective Date: January 15, 2024

With Amendments Through: May 13, 2024

Date of Initial Adoption of Zoning: March 17, 1931

HYPERLINK:

<https://www.bristolct.gov/DocumentCenter/View/48404/BristolZoningRegulations-051324>



City of Bristol Comprehensive Zoning Update

Date: 6/7/2024

Recommendation 1: Update and expand minimum parking requirements, providing minimum requirements for almost all uses.

Purpose: The current parking requirements lack parking standards for multiple uses and require that the Commission identify the appropriate number of parking spaces that should be required for those uses. This practice creates additional work for the Commission and results in uncertainties for the applicant. This practice may also result in inconsistent requirements across similar uses.

Description: The recommended amendments would provide a specified minimum parking requirement for nearly all principal uses and some accessory uses permitted by the zoning regulations. The parking requirement standardizes the required parking units of measure to the greatest extent possible and associates the minimum number of spaces required per gross square feet of floor area for most uses. Other standards of measure are also provided including number of dwelling units.

Geographic Extents: Applicable across all districts city-wide with unique standards for the BD District.

Potential Impacts: The adoption of this recommended amendment is expected to streamline the parking aspect of an application by making this aspect more predictable and reducing the burden on the Commission to establish requirements on a case-by-case basis. Because the recommended parking requirements are more precise than the existing standards, the recommended amendment may result in less off-street parking being constructed.

Context: Many cities (such as Hartford) have experimented with reducing parking requirements, particularly in their downtown areas to support redevelopment and infill development. The provision of off-street parking represents a significant share of the cost of most developments.

Recommended Zoning Amendments:

Replace the parking standards of Section 13.2.D with the following standards (see following page):



Use Group	Existing	Recommended
Conversion and Reuse		
Adaptive Reuse of Non-Residential Buildings	None	Parking requirement to be determined by Commission based upon proposed uses.
Conversion of Historic Dwellings	None	
Unified Downtown Development	None	
Sales Establishments		
Accessory Retail	4 per ksf	4.0 per ksf
Convenience Store	None	
Drugstore	None	
Grocery Store	None	
Pawn Shop	None	
Retail Store	4 per ksf (3 in BD), 4.5 per ksf shopping center	
Specialty Retail	None	2.5 per ksf indoor + 1.0 per ksf outdoor storage area
Building Supply	2.5 per ksf indoor + 1 per ksf outdoor storage area	
Garden Supply	None	
Retail Store-Large Goods	2.0 per ksf	
Farm Stand	1 per 5 linear foot sheltered display or sales frontage	1 per 5 linear foot sheltered display or sales frontage

Food & Beverage Service	Existing	Recommended
Bar or Club	None	12.0 per ksf
Brewpub	None	
Restaurant, Fast Food	5.0 per ksf	8.0 per ksf
Restaurant, Sit-Down	5.0 per ksf	
Microbrewery	None	8.0 per ksf indoor visitor space+ 3.0 per ksf office space+ 1.0 per ksf indoor production space
Restaurant, Take-Out	5.0 per ksf	4.0 per ksf
Specialty Food or Beverage Establishment	None	
Catering Service	None	3.0 per ksf
Kitchen Incubator	None	
Specialty Food or Beverage Manufacturer	None	
Office and Technology Uses		
Business or Professional Office	3 (2 in BD) per ksf	4.0 per ksf
Government Office or Building	None	
Medical Office	4.5 per ksf (3.5 in BD)	
Social Services Agency or Charitable Institution	None	
High Technology Business	None	3.0 per ksf
Radio or Television Broadcast Facility	None	
Medical Laboratory	None	
High Technology Business	None	



Residential Uses	Existing	Recommended
Assisted Living Facility	1.5 per ksf	1.5 per ksf
Nursing or Convalescent Home	1.5 per ksf	
Community Residence	3 per home	
Conversion to Three-Family	2 per du	2.0 per residence
Conversion to Two-Family	2 per du	
Live-Work Units		
Manufactured Home Park		
Residential, Single-Family	2 per du	
Residential, Three-Family	3 per du	
Residential, Two-Family	4 per du	
Residential, Multi-Family	2.5 per du (1.5 in BD)	2.0 per dwelling unit
Government or Non-Profit Housing	None	
Seasonal Camps and Cottages	Commission Determination	
Senior Housing	1.5 per unit	
Mixed-Use Development	0.75 per dwelling unit + 0.5 per bedroom + 1.5 per ksf gross floor area of non-residential uses	1.0 per dwelling unit + 0.5 per bedroom + 2.0 per ksf gross floor area of non-residential uses
Unified Residential Development	0.75 per dwelling unit + 0.5 per bedroom + 1 for every 4 residential parking spaces (or fraction thereof)	1.0 per dwelling unit + 0.5 per bedroom

Industrial & Fleet Uses	Existing	Recommended
Composting Facility	None	2.0 + 3.0 per ksf office space
Contractor Yard	2 + 4 per ksf office space	
Environmental Service Facility	None	
Fuel Oil and Heating Fuel Storage Facility	None	
Junkyard	None	
Motor Vehicle Junk Yard	None	
Recycling Facility	None	
Removal of Earth Materials	None	
Renewable Energy Generation Facility	None	
Wood Processing Facility	None	
Bus Yard	1 per bus parking space (indoor or outdoor) + 3 per ksf office space	1.0 space per fleet parking space (or equivalent capacity) + 3.0 spaces per ksf office space
Fuel Oil Dealer	None	
Sanitary Services Yard	None	
	1 per delivery vehicle space (indoor or outdoor, excluding loading berths) + 3 per ksf office space	1.0 per ksf production/storage space + 3.0 per ksf office space
Trucking and Courier Service		
Manufacturing Facility	2 per ksf	2.0 per ksf
Industrial Laundry or Dry Cleaning	None	
Specialty Trade Contractor	None	
Helicopter Landing Facility	None	2.0 spaces per landing pad



Storage, Warehousing, or Distribution	Existing	Recommended
Climate Controlled Self-Storage Facility	Commission Determination	0.1 per ksf storage space + 3.0 per ksf office space
Self-Storage Facility	0.1 per ksf storage space + 4.0 office	
Public Warehouse	None	1.0 per ksf indoor distribution/ storage space + 3.0 per ksf office space
Wholesale Business	2 per ksf	
Wholesale or Distribution Facility	2 per ksf	
Vehicle or Equipment Sales and Service		
Boat or Recreational Vehicle Sales and Service	None	3.0 per ksf indoor office and display+0.15 per ksf outdoor display
Motor Vehicle Sales	3 per ksf indoor office and display+ 0.15 per ksf outdoor display	
Motor Vehicle Rental or Leasing	3 per ksf office and sales space	
Equipment Rental or Leasing	None	
Motor Vehicle Filling Station	4 per establishment + 2 per service bay + 3.5 per ksf retail sales area	2.0 per establishment + 2.0 per service bay + 3.0 per ksf office and retail sales area
Motor Vehicle Detailing Facility	None	3.0 per establishment + queuing requirement
Car or Truck Wash	3 per facility, plus adequate stacking room to accommodate 5 cars per stall	
Motor Vehicle Repair or Service Facility	2 per bay +3.5 per ksf retail sales area	2.0 per service bay + 3.0 per ksf office and retail sales area

