

|                                                                                                                                                                                                                                                                                                                                                                                                          |   |             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-------------|
| <b>DOCKET NO. 526</b> – Greenskies Clean Energy, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a 4.999-megawatt-AC solar photovoltaic electric generating facility and associated equipment located at Lantern Hill Road (Parcel No. 169-1-4), Stonington, Connecticut and associated electrical interconnection. | } | Connecticut |
|                                                                                                                                                                                                                                                                                                                                                                                                          | } | Siting      |
|                                                                                                                                                                                                                                                                                                                                                                                                          | } | Council     |

January 17, 2025

## DRAFT Findings of Fact

### Introduction

1. Pursuant to the Public Utility Environmental Standards Act (PUESA), Connecticut General Statutes (CGS) §16-50g *et seq.*, on September 27, 2024, Greenskies Clean Energy, LLC (GCE) applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a 4.99-megawatt (MW) AC solar photovoltaic electric generating facility and associated equipment located at Lantern Hill Road (Parcel No. 169-1-4), Stonington and associated electrical interconnection (Project). (GCE 1, pp. 3-4)
2. Pursuant to CGS §16-50k, no person shall commence the preparation of a site for a facility that may, as determined by the Council, have a substantial adverse environmental effect without obtaining a Certificate issued with respect to such facility by the Council. (CGS §16-50k (2024)).
3. The Council's purpose under PUESA is to provide for the balancing of the need for adequate and reliable public utility services at the lowest reasonable cost to consumers with the need to protect the environment and ecology of the state and to minimize damage to scenic, historic, and recreational values. (CGS §16-50g (2024))
4. The Council has exclusive jurisdiction over electric generating facility sites throughout the state. A facility site is defined as a contiguous parcel of property with specified boundaries, including, but not limited to, the leased area, right-of-way, access and easements on which a facility and associated equipment is located, shall be located or is proposed to be located. (CGS §16-50i(a)(3); CGS §16-50x (2024); Regulations of Connecticut State Agencies (RCSA) §16-50j-2a(29) (2024))
5. Pursuant to §16-50x, the Council has exclusive jurisdiction over the construction, maintenance and operation of the proposed solar photovoltaic electric generating facility. (CGS §16-50x (2024))
6. Under CGS §16-50p, the Council shall render a final decision on an application for an electric generating facility not later than 180 days after the filing of an application. The 180-day deadline for the Council's final decision on this application under CGS §16-50p is March 26, 2025. The Council may extend the final decision deadline by not more than 180 days with the consent of the applicant. (CGS §16-50p (2024))
7. In its final decision, the Council shall find and determine:
  - a. A public benefit for the facility;
  - b. The nature of the probable environmental impact of the facility alone and cumulatively with other existing facilities, including a specification of every significant adverse effect, including, but not limited to, (i) electromagnetic fields that, whether alone or cumulatively with other effects, impact on, and conflict with the policies of the state concerning the natural environment, (ii) ecological balance, (iii) public health and safety, (iv) scenic, historic and recreational values, (v)

- agriculture, (vi) forests and parks, (vii) air and water purity, and (viii) fish, aquaculture and wildlife; and
- c. Why the adverse effects or conflicts referred to above are not sufficient reason to deny the application.  
(CGS §16-50p (2024))
8. In its evaluation of an application for an electric generating facility under PUESA, the Council shall also consider neighborhood concerns, including public safety. (CGS §16-50p (2024))
9. GCE is a limited liability company with its principal place of business at 127 Washington Ave, North Haven, Connecticut. It is a developer and operator of solar electric generating facilities. (GCE 1, p. 5)
10. The party to this proceeding is GCE. (Record)
11. Under Regulations of Connecticut State Agencies (RCSA) §16-50j-16, the Council may add parties and intervenors at any time during the pendency of a proceeding. Any person granted status is responsible for obtaining and reviewing all materials for the proceeding. (RCSA §16-50j-16 (2024))
12. The purpose of the proposed Project is to contribute to the state's efforts to promote the deployment of clean renewable energy sources. (GCE 1, pp. 4-5, 11-12)
13. GCE has a 21-year lease for the proposed site with options for up to four additional five-year lease extensions. There is no option for GCE to purchase the host parcel. (GCE 3, response 16)
14. If GCE transfers the solar facility to another entity in the future, GCE would provide a written agreement as to the entity responsible for any outstanding conditions of the Certificate and quarterly assessment charges under CGS §16-50v(b)(2) that may be associated with the facility, including contact information for the individual acting on behalf of the transferee. (GCE 3, response 13)
15. The proposed Project would be a "grid-side distributed resources" facility under CGS §16-1(a)(37). (CGS §16-1(a)(37)(2024))
16. The proposed Project would generate renewable electrical energy from solar power. Solar power is considered a Class I renewable energy source. (CGS §16-1(a)(20)(2024))
17. The State legislature established a renewable energy policy under CGS §16a-35k that encourages the development of renewable energy facilities to the maximum extent possible. (CGS §16a-35k)
18. Pursuant to CGS §16-50l (b), GCE provided public notice of the filing of the application to the Council that was published in The Day on September 18 and September 20, 2024. (GCE 1, p. 13)
19. On September 17, 2024, GCE provided notice of the application to all abutting property owners by certified mail and to all federal, state and local officials and agencies pursuant to CGS §16-50l (b). Two of the certified mail receipts to abutting property owners were not returned. GCE re-sent notice to these abutting property owners by first class mail on November 26, 2024. (GCE 1, p. 13, Appendix Q; GCE 3, response 3)

### **Administrative Procedures**

20. Hearings shall be held at times and locations specified by the Council. (CGS §16-50m (2024); RCSA §16-50j-20 (2024))
21. CGS §1-225a permits public agencies to hold remote meetings under the Freedom of Information Act (FOIA) and the Uniform Administrative Procedure Act. FOIA defines “meeting” in relevant part as “any hearing or other proceedings of a public agency.” (CGS §1-225a (2024); CGS §1-200, *et seq.* (2024))
22. CGS §1-225a allows public agencies to hold remote meetings provided that:
  - a) The public has the ability to view or listen to each meeting or proceeding in real-time, by telephone, video, or other technology;
  - b) Any such meeting or proceeding is recorded or transcribed and such recording or transcript shall be posted on the agency’s website within seven (7) days of the meeting or proceeding;
  - c) The required notice and agenda for each meeting or proceeding is posted on the agency’s website and shall include information on how the meeting will be conducted and how the public can access it any materials relevant to matters on the agenda shall be submitted to the agency and posted on the agency’s website for public inspection prior to, during and after the meeting; and
  - e) All speakers taking part in any such meeting shall clearly state their name and title before speaking on each occasion they speak.(CGS §1-225a (2024))
23. On September 30, 2024, the Council sent a letter to the State Treasurer, with a copy to the Chief Elected Official of the Town of Stonington and the Town of Ledyard, which is within 2,500 feet of the proposed facility site (municipalities) stating that \$25,000 was received from GCE as payment to the Municipal Participation Fund (MPF) and deposited in the Office of State Treasurer’s department account. The MPF is available for the municipalities to apply for reimbursement to defray expenses incurred by the municipalities if they participate as a party in the proceeding, pursuant to CGS §16-50bb. The municipalities did not participate as parties in the proceeding. (Record; CGS §16-50bb (2024)).
24. During a regular Council meeting held on October 24, 2024, the application was deemed complete pursuant to RCSA §16-50/-1a and the public hearing schedule was approved by the Council. (Record; Council August 15, 2024 Meeting Minutes)
25. Pursuant to CGS §16-50m, on October 25, 2024 the Council sent a letter to the municipalities to provide notification of the scheduled public hearing via Zoom remote conferencing and to invite the municipalities to participate. (Record)
26. Local zoning regulations do not apply to facilities under the exclusive jurisdiction of the Council. Pursuant to CGS §16-50x, the Council has exclusive jurisdiction over solar facilities with a generating capacity greater than 1 MW throughout the state. It shall consider any location preferences provided by the host municipality as the Council shall deem appropriate. (CGS §16-50x (2024))
27. Pursuant to CGS § 16-50m, the Council published legal notice of the date and time of the public hearing in The Day on October 26, 2024. (Record)