Shopping Centers	Existing	Recommended
Shopping Centers	4.5 per ksf	4.0 per ksf
Recreation or Entertainment Facility		
Indoor Entertainment Facility	1 per 3 seats (1 per 5 seats in BD), additional spaces may be required by Commission	0.33 per seat
Indoor Recreation Facility	3 per bowling lane	3 per bowling lane, other facility types to be determined by Commission
Fitness Club	None	5.0 per ksf
Tennis or Racquet Clubs	None	5.0 per ksf + 2.0 per court
Golf Course	10 per hole	10 per hole
Park or Open Space	None	To be determined by Commission
Outdoor Entertainment Facility	None	
Agricultural Uses		
Commercial Greenhouse	1 per ksf gross sales floor area	0.5 per ksf gross indoor greenhouse area
Nursery	1 per ksf gross sales floor area	To be Determined by Commission
Farm	None	
Stable	None	0.25 per stall

Cultural or Institutional Uses	Existing	Recommended
Religious Organization or Institution	0.3 per seat	0.33 per seat for worship space + 2.0 ksf non-worship space
Cultural Institution	2 per ksf	2.0 per ksf
Civic Facility	1.5 per ksf (school) / Comm. all other	1.5 per ksf per school, 3.0 per ksf per library, Commission to determine requirement for other uses
Non-Profit Private School	1.5 per ksf	1.5 per ksf
Community Youth Organization	None	5.0 per ksf
Membership Organization	5 per ksf	
General Medical or Surgical Hospital	3 per ksf	3 per ksf
Cemetery	None	To be Determined by Commission



Service Based Uses	Existing	Recommended
Hotel or Motel	1.5 per room+spaces determined by Comm.	1.0 per room + other uses (10 per ksf for restaurant, 7 per ksf for conference/ banquet)
Emergency Housing Shelter	None	4.0 per shelter
Funeral Home or Mortuary	0.3 per seat	10.0 per ksf
Animal Day Care Facility	None	3.0 per ksf
Animal Hospital	None	
Building Services	None	
Commercial Kennel	None	
Printing Shop	None	
Retail Dry Cleaner or Laundry	None	
Adult Day Care Center	None	4.0 per ksf
Child Care Center	4 per ksf	
Group Child Care Home (located outside of a residential home)	5 per ksf	
Laundromat	None	5.0 per ksf
Bank	5 (3.5 in BD) per ksf	
Personal Service Establishment	4 per ksf (3 in BD)	
Specialty Service Establishment	None	
For Profit School or Studio	5 per ksf	
Health Care Clinic	3.5 per ksf	

Drive-Up Facilities	Existing	Recommended
Car Wash	None	Queuing space for 5 vehicles
Other (Banks, Pharmacy, etc.)	None	
Restaurants, Take-Out, Specialty Food or Beverage Establishment	None	Queuing space for 10 vehicles



City of Bristol Comprehensive Zoning Update

Date: 6/7/2024

Recommendation 2: Specify process for the Commission's determination of required parking.

Purpose: The current regulations require the Commission to determine the amount of off-street parking for multiple uses. While Recommendation 1 would reduce the number of properties that would be subject to their discretion, this authority will remain for some uses. The current regulations do not stipulate whether the applicant or the Commission is responsible for collection information necessary in making its determination.

Description: The recommended amendment specifies that the applicant is responsible for providing a recommendation regarding the number of spaces required and that such recommendation shall be provided by a traffic engineer or parking expert.

Geographic Extents: In all districts citywide.

Potential Impacts: No adverse impacts are anticipated.

Context: It is a standard practice in zoning, including within Bristol's zoning regulations, to require the information necessary to render a decision on an application.

Recommended Zoning Amendments:

Amend Section 13.2.C as follows (new text is shown in red):

Section 13.2 Amount of Off-Street Parking Required

Where the minimum number of parking spaces required for a particular use is to be determined by the Commission, **the applicant shall provide a recommendation for the number of parking spaces required for the use in question. Such recommendation shall be provided by a traffic engineer or parking expert. In making its determination,** the Commission shall be guided by the recommendations of the applicant and by the nature, intensity and/or mix of the proposed use, including projected attendance, the number of employees, visitors and/or customers, and the experience of similar facilities elsewhere.



City of Bristol Comprehensive Zoning Update

Date: 6/7/2024

Recommendation 3: Provide more flexibility in the use of shared parking in the BD.

Purpose: Incentivize development in the downtown by providing more flexibility in satisfying the parking requirements through the use of shared parking and off-site parking.

Description: The existing regulations allow for the use of parking that is shared between uses or is located off-site to meet parking requirements but the use in question must be located within 500 feet of the parking facility. The recommended amendment increases that distance to 1,000 feet in the BD district but maintains a 500-foot requirement in other districts.

Geographic Extents: Applicable to BD District.

Potential Impacts: May support redevelopment and infill development in the downtown.

Context: The use and allowance of shared parking and off-site parking is one of many tools used to support infill development and redevelopment in downtowns. It allows for more efficient and effective use of parking supply.

Recommended Zoning Amendments:

Amend Section 13.4.B Shared Parking and Section 13.6.B Location of Parking as follows (new text is shown in red):

Section 13.4.B Shared Parking

Upon provision of a parking study conducted by a traffic engineer or parking expert and the provision of a site plan, the Commission may allow up to 50% of the required parking spaces for a use which operates primarily during the evening or on weekends to be counted toward the parking requirements of a use which operates primarily during the daytime or on weekdays, and vice versa. All shared parking spaces shall be located within 500 feet of the main building entrance of the recipient use **except that in the BD zone, such parking shall be located within 1,000 feet of the main building entrance of the recipient use. In approving such a reduction, the applicant shall demonstrate to the Commission** that there shall not be a substantial overlap of peak parking periods for the uses and that arrangements satisfactory to the Commission have been made to guarantee long-term access to and use of the shared parking spaces by the recipient use.

Section 13.6.B Location of Parking

By Special Permit, the Commission may allow all or a portion of the required parking spaces to be located either on a separate lot under the same ownership as the use being served or on a separate lot under a different ownership than the use being served, provided that arrangements satisfactory to the Commission have been made to guarantee long-term access to and use of such spaces. All spaces approved under this provision shall be located within 500 feet of the main building entrance of the use being served **except that in the BD zone, such parking shall be located within 1,000 feet of the main building entrance of the use being served.**



City of Bristol Comprehensive Zoning Update

Date: 6/7/2024

Recommendation 4: Reference Connecticut State Building Code for handicapped parking requirements.

Purpose: The recommended amendment references the requirements of Connecticut State Building Code to ensure that handicapped spaces are provided as required by the code.

Description: The current regulations refer to Connecticut General Statutes requirements for handicapped parking but does not refer to the building code requirements.

Geographic Extents: Applies to all districts citywide.

Potential Impacts: No adverse impacts.

Context: Specific handicapped parking requirements and provided in detail in the State building code.

Recommended Zoning Amendments:

Amend Section 13.7.3 as follows (new text is shown in red):

Section 13.7.3. Accessibility Requirements

- C. The number, size, designation, location, and markings of parking spaces for the handicapped shall be as per the Connecticut General Statutes, **Sec. 14-253a(h) and Section 1106 of the Connecticut State Building Code – 2021 IBC Portion, as amended.**



City of Bristol Comprehensive Zoning Update

Date: 6/7/2024

Recommendation 5: Relocate parking lot landscaping standards of Section 11 to Section 13 Off-Street Parking Requirements

Purpose: Place regulations applicable to parking within the same section by moving parking lot landscaping standards from Section 11 Landscaping and Site Features to Section 13 Off-Street Parking Requirements.

Description: Relocate Sections 11.1.3 Parking Lot Landscaping and 11.1.4.A Screening to Section 13. Maintain the standards as written.

Geographic Extents: Not applicable.

Potential Impacts: No impacts.

Context: Not applicable.

Recommended Zoning Amendments:

- Remove Section 11.1.3 and renumber subsequent sections.
- Remove Section 11.1.4.A and renumber subsequent sections.
- Amend Section 13.7.5 Landscaping, Curbs, and Islands as follows (see next page, new text is shown in red):



Section 13.7.5 Landscaping, Curbs, and Islands

- A. Screening shall be provided for parking areas which are adjacent to residential properties or visible from the street. Acceptable screening materials shall include:
 - 1. Evergreen hedges having a minimum height of four feet at the time of planting;
 - 2. Solid fences or walls, if approved by the Commission;
 - 3. Earthen berms; or,
 - 4. Any combination of the above materials.
- B. Parking areas containing 10 or more parking spaces shall be suitably landscaped with appropriate trees, shrubs and ground cover, in accordance with the following:
 - 1. Parking areas containing 10 or more parking spaces shall contain at least one major tree and two shrubs per ten parking spaces or major fraction thereof, planted within and along the perimeter of the parking area.
 - 2. Parking areas containing between 20 and 99 parking spaces shall contain a minimum of 15 square feet of interior landscaping area per parking space, distributed among the end islands, interior islands and planting strips.
 - 3. Parking areas containing 100 or more parking spaces shall contain a minimum of 20 square feet of interior landscaping area per parking space, distributed among the end islands, interior islands and planting strips.
 - 4. Trees within and along the perimeter of parking areas shall be of such varieties which provide shade or are capable of providing shade at maturity.
- C. In parking areas containing 10 or more parking spaces:
 - 1. Curbed islands shall be provided at each end of each row of parking spaces;
 - 2. Curbed islands shall be provided to interrupt long rows of interior and perimeter parking spaces in an arrangement acceptable to the Commission so as to allow for no more than 20 consecutive spaces in a single row;
 - 3. Such end and interior islands shall be a minimum of 9 feet wide by 17 feet long for a single row of spaces and 9 feet wide by 34 feet long for a double row of spaces;
 - 4. Such end and interior islands shall be landscaped in accordance with the requirements of **Item B above**.
- D. In parking areas containing 100 or more parking spaces, planting strips shall be provided along every other set of interior parking spaces between abutting rows of spaces. Such strips shall be a minimum of 10 feet wide and landscaped in accordance with the requirements of **Item B above**. Planting strips should be protected from vehicles by a curb or wheel stop. Curbs may contain breaks to allow surface water flow into planting strips.
- E. Except for parking spaces in driveways that serve single- or two-family dwellings, the perimeter of all parking areas, islands and driveways shall be curbed, to prevent damage to landscaping and lighting and to prevent interference with pedestrian use of walkways. Curbs may contain breaks to allow surface water flow into vegetated areas so as to reduce stormwater runoff.
- F. Where provided, motor vehicle wheel stops shall be a maximum of six inches in height and shall be placed a maximum of 30 inches from the front of the parking spaces in which they are located.



City of Bristol Comprehensive Zoning Update

Date: 6/7/2024

Recommendation 6: Establish porous, pervious, and permeable pavement incentive.

Purpose: Encourage the installation of porous, pervious, or permeable pavement surfaces to reduce stormwater runoff.

Description: This recommendation would allow the use of porous, pervious, and permeable pavement to reduce lot coverage across all zoning districts with an established lot coverage limit with the goal of reducing stormwater runoff and improving groundwater recharge.

Geographic Extents: Citywide, except within Aquifer Protection Areas.

Potential Impacts: Allows for a higher lot coverage than would otherwise be permitted.

Context: The existing regulations have no porous pavement requirement or incentive. Multiple cities across the US (Los Angeles, San Antonio, Minneapolis, and others) encourage or require uses of porous, pervious, and permeable pavements.

Recommended Zoning Amendments:

- Add Section 13.7.6 Porous, Pervious, and Permeable Pavement as follows:

13.7.6 Porous, Pervious, and Permeable Pavement

Porous asphalt, pervious concrete, or permeable pavers may be used to offset lot coverage of paved surfaces at a rate of 50% of the porous, pervious, or permeable pavement area. By example, a 1,000-sf porous asphalt parking area would reduce the lot coverage area by 500 sf. To qualify for such a reduction a pervious pavement area shall:

- A. Be located outside of an Aquifer Protection Area.
- B. Be designed and constructed in accordance with the Chapter 13 of the 2023 Connecticut Stormwater Quality Manual.
- C. Cover a contiguous area of a minimum of 1,000 sf.
- D. Be maintained for the life of the surface.
- E. Be subject to periodic inspection by the Zoning Enforcement Officer to ensure adequate maintenance.



City of Bristol Comprehensive Zoning Update

Date: 6/7/2024

Recommendation 7: Provide a Bicycle Parking Requirement

Purpose: Ensure that bicycles can be securely parked in a designated location.

Description: The current regulations do not require the provision of facilities for bicycle parking. The recommended amendment would require the provision of bicycle parking for multi-family, commercial, industrial, or institutional developments.

Geographic Extents: Citywide.

Potential Impacts: No adverse impacts expected.

Context: Cities and towns are increasingly providing and improving facilities to accommodate bicyclists in an attempt to support multimodal travel and embrace a Complete Streets approach to transportation.

Recommended Zoning Amendments: Add new Section 13.15 Bicycle Parking as follows:

13.15 Bicycle Parking

Bicycle parking facilities shall be provided as part of new multi-family developments of 4 units or more, and new commercial, industrial, or institutional developments.

- A. Bicycle parking shall be provided at all new construction, changes of use, or substantial improvement and shall be provided at a rate of 1 bicycle parking space per 10 automobile spaces or at a rate of 1 space per 2,000 square feet of gross floor area, whichever is less.
- B. Bicycle parking spaces shall:
 - 1. Provide a convenient place to lock a bicycle and shall be at least 6 feet long, 2 feet wide, and shall provide at least 7 feet of vertical clearance, unless a bicycle locker is provided.
 - 2. Be capable of locking the bicycle and supporting the bicycle in an upright position.
 - 3. Be securely anchored to a supporting surface.
- C. Bicycle parking shall not interfere with pedestrian circulation and shall be separated from automobile parking.
- D. For any use where bicycle parking is required, if the vehicular parking is covered or partly covered the bicycle parking will be covered at the same ratio.
- E. Bicycle racks shall be located in proximity of a main building entrance and placed in an area that is highly visible.