28. The Council's Hearing Notice did not refer to a public field review of the proposed site. Field reviews are neither required by statute nor an integral part of the public hearing process. The purpose of a field review is an investigative tool to acquaint members of a reviewing commission with the subject property. (Council's Hearing Notice dated October 24, 2024; Council Administrative Notice Item No. 76 – *Manor Development Corp. v. Conservation Comm. of Simsbury*, 180 Conn. 692, 701 (1980); Council Administrative Notice Item No. 79 – *Grimes v. Conservation Comm. of Litchfield*, 243 Conn. 266, 278 (1997))
29. On November 13, 2024, the Council held a pre-hearing conference on procedural matters for parties and intervenors to discuss the requirements for pre-filed testimony, exhibit lists, administrative notice lists, expected witness lists, and filing of pre-hearing interrogatories, as well as the order of party and intervenor appearances and cross examination during the hearing. Procedures for the public hearing via Zoom remote conferencing were also discussed. (Council Pre-Hearing Conference Memorandum, dated November 6, 2024)
30. On November 15, 2024, in lieu of an in-person field review of the proposed site, the Council requested that GCE submit photographic documentation of site-specific features into the record intended to serve as a "virtual" field review of the proposed site. On December 5, 2024, GCE submitted such information in response to the Council's interrogatories. (Record; GCE 3, response 66)
31. On December 2, 2024, in compliance with RCSA §16-50j-21, GCE installed a four-foot by six-foot sign in the vicinity of the proposed site access drive. The sign presented information about the proposed solar facility, the public hearing date and contact information for the Council. (Council Pre-Hearing Conference Memorandum, dated November 6, 2024; GCE 2; Transcript 1 – December 12, 2024- 2:00 p.m. [Tr. 1], p. 5)
32. On December 5, 2024, pursuant to CGS §16-50o, GCE filed a Motion for Protective Order related to the disclosure of the monthly rent and financial terms contained within the lease agreement for the proposed site. (Record; GCE 3, response 17)
33. Pursuant to CGS §16-50m, the Council gave due notice of a public hearing to be held on December 12, 2024, beginning with the evidentiary session at 2:00 p.m. and continuing with the public comment session at 6:30 p.m. via Zoom remote conferencing. The Council provided information for video/computer access or audio only telephone access. (Council's Hearing Notice dated October 25, 2024)
34. During the evidentiary hearing session held on December 12, 2024, the Council issued a Protective Order related to the disclosure of the monthly rent and financial terms contained within the lease agreement for the proposed site, pursuant to CGS §1-210(b) and §16-50o, and consistent with the Conclusions of Law adopted in Council Docket 366. (Record) move to right before the 6:30 public comment finding.
35. The 6:30 p.m. public comment session afforded interested persons the opportunity to provide oral limited appearance statements. Interested persons were also afforded an opportunity to provide written limited appearance statements at any time up to 30 days after the close of the evidentiary record. Limited appearance statements in this proceeding, whether oral or written, were not provided under oath nor subject to cross examination. (Transcript 2 – December 12, 2024- 2:00 p.m. [Tr. 2], pp. 4-6; CGS §16-50n(f) (2024))
36. During the public comment session of the Council's hearing held on December 12, 2024, two persons made oral limited appearance statements about the proposed facility. (Tr. 2, pp. 9-14)

37. In compliance with CGS §1-225a:
- a) The public had the ability to view and listen to the public hearing(s) in real-time, by computer, smartphone, tablet or telephone;
  - b) The public hearing was recorded and transcribed, and such recordings and transcripts were posted on the Council's website on December 12, and December 30, 2024, respectively;
  - c) The Hearing Notice, Hearing Program, Citizens Guide for Siting Council Procedures and Instructions for Public Access to the Remote Hearing were posted on the agency's website;
  - d) Prior to, during and after the public hearing, the record of the proceeding has been, and remains, available on the Council's website for public inspection; and
  - e) The Council, parties and intervenors provided their information for identification purposes during the public hearing.
- (Hearing Notice dated October 25, 2024; Tr. 1; Tr. 2; Record)
38. The purpose of discovery is to provide the Council, parties and intervenors access to all relevant information in an efficient and timely manner to ensure that a complete and accurate record is compiled. (RCSA §16-50j-22a (2024))
39. In an administrative proceeding, irrelevant, immaterial or under repetitious evidence shall be excluded, and an agency has the right to believe or disbelieve the evidence presented by any witness, even an expert, in whole or in part. (CGS §4-178 (2024); *Dore v. Commissioner of Motor Vehicles*, 62 Conn. App. 604 (2001); RCSA §16-50j-25 (2024))
40. The Council's experience, technical competence, and specialized knowledge may be used in the evaluation of evidence. In accordance with the Council's October 24, 2024 completeness review, the Council determined this project would not require an outside consultant. (Record; CGS §4-178 (2024))
41. GCE's witnesses in this proceeding prepared, supervised and/or assisted in the preparation of exhibits. During the evidentiary hearing session, the Council cross examined GCE's witness panel on their respective exhibits. (Record; Tr. 1)
42. Pursuant to CGS §16-50n(f), at the conclusion of the evidentiary hearing session held on December 12, 2024, the Council closed the evidentiary record for Docket 526 and established January 11, 2025 as the deadline for public comments and the submission of briefs and proposed findings of fact by the parties and intervenors to the proceeding. (Tr. 2, p. 15; Council December 13, 2024 Memorandum)
43. GCE did not submit a post hearing brief or proposed findings of fact. (Record)
44. Pursuant to CGS §16-50p(g), the Council shall in no way be limited by GCE already having acquired land or an interest therein for the purpose of constructing the proposed facility. (CGS §16-50p(g) (2024); Council Administrative Notice Item No. 82 - *Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007))
45. The Council's evaluation criteria under CGS §16-50p does not include the consideration of property ownership or property values nor is the Council otherwise obligated to take into account the status of property ownership or property values. (CGS §16-50p (2024); *Woodbridge Newton Neighborhood Env't Trust, et al v. Conn. Siting Council*, 2024 Conn. LEXIS 163 (2024); *Goldfisher v. Conn. Siting Council*, 95 Conn. App. 193 (2006))

46. Constitutional principles permit an administrative agency to organize its hearing schedule so as to balance its interest in reasonable, orderly and non-repetitive proceedings against the risk of erroneous deprivation of a private interest. It is not unconstitutional for the Council, in good faith, to balance its statutory time constraints against the desire of a party, intervenor or CEPA intervenor for more time to present their objections to a proposal. (*Concerned Citizens of Sterling v. Conn. Siting Council*, 215 Conn. 474 (1990); *Pet v. Dept. of Public Health*, 228 Conn. 651 (1994); *FairwindCT, Inc. v. Conn. Siting Council*, 313 Conn. 669 (2014))

#### **Municipal Consultation**

47. Pursuant to CGS §16-50l(e), GCE began consultation with the municipalities in 2021. On June 1, 2021, GCE attended a Town Planning and Zoning Meeting where preliminary version of the Project was presented. At that time, the Town expressed concerns about the installation of equipment potentially containing per- and polyfluoroalkyl substances (PFAS) and wetland and floodplain concerns. (GCE 1, p. 130)
48. GCE subsequently informed the Town it would not use equipment containing PFAS and would protect the wetlands and floodplains. (GCE 1, p. 13)
49. After 2021, GCE revised the project footprint several times and submitted the proposed site into the Shared Clean Energy Facility (SCEF) Program- Year 4, where it was selected. (GCE 3, response 14)
50. On July 29, 2024, GCE submitted updated Project site plans and site information to the municipalities. Neither municipality commented on the proposal. (GCE 1, p. 13)
51. CGS §22a-20a and Department of Energy and Environmental Protection's (DEEP) Environmental Justice Guidelines require applicants seeking a permit from DEEP or the Council for a new or expanded facility defined as an "affecting facility" that is proposed to be located in an environmental justice community to file an Environmental Justice Public Participation Plan (EJPPP). The proposed solar facility is not an "affecting facility" under CGS §22a-20a because it uses non-emitting and non-polluting renewable sources. Thus, Environmental Justice does not apply to the facility, and an EJPPP is not required. (CGS § 22a-20a (2024))