City of Bristol Comprehensive Zoning Update

Date: 6/7/2024

Recommendation 8: Reduce the parking requirement in the BD zone and simplify and provide more flexibility in the maximum amount of parking that is permitted.

Purpose: Universally reduce the parking requirement in the BD zone to incentivize infill development and redevelopment and ensure that parking is not overbuilt in the Downtown. Provide more flexibility in the maximum amount of parking that may be permitted to allow the development of more parking where required to support the land use.

Description: The existing regulations have lesser parking requirements for only specific uses in the Downtown. The parking reduction varies from use to use and many uses do not have a lesser parking requirement. The recommended amendment would provide a universal parking reduction of 25% for all uses across the Downtown. The amendment would also provide more flexibility in the maximum amount of parking that is required, which is currently limited to 5% above the required amount.

Geographic Extents: BD zone only.

Potential Impacts: May remove barriers to infill development or redevelopment in the BD.

Context: The Downtown is served by municipal parking facilities, on-street parking supply, private parking facilities, transit, and is home to a mixture of uses, which allows for walking between locations and a reduced dependency on automobile travel. Many cities have reduced or eliminated their downtown parking requirements.

Recommended Zoning Amendments:

- Eliminate Section 8.4.6 Parking Increase in favor of regulating the maximum amount of parking allowed in the BD through Section 8.4.4 in a more simplified form. Renumber subsequent sections.
- Amend Section 8.4.4 and reorder it as follows (amended text shown in red):

8.4.4 Baseline Off-Street Parking Requirement

- A. The “baseline” number of off-street parking spaces shall be **75% of** the sum of the required parking for each separate use in the proposed development, in accordance with Section 13.2. Except as approved by the Commission in accordance with the provisions of this section **or Section 13.2**, no fewer off-street parking spaces than this “baseline” number shall be provided for a proposed development.
- B. The maximum number of off-street parking spaces shall be no more than **10%** above the baseline requirement. **This amount may be increased by Special Permit, which shall require that proof of parking demand exceeding the baseline requirement is provided by a traffic engineer or parking expert to the satisfaction of the Commission. In no case shall the off-street parking supply exceed the baseline parking requirement by more than 25%.**
- C. Additional off-street parking shall not be required for changes of use within an existing building or for building additions less than or equal to 500 square feet of gross floor area. This exemption from providing additional off-street parking spaces for additions shall only be granted once per property.



City of Bristol Comprehensive Zoning Update

Date: 6/7/2024

Recommendation 9: Remove Section 8.4.5 Parking Reduction of BD zone regulations.

Purpose: Simplify the regulations and remove redundancies and conflicts between the BD zone regulations and the citywide parking regulations.

Description: Section 8.4.5 allows for shared use parking reduction of 35-45% in the BD. However, a shared parking reduction of up to 50% is authorized in Section 13.4, making Section 8.4.5 redundant and conflicting with Section 13.4. Removal of Section 13.4 would correct this.

Geographic Extents: BD zone.

Potential Impacts: No impacts.

Context: N/A

Recommended Zoning Amendments: Eliminate Section 8.4.5 and renumber subsequent sections.



City of Bristol Comprehensive Zoning Update

Date: 6/7/2024

Recommendation 10: Provide visuals to support Section 8.4.7 and make minor adjustments.

Purpose: Provide more clarity to Section 8.4.7 Location of Parking Spaces and allow for the use of parallel parking in addition to diagonal parking.

Description: Section 8.4.7 is difficult to understand without the aid of visuals. It also permits only diagonal parking but does not enable parallel parking in front of buildings. The recommended amendment would allow for the use of parallel parking and provides visuals to demonstrate how parking areas should be situated.

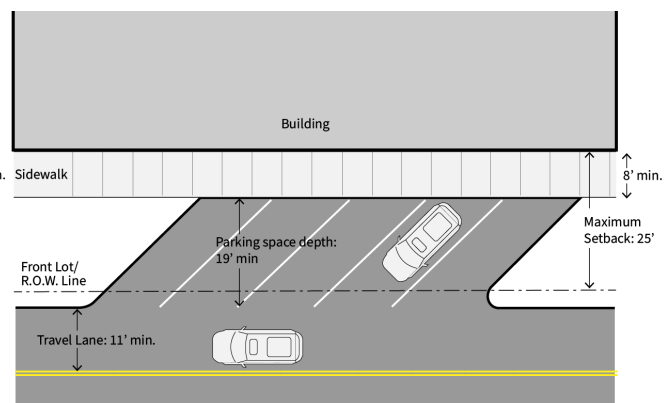
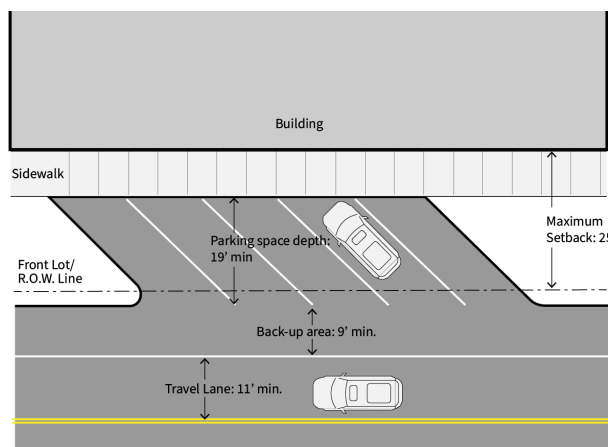
Geographic Extents: BD zone

Potential Impacts: No impacts.

Context: N/A

Recommended Zoning Amendments:

- Provide a visual aid to supplement Section 8.4.7 (see below).
- Amend Section 8.4.7 to allow for the use of parallel parking (see next page, added text in red).





8.4.7 Location of Parking Spaces

- A. Where feasible, parking spaces shall be located to the rear of a building.
- B. Parking spaces may be located along the side of a building, provided that such parking area does not occupy more than 45 feet or 35 percent of the frontage of the lot on which it is located, whichever is less.
- C. Parking spaces may be located between the front of a building and the street, subject to the following provisions:
 - 1. Such parking spaces shall be directly accessible via the street right-of-way.
 - 2. Such parking spaces shall be separated from the building by a sidewalk having a minimum width of 8 feet, arranged in a single row located adjacent to the sidewalk, and arranged in one of the following configurations:
 - a. Angled diagonally toward the general direction of the adjoining travel lane of the street. Such spaces shall have a minimum depth of 19 feet and a minimum back-up area of 9 feet, exclusive of the adjoining travel lane of the street.
 - b. Angled diagonally away from the general direction of the adjoining travel lane of the street. Such spaces shall have a minimum depth of 19 feet and the adjoining travel lane shall have a minimum width of 11 feet.
 - c. **Parallel to the curb. Such spaces shall have a minimum depth of 8 feet and shall have a minimum length of 22 feet.**
 - 3. Depending upon the width of the street right-of-way, such parking spaces may be located entirely within the right-of-way, partly within the right-of-way and partly on the lot, or entirely on the lot. Notwithstanding any other provisions of this section, the Commission may allow all or a portion of the building to have a build-to line as far back as 25 feet in order to accommodate such parking spaces.
 - 4. Such parking spaces shall be available for use by the public at all times.
 - 5. The property owner shall grant to the city such easements as are necessary to allow such parking to be utilized for public purposes in return for the city's maintenance of the parking spaces.