#### **Neighborhood Concerns**

52. During the public comment session of the Council's hearing held on December 12, 2024, the host parcel owners spoke about the history of the property and Project development. The Council received two written limited appearance statement regarding the proposed facility. Concerns relevant to the Council's statutory review criteria include, but are not limited to, the following: construction, wildlife, noise, water quality, visibility, agricultural use and landscaping. These concerns are addressed in the Facility Construction and Environmental Effects and Mitigation Measures sections of this document, pursuant to CGS §16-50p. (Record; Tr. 2, pp. 4, 9-14)
53. Based on neighborhood concerns regarding visibility, GCE would install landscaping upon consultation with abutting property owners. Based on concerns regarding construction, GCE altered work hours to begin at 7:00 AM instead of 6:30 AM and would install a construction contact sign at the site entrance. (Tr. 1, pp. 27, 31-32, 48-49, 54-55)
54. Neither municipality submitted comments on the proposed facility. (Record)

### State Agency Comments

55. Pursuant to CGS §16-50j(g), on October 25, 2024, the following state agencies were solicited by the Council to submit written comments regarding the proposed facility by December 5, 2024: DEEP; Connecticut Department of Agriculture (DOAG); Department of Public Health (DPH); Council on Environmental Quality (CEQ); Public Utilities Regulatory Authority (PURA); Office of Policy and Management (OPM); Department of Economic and Community Development (DECD); Department of Emergency Services and Public Protection (DESPP); Department of Labor (DOL); Department of Administrative Services (DAS); Department of Transportation (DOT); the Connecticut Airport Authority (CAA); the Office of Consumer Counsel (OCC); and the State Historic Preservation Office (SHPO). (Record)
56. On November 20, 2024, the Council received comments from CEQ<sup>1</sup> related to farmland soil, wildlife, and spill prevention. These comments, among other environmental concerns, are more specifically addressed in the Public Health and Safety and Environmental Effects and Mitigation Measures sections of this document, pursuant to CGS §16-50p. (Record; CGS §16-50p (2024))
57. On December 5, 2024, the Council received comments from DEEP<sup>2</sup> related to wildlife, wetlands, stormwater management, visibility and noise. These comments, among other environmental concerns, are more specifically addressed in the Public Health and Safety and Environmental Effects and Mitigation Measures sections of this document, pursuant to CGS §16-50p. (Record; CGS §16-50p (2024))
58. No other state agencies responded with comment on the application. (Record)
59. While the Council is obligated to consult with and solicit comments from state agencies by statute, the Council is not required to abide by the comments from state agencies. (Council Administrative Notice Item No. 75, *Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007))
60. The Council cannot delegate its statutory authority to any other entity. (CGS §16-50x (2024); *Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007))

### Public Act 17-218

61. Pursuant to Public Act (PA) 17-218, codified at CGS §16-50k(a), the Council shall approve by declaratory ruling ... the construction or location of any customer-side distributed resources project or facility or grid-side distributed resources project or facility with a capacity of not more than sixty-five megawatts, as long as: (i) Such project meets air and water quality standards of DEEP, (ii) the Council does not find a substantial adverse environmental effect, and (iii) ***for a solar photovoltaic facility with a capacity of two or more megawatts***, to be located on prime farmland or forestland, DOAG represents, in writing, to the Council that such project will not materially affect the status of such land as prime

---

<sup>1</sup> [https://portal.ct.gov/-/media/csc/1\\_dockets-medialibrary/1\\_media\\_do500\\_600/do526/state\\_municipal\\_official/do-526-ceq-comments-recd\\_a.pdf?rev=68be5e507e6b4b8086f85c0113c09d55&hash=B050DA93349E227C4659719825E05DAC](https://portal.ct.gov/-/media/csc/1_dockets-medialibrary/1_media_do500_600/do526/state_municipal_official/do-526-ceq-comments-recd_a.pdf?rev=68be5e507e6b4b8086f85c0113c09d55&hash=B050DA93349E227C4659719825E05DAC)

<sup>2</sup> [https://portal.ct.gov/-/media/csc/1\\_dockets-medialibrary/1\\_media\\_do500\\_600/do526/proceduralcorrespondence/do-526-deep-comments-recd\\_a.pdf?rev=c23a5f573e3a4018bc8b882e237166df&hash=F4DE022E7438C21D3B1D2F467E9A3BB4](https://portal.ct.gov/-/media/csc/1_dockets-medialibrary/1_media_do500_600/do526/proceduralcorrespondence/do-526-deep-comments-recd_a.pdf?rev=c23a5f573e3a4018bc8b882e237166df&hash=F4DE022E7438C21D3B1D2F467E9A3BB4)