City of Bristol Comprehensive Zoning Update

Date: 8/12/2024

Recommendation 11a: Provide reference to the Aquifer Protection Area Regulations

Purpose: Ensure that projects comply with the City's Aquifer Protection Regulations.

Description: Provide a reference to the Aquifer Protection Regulations within the Zoning Regulations and require that Site Plans indicate the status of a property located within an aquifer protection area.

Geographic Extents: Aquifer Protection Areas as indicated on the City's Zoning Map.

Potential Impacts: May increase compliance with the Aquifer Protection Regulations.

Context: Aquifer Protection Areas are delineated by the State and define the land area that contributes ground water to active public water supply wells (or well fields) that serve more than 1,000 people. Bristol's Aquifer Protection Area is shown on its zoning map, which comprises of a large area in the northeastern part of town. Mapping provided by the state also indicates that there is an Aquifer Protection Area on the west side of the City that is primarily located within Plymouth but extends into Bristol in proximity of Mathews Street.

Recommended Zoning Amendments:

1. Add a new section, Section 15.7 Aquifer Protection Areas as follows:

15.7 Aquifer Protection Areas

Properties located in the Aquifer Protection Area (the Final Adopted Level A Aquifer Protection Area (APA) mapped by CT DEEP and as amended) shall be subject to the Aquifer Protection Area Regulations of the City of Bristol.

2. Add a requirement to Section 16.3.5 Site Plan Requirements, Item A, that the Site Plan survey identify whether the site is located within an Aquifer Protection Area (APA) and if partially located within an APA, provide the boundaries of such on the Site Plan survey as follows:

16.3.5 Site Plan Requirements

- A. The Site Plan shall be based upon an accurate and up-to-date Class A-2 survey of the property prepared in accordance with the standards as defined in the Code of Recommended Practice for Standards of Accuracy of Surveys and Maps, as prepared and adopted by the Connecticut Association of Land Surveyors, Inc., on September 13, 1984, as may be amended. The survey map shall be certified, signed and sealed by a registered land surveyor licensed to conduct business in Connecticut. If a separate survey map is used, a copy shall be attached to the Site Plan. The survey shall identify if a property is located within an aquifer protection area and shall delineate an aquifer protection area boundary that traverses the property (if applicable).



City of Bristol Comprehensive Zoning Update

Date: 8/12/2024

Recommendation 12: Increase the permitted height of Ground Mounted Solar Energy Systems.

Purpose: Increase the maximum height of ground mounted solar energy systems to allow for their use over parking areas.

Description: Ground mounted solar energy collection systems are a permitted accessory use, but ground mounted systems are limited in height to 14 feet, which restricts their use above parking areas. This recommendation would allow ground mounted systems to be up to 20 feet in height to allow for use over parking areas.

Geographic Extents: All zoning districts.

Potential Impacts: The deployment of ground mounted systems of large parking areas may have an adverse visual impact in some contexts.

Context: Ground mounted solar energy systems are increasingly being deployed over larger parking areas. According to a 2021 study published in the official journal of the International Solar Energy Society, Connecticut could generate more than one third of the state's annual electricity consumption with solar canopies built over large, existing parking lots. Examples in Connecticut include at Westfarms Mall, which recently constructed a four-acre array over an existing parking lot.

Recommended Zoning Amendments:

Amend Section 5.4.9.C as follows:

C. Shall not exceed **twenty (20) feet** in height including all supporting structures.



City of Bristol Comprehensive Zoning Update

Date: 8/12/2024

Recommendation 13: Strengthen regulations for the protection and planting of trees.

Purpose: Protect Bristol's tree cover and native trees and provide tree cover over areas of impervious surface to reduce urban heat-island effects.

Description: This recommendation seeks to strengthen the requirements for the preservation of trees, replacement of trees, and planting of new trees.

Geographic Extents: All zoning districts

Potential Impacts: Planting of trees adds a marginal amount to development costs and increases maintenance costs (watering of trees, leaf removal, pruning, etc.).

Context: A mature tree canopy is characteristic of New England communities. Preserving that canopy and replacing trees lost to development important to preserving the identity of Bristol. Trees also play an important role in mitigating the causes and effects of climate change by absorbing carbon dioxide and replenishing oxygen and cooling the local environment. Tree replacement requirements are common to zoning regulations. Payment in-lieu-of programs and tree funds are more commonly used in large cities such as New York City, which has a Parks Tree Fund that receives payments from those required to plant new street trees by the City's zoning regulations but cannot plant on-site. The City of Hartford has a tree ordinance that requires the inch-per-inch replacement of trees 13 inches or more or payment into a tree account.

Recommended Zoning Amendments:

- By municipal ordinance, create a tree fund for receipt of payment in-lieu-of planting with funds used exclusively for the planting and maintenance of trees in rights-of-way and on City land.
- Revise Section 11.1 Landscaping Requirements as follows:

11.1.2 General Requirements

- ~~K. Where feasible, existing trees shall be saved; if grading is required in their vicinity, trees shall be appropriately welled or mounded to protect them from damage.~~
- ~~L. No trees five inches or greater in caliper as measured three feet above ground level shall be removed unless so approved by the Commission.~~
- K. Existing non-invasive trees in good condition over 12 inches in caliper shall be preserved unless approved for removal by the Land Use Department. If such tree or trees are removed, the tree(s) shall be replaced with native trees (per UCONN's Native Tree and Shrub Availability List) on one-for-one basis. Replacement trees shall be planted on-site. If on-site planting is demonstrated to be partially or wholly infeasible, required trees may be planted off-site. Newly planted trees shall be a minimum of 2 inches in caliper (if deciduous) or 6 feet tall (if evergreen) and shall be maintained until successfully established. Trees that are not successfully established within one year of planting shall be replaced with a tree of the same or greater caliper or height. Trees planted as required by other sections of these regulations may be counted towards this requirement.
- L. Payment in-lieu-of planting may be provided if the required planting of replacement trees cannot fully or partially be conducted on-site, or if planting cannot be conducted at an off-site location. A payment of \$500 per required tree not planted shall be provided to the City of Bristol.



City of Bristol Comprehensive Zoning Update

Date: 8/12/2024

Recommendation 14: Provide a Sustainability Incentive

Purpose: Provide an incentive for sustainable development to conserve resources, reduce stormwater runoff, reduce light pollution, reduce urban heat island effect, and encourage low-carbon forms of transportation.

Description: This recommended amendment would provide a coverage incentive for a non-single-family or duplex development that scores above a specified level by providing sustainable features.

Geographic Extents: All zoning districts

Potential Impacts: No adverse impacts

Context: Connecticut General Statutes Section 8-2(c)(4) enables municipalities to provide incentives in their zoning regulations for: solar and other renewable forms of energy; combined heat and power; water conservation, including demand offsets; and energy conservation techniques.

Recommended Zoning Amendments:

- Add Section 15.9 Sustainability Incentives as follows (see next page):



15.9 Sustainability Incentives

The inclusion of sustainable elements may be applied to increase the maximum lot coverage permitted.

15.9.1 Eligibility

All proposed uses except for single-family and duplex uses that are not included in a subdivision application shall be eligible for a lot coverage increase as permitted by this section.

15.9.2 Review

The review of project scoring and awarding of the incentive shall be conducted by the reviewing authority (Commission or Zoning Enforcement Officer) for the permit or application type required for the proposed use.

15.9.3 Coverage Increase

The maximum lot coverage shall be increased by the following amount based upon a project's score:

Points Earned	Coverage Increase Permitted
500-999	5%
1,000-1,499	10%
1,500-1,999	15%
2,000-2,499	20%
2,500+	25%

15.9.4 Maintenance and Improvements

- A. Projects shall be built and maintained in good faith. Elements of the project receiving points shall be maintained for the life of the project but may be improved to a higher, more sustainable standard.
- B. Failure to maintain elements of a project awarded points shall result in the project being non-conforming with the coverage standards of these regulations if the project exceeds the coverage limit of the zoning district in which it is located.
- C. Projects shall be subject to periodic inspection by the Zoning Enforcement Officer to ensure adequate maintenance of sustainable elements for which points have been awarded.

15.9.5 Scoring

- A. Calculation of Score: Scoring shall be conducted in accordance with the table below. Points earned shall be multiplied by the sustainability factor, which shall equal the score for each item. The award is based upon the total score, which is a sum of the score for each item.
- B. Documentation: The applicant is responsible for providing documentation that confirms the performance of the proposal in accordance with the scoring matrix and shall submit a scoring matrix with calculations completed. The Commission or Zoning Enforcement Officer may request additional data, calculations, or professional certification to confirm the score(s) provided by the applicant prior to increasing the permitted lot coverage.



Sustainability Element	Points	Sustainability Factor (multiply points by this factor to determine score)
LEED	Points shall be awarded in accordance with projects designed to meet the following LEED certification levels: Certified=70, Silver=80, Gold=90, Platinum=100	5
Tree Cover	1 point for each 1% of lot area with contiguous tree cover	5
Native Plants	1 point for each 1% of shrubs and trees that are CT native plants as listed on the UCONN Plant Database	1
On-Site Capture of Stormwater	1 point for each 1% of stormwater captured on-site during ten-year storm event.	2
On-Site Solar	1 point for each 1% of energy use to be supplied by solar	2
Geothermal Heating and Cooling	1 point for each 1% of heating and cooling to be supplied by a geothermal source.	2
Gray Water	1 point for each 1% of site water use provided by gray water	2
Pervious, Porous, or Permeable Pavement*	1 point for each 1% of pavement surface comprised of pervious, porous, or permeable pavement.	1
Green Roof*	1 point for each 1% of roof area covered by a green roof	1
Electric Vehicle Charging	1 point for each 1% of parking spaces provided with an electric vehicle charger	2
Bicycle Parking	1 point for each 1% of bicycle parking spaces (indoor or outdoor) relative to vehicular parking spaces (for example, if 100 parking spaces are provided and 10 bicycle spaces are provided, 10 points are awarded)	2
Public Sidewalks	1 point for each 1% of frontage with public sidewalks (includes driveway crossing if sidewalks remain at grade and the sidewalk material continues across the driveway)	1
Dark Sky Compliance	1 point for each 1% of outdoor fixtures that are Dark Sky Approved by Dark Sky International	1
*Projects claiming a coverage offset as permitted by Sections [insert reference to green roof and pervious surface coverage offsets if approved] shall not be awarded points for green roofs or pervious, porous, or permeable pavement.		



City of Bristol Comprehensive Zoning Update

Date: 8/12/2024

Recommendation 15: Provide Riparian Corridor Protection Regulations

Purpose: Expand protections for riparian corridors and to better protect those resources, the associated habitats, and water quality of the Long Island Sound.

Description: The intent of this regulation is to better regulate and prohibit development in close proximity of the City's rivers, brooks, and streams such as the Pequabuck River, Copper Mine Brook, Polkville Avenue Brook, Birge Pond Brook, etc.

Geographic Extents: All zoning districts

Potential Impacts: Multiple properties/structures will become non-conforming thus limiting expansion of those properties within riparian zones. The improvement of existing structures that do not expand ground area coverage within the riparian zone would be permitted.

Context: The State of Connecticut requires that communities take action to protect the water quality of the Long Island Sound and waterbodies with connections to the Sound. WestCOG's "The Case for Riparian Corridor Protection" documents the importance of protecting riparian zones and their role in the water quality of the Long Island Sound. In other states, such as Massachusetts, the Massachusetts Rivers Act establishes a 200-foot-wide riparian zone on each side of rivers and streams that restricts development in those areas with the exception of single-family homes and associated accessory uses. The riparian zone is 25 feet in a small number of urban communities.

Recommended Zoning Amendments:

1. Provide a new section: Section 15.8 Riparian Corridor Protection (see next page).



15.8 Riparian Corridor Protection

These regulations establish riparian zones along riparian corridors in the City to protect the water quality of those waterbodies and the habitats associated with them. Properties and projects subject to these regulations may also be subject to the Inland Wetlands and Watercourses Regulations of the Conservation Commission of the City of Bristol.

15.8.1 Applicability

- A. A riparian zone shall be provided adjacent to brooks, streams, and rivers.
- B. Intermittent streams and brooks shall not be subject to these regulations.

15.8.2 Riparian Zone Establishment

The riparian zone shall be 25 feet as measured from the mean annual high-water line or from the visible edge of the waterbody if a mean annual high-water line cannot be determined.

15.8.3 Prohibited Uses in Riparian Zone

The following uses shall be prohibited within the riparian zone:

- A. Principal buildings, additions to existing buildings, or detached accessory buildings including but not limited to garages and sheds.
- B. Impervious surfaces including but not limited to paved parking areas, driveways, athletic courts, terraces, and pools.

15.8.4 Permitted Uses in Riparian Zone

The following uses shall be permitted in the riparian zone provided that the zone is not disturbed, filled, or improved except in support of the permitted use:

- A. Any activity for the purposes of environmental impact mitigation or restoration activities including, but not limited to, stormwater management, habitat management, riparian zone restoration or wetland restorations.
- B. Boat facilities, public trails, and greenways.
- C. Agricultural activities permitted by Connecticut General Statutes Section 22a-40.
- D. Construction and operation, by water companies (as defined by Section 16-1 of Connecticut General Statutes) or by municipal water supply systems (as provided for in Chapter 102 of the Connecticut General Statutes) of dams, reservoirs and other facilities necessary to the impounding, storage and withdrawal of water in connection with public water supplies except as provided in Sections 22a-401 through 22a-410 of the Connecticut General Statutes.

15.8.5 Existing Uses

Uses and structures within the riparian zone existing as of [insert date of adoption] shall be non-conforming to these regulations and may not be expanded in ground area within the riparian zone.



City of Bristol Comprehensive Zoning Update

Date: 8/12/2024

Recommendation 16: Update Soil and Erosion Control Regulations.

Purpose: Update the regulations to provide references to current State guidelines.

Description: Provide updated references to the 2024 Connecticut Guidelines for Soil Erosion and Sediment Control. Remove references to the Connecticut Stormwater Quality Manual, which is not directly applicable to this section.

Geographic Extents: All zoning districts

Potential Impacts: None

Context: The State has recently updated its Guidelines for Soil Erosion and Sediment Control, which became effective in 2024.

Recommended Zoning Amendments:

1. Update Section 15.1.1 as follows:

15.1.1 Purpose

This Section is designed to further the purposes set forth in Section ~~22a-326~~ **22a-329** of the Connecticut General Statutes relative to soil conservation in the State of Connecticut

2. Update Section 15.1.5 as follows and remove reference to the Stormwater Quality Manual as it contains no guidance on soil erosion and sediment control.

15.1.5 Erosion and Sediment Control Plan

A Soil Erosion and Sediment Control Plan (hereinafter referred to as a "Control Plan") shall contain proper provisions to adequately control accelerated erosion and sedimentation and to reduce the danger from storm water runoff on the proposed site based on the best available technology. For methods and practices necessary for certification, **Chapter 3 of** the "Connecticut Guidelines for Soil Erosion and Sediment Control (2002) **(2024)**" as amended, published by the Connecticut Council on Soil and Water Conservation, as well as the "Connecticut Stormwater Quality Manual (2004)", as may be amended, shall be utilized.



City of Bristol Comprehensive Zoning Update

Date: 8/12/2024

Recommendation 17: Amend Removal of Earth Materials and Filling of Land Regulations.

Purpose: Improve language of the regulations for removal of earth materials and filling of land to provide more clarity.

Description: Amend multiple items in Section 15.2 Removal of Earth Materials and Section 15.3 Filling of Land.

Geographic Extents: All zoning districts

Potential Impacts: None

Context: N/A

Recommended Zoning Amendments:

1. Amend Section 15.2.2 General Provisions as follows to provide more clarity:

- ~~A. Except as otherwise provided herein, there shall be no removal of earth materials from any property in any zoning district.~~
- A. The removal of earth materials shall be conducted in accordance with Sections 15.2.3 through Section 15.2.7 below.

2. Amend Section 15.2.3 as follows to refer to the proper permit type:

15.2.3 ~~Temporary~~ Zoning Permit for Earth Removal up to 400 Cubic Yards

- B. Where a bona fide construction project, as evidenced by an approved Site Plan, an approved subdivision plan or a valid Building Permit, requires the removal from the property of not more than 400 cubic yards of earth materials, the Zoning Enforcement Officer may issue without a bond a ~~temporary~~ Zoning Permit for earth removal. Such permit shall be valid for a period of 60 days. Such time period may be extended once by the Zoning Enforcement Officer for an additional period of 60 days.
 - C. The Zoning Enforcement Officer may issue without a bond, a ~~temporary~~ Zoning Permit to excavate and move up to 1,500 cubic yards of earth materials in any zoning district to an adjacent property, provided public roads shall not be used. Such permit shall be valid for a period of 60 days.
3. Amend Section 15.2.5.B as follows to apply the buffer area requirement only to earth removal operations, not to the removal of earth material associated with site development:

- D. Buffer ~~Areas~~ area requirement for Earth Removal Operations.



4. Amend Section 15.2.6.E to require reporting over a full 12-month period and refer to proper permit type.

E. Every 12 months after the approval of a Special Permit for earth removal, the applicant shall submit to the Commission information prepared, signed and sealed by a surveyor and an engineer registered and licensed to practice in the State regarding the progress of the operation, including the amount of material removed, existing contours and cross-sections in the area excavated during the preceding ~~six-month~~ **12-month** period. Failure of the applicant to provide the Commission with such information within 30 days after the end of the 12-month period shall be deemed sufficient cause for the Commission to revoke the ~~Temporary~~ **Zoning** Permit.

5. Amend Section 15.3.1 General Provisions as follows to provide clarity regarding the requirement for filling of land:

A. The filling of land shall require ~~the~~ **a Site Plan application and Site Plan** approval ~~of~~ **by** the Commission unless the filling shall be for the express purpose of preparing the land for immediate development in accordance with an approved subdivision plan or an approved Site Plan, or the amount of fill to be deposited shall be less than 400 cubic yards in any 12-month period, or the deposit shall be one of topsoil for the purpose of improving an agricultural use.



City of Bristol Comprehensive Zoning Update

Date: 8/12/2024

Recommendation 18: Update Stormwater Management Regulations

Purpose: Update regulations to provide updated references, more clarity regarding process, and provide updates recommended by the City's Stormwater Management Plan.

Description: Provide references to the 2024 Connecticut Stormwater Quality Manual and add maintenance plan requirements as recommended by the City's Stormwater Management Plan.

Geographic Extents: All zoning districts

Potential Impacts: None

Context: The State has recently updated its Stormwater Quality Manual, which became effective in 2024.

Recommended Zoning Amendments:

1. Update Section 15.5.3 as follows to reference the 2024 Connecticut Stormwater Quality Manual:

15.5.3 Requirements

A. Unless modified by the Commission by Special Permit as provided for in Section 15.5.4 below, any development within the City of Bristol shall implement the following provisions of Chapter 7 of the ~~2004~~ **2024** Connecticut Stormwater Quality Manual (CSQM), as may be amended:

1. Pollutant Reduction as provided in ~~Section 7.4~~ **Standard 1** of the CSQM.
2. Groundwater Recharge and Runoff Volume Reduction as provided in ~~Section 7.5~~ **Standard 1** of the CSQM.
3. Peak Flow Control for the 2-year, 10-year, 25-year, 50-year, and 100-year storm events as provided in ~~Section 7.6~~ **Standard 2** of the CSQM ~~(and the LID appendices)~~ **and Chapter 5**.

B. In the design of a stormwater management system, design professionals may utilize low impact development techniques as contained in the Connecticut Stormwater Quality Manual ~~(2004)~~ **(2024)**, as may be amended.

2. Add the following items recommended by the City's Stormwater Management Plan, to Section 15.5.3 Requirements:

- C. All Site Plan and Special Permit applications involving stormwater infrastructure shall provide and require compliance with a long-term maintenance plan and schedule to ensure the performance and pollutant removal efficiency of privately owned retention ponds, detention ponds and other stormwater basins that discharge to or receive discharge from Bristol's municipal separate storm system (MS4) including short-term and long-term inspection and maintenance measures to be implemented by the property owner.
- D. The City is authorized to carry out all inspections, surveillance and monitoring procedures necessary to determine compliance with these regulations and the requirements of the City's MS4 program.



3. Revise Section 15.5.4 Modifications to improve clarity regarding required process.

15.5.4 Modifications

The Commission may, ~~by Special Permit~~ **in the course of a Site Plan or Special Permit approval**, modify the requirements of this Section provided that adequate information has been submitted by the applicant to evaluate the request and:

Subdivision Status Report																														
Identifying Information						Open Space		Approvals			Bonding			Construction Status**												Notes				
											Performance Bond ⁽⁴⁾		Maintenance Bond																	
App. #	Name of Development (Developer/ Applicant)	Location (New or Extended Streets)	Total Lots	New Lots	New Streets (x)	Type*	Approx. Size (Acres)	Transaction Complete (x)	Date Approved by Planning Comm.	Due Date for Filing on Land Records	Expiration Date of Conditional Approval ⁽²⁾	Not Required (x)	Original Bond Amount (\$)	Date Bond Expires	Maintenance Bond Amount (\$)	Sanitary Sewers	Drainage	Water	Detention Pond	Sidewalk	Process	Rough Graded	Binder Pavement	Finish Pavement	As-Builts	Lot Pins	Street Lights	Other		
324 ⁽⁶⁾	Bristol Crossings, Section 1, Phase 3	Old Orchard Rd./Tevins Way Phase 3	12	12	x				Jun 25, 2008				\$583,660	May 18, 2025								x								
									Jun 25, 2025	Feb 20, 2009	Mar 08, 2019		\$583,660																	
409	Ridgeview (Rock Builders)	Great Pyrenees Way	8	7	x				May 30, 2018				\$59,370	Apr 01, 2025		x	x	x		x	x	x	x	x						
									May 30, 2028	Aug 06, 2018	May 30, 2020		\$59,370																	
413	Laurentide Glen Phase 1	12 lots – Assessor's Map 67, Lots 37B-1 to 37B-11; 37B-72; Pequabuck Street	12	12	x				Oct 24, 2018				\$454,250	Apr 03, 2025		x	x	x	x	x	x	x	x	x			x	x		
									Oct 24, 2028	Aug 06, 2019	Apr 01, 2021		\$127,075																	
413	Laurentide Glen Phase 2	11 Lots – Map 67, Lots 12 - 14, 16 – 22 Wiegert Way;	11	11	x				Oct 24, 2018				\$454,250	Apr 03, 2025		x	x	x	x	x	x	x	x	x					x	
									Oct 24, 2028	Aug 06, 2019	Oct 27, 2021		\$1,725																	
413	Laurentide Glen Phase 3	20 Lots – Lots 23-37 Stellas Way and Lots 57-61 Gino Drive	24	24	x				Oct 24, 2018				\$454,250	Apr 03, 2025		x	x	x	x	x	x	x	x	x						
									Oct 24, 2028	Aug 06, 2019	Mar 24, 2022		\$4,025																	
413	Laurentide Glen Phase 4	19 Lots - Lots 38 & 40 - Pequabuck Street; Lots 39, 41-56 - Gino Drive	19	19	x				Oct 24, 2018				\$454,250	Apr 03, 2025		x	x	x	x	x	x	x	x	x						Lots 62, 63, 65 & 66 moved from Phase 5 to Phase 3 - 6/24/24
									Oct 24, 2028	Aug 06, 2019	Sep 26, 2022		\$34,500																	
413	Laurentide Glen Phase 5 & 6	Barlow St., Martin Rd., Arcadia Rd., Farrell Ave. Phases 5 & 6.	26	26	x				Oct 24, 2018		Oct 24, 2025																			
									Oct 24, 2025	Aug 06, 2019																				
414	Calco Construction	Pine St. and Mitchell St.	5	3					Aug 29, 2018				\$202,075	n/a															x	
									Aug 29, 2028	Jun 11, 2019	Aug 26, 2020		\$202,075																	
424	Blossom Estates	Redstone Hill Road - Phase 1	2	0					Aug 25, 2021				\$9,600						x	x										Earth excavation, rough grading OSTA permit acquired; Encroachment Permit needed.
									Aug 25, 2026	May 04, 2022	Jul 18, 2022		\$9,600																	
424	Blossom Estates	Redstone Hill Road - Phase 2	16	16	x				Aug 25, 2021				\$175,052			x	x	x	x		x	x	x							
									Aug 25, 2026	May 04, 2022	May 17, 2024		\$175,052																	
430	Perkins Meadow	James P. Casey Road and Perkins Street	9	7					Feb 23, 2022				n/a	n/a																
									Feb 23, 2027	Apr 05, 2022	Feb 23, 2022		n/a	n/a																
431	Meadow View Farm	1960 Perkins Street and Southdown Drive	9	8					Apr 27, 2022				n/a	n/a																
									Apr 27, 2027	May 25, 2022	Apr 27, 2024		n/a	n/a																
433	Cold Springs Farm Phase 4	20 lots - West of Village St. &Silo Rd.	20	20					Aug 28, 2023		Aug 24, 2025					x	x	x			x	x	x	x						
									Aug 28, 2028	May 09, 2024																				

NOTES:
(1) The expiration date is 5 years from the original date of approval or, if extended by the Commission, up to 10 years from the original date of approval. HOWEVER, SEE NOTE (6) BELOW.
(2) The expiration date of a conditional approval (which is also the deadline for final approval) is 24 months from the original date of approval. Up to three additional 12-month extensions of the expiration date may be granted by the Commission.
(3) For subdivisions that contain public improvements, the date of final approval is the date on which either (a) all public improvements have been completed, or (b) a performance bond is posted with the city for any uncompleted public improvements. For subdivisions that contain no public improvements, the date of final approval is the date on which the subdivision is approved by the Commission. Final approval is required prior to the sale or offering for sale of any subdivision lots.
(4) A performance bond must be posted for any uncompleted public improvements in order to obtain final approval. A performance bond is NOT necessary for those subdivisions that have final approval, either because all public improvements have been completed or because there are no public improvements associated with the subdivision.
(5) A maintenance bond is required for any subdivision that contains public improvements, even if such improvements were completed prior to final approval and a performance bond was not required.
(6) In accordance with Public Act No. 11-5, any subdivision approved prior to July 1, 2011 that has not yet expired shall expire not less than NINE (9) years after the date of such approval. The Commission may grant one or more extensions of time to complete all or part of the work in connection with such subdivision, provided that no subdivision approval, including all extensions, shall be valid for more than fourteen (14) years from the date the subdivision was approved.
(7) In accordance with Public Act No. 21-163, any subdivision approved prior to July 1, 2011 that has not yet expired shall expire prior to March 10, 2020 shall not expire not less than nineteen (19) years after the date of such approval. The Commission may grant one or more extensions of time to complete all or part of the work in connection with such subdivision, provided that no subdivision approval, including all extensions, shall be valid for more than nineteen (19) years from the date the subdivision was approved. L = Land C= Conservation Easement F= Fee x = complete (blank) = not complete n/a = not applicable

Subdivision Status Report																																
Identifying Information						Open Space		Approvals					Bonding				Construction Status**										Notes					
													Performance Bond ⁽⁴⁾		Maintenance Bond																	
App. #	Name of Development (Developer/ Applicant)	Location (New or Extended Streets)	Total Lots	New Lots	New Streets (x)	Type*	Approx. Size (Acres)	Ownership	Transaction Complete (x)	Date Approved by Planning Comm.	Due Date for Filing on Land Records	Expiration Date of Conditional Approval ⁽²⁾	Not Required (x)	Original Bond Amount (\$)	Date Bond Expires	Maintenance Bond Amount (\$)	Current Bond Amount (\$)	Date Bond Released	Current Maint. Bond Amount (\$)	Sanitary Sewers	Drainage	Water	Detention Pond	Sidewalk	Process	Rough Graded	Binder Pavement	Finish Pavement	As-Builts	Lot Pins	Street Lights	Other