- farmland or DEEP represents, in writing, to the Council that such project will not materially affect the status of such land as core forest. (Emphasis added) (CGS §16-50k(a) (2024)).
62. PA 17-218 does not confer the Council's exclusive jurisdiction over the construction, maintenance and operation of solar photovoltaic electric generating facilities throughout the state upon DOAG or DEEP. (CGS §16-50k(a) (2024); CGS §16-50x (2024))
  63. PA 17-218 does not permit DOAG or DEEP to impose any enforceable conditions on the construction, maintenance and operation of solar photovoltaic electric generating facilities under the exclusive jurisdiction of the Council. (CGS §16-50k(a) (2024)).
  64. PA 17-218 does not require agricultural activity at solar photovoltaic electric generating facility sites. (CGS §16-50k(a) (2024))
  65. At any time within the discretion of the applicant or under circumstances when a proposed solar photovoltaic facility with a capacity of two or more megawatts is unable to obtain written correspondence from DOAG or DEEP as to any material affects to the status of core forest or prime farmland, the proposed facility may be submitted as an application for a Certificate with the Council even if it has a generating capacity of less than 65 megawatts. (CGS §16-50l (2024)).
  66. There is no prohibition on the submission of an application for a Certificate to the Council for a proposed solar electric generating facility of **any generating capacity**. A letter from DEEP or DOAG under PA 17-218 is not required. (Emphasis added) (CGS §16-50l (2024))
  67. GCE initially planned to submit the Project to the Council as a Petition for a Declaratory Ruling (petition) pursuant to CGS §4-176 and §16-50k as it would have a generating capacity of more than 2 megawatts, but less than 65 megawatts. (CGS §16-50k(a) and §16a-3k (2024); GCE 1, Appendix L; DEEP letter dated July 8, 2024)
  68. By letter dated July 8, 2024, and in accordance with PA 17-218, GCE secured written confirmation from DEEP's Bureau of Natural Resources that the proposed 4.99 MW solar facility would not have a material affect on the status of core forest. (July 8, 2024 DEEP CGS §16-50k No Material Affect to Status of Core Forest Determination Letter)
  69. After the project was selected in the SCEF-Year 4 program, DOAG revised its Agrivoltaics requirements in December 2023. GCE determined DOAG's Revised December 2023 Agrivoltaics requirements were overly burdensome given that such requirements are not imposed on other agricultural operations, including but not limited to, baseline and periodic testing of prime farmland soil at the site and a complete agricultural activity plan on the entire parcel, identifying the farmer, planned crops or other co-use and vegetation mix. (GCE 1, pp. 8-9; GCE 3, response 61)
  70. Soil testing would cost approximately \$15,000 - \$20,000. (Council Administrative Notice Item 40-Docket 525 Record, Finding of Fact # 77)
  71. GCE intends to implement agricultural activities at the site. Specific details have not been finalized. (GCE 1, Appendix O; Tr. 1, pp. 46-47)
  72. Projects selected in the SCEF Program-Year 4 are not required to adhere to DOAG agrivoltaics co-use requirements. (Council Administrative Notice Item No. 73)

73. The SCEF Program requirements and DOAG's Agrivoltaics Guidelines are not permits or regulations issued under the provisions of the Uniform Administrative Procedure Act. (CGS §4-166, *et seq.* (2024))
74. Given that SCEF projects must meet contractual energy obligations within three years of bid selection, GCE opted to submit an application for a Certificate with the Council for the proposed solar electric generating facility. Applications for a Certificate are exempt from the provisions of PA 17-218. (CGS §16-50k (2024); Council Administrative Notice Item No. 73)
75. The lease agreement with the property owner does not contain specific provisions for agricultural activities at the site, but the property owner is amenable to such activities. (GCE 3, response 18)

**Public Act 23-163**

76. Pursuant to PA 23-163, codified at CGS §16-50k(a), the Council shall not issue a Certificate for a solar electric generating facility with a capacity of more than 2 megawatts unless the applicant furnishes a bond to cover all costs associated with the decommissioning of the facility and the restoration of prime farmland soil. (CGS §16-50k(a) (2024))
77. PA 23-163 does not require an agricultural activity at solar photovoltaic electric generating facility sites. (CGS §16-50k(a) (2024))
78. PA 23-163 does not designate a timeframe/deadline for applicants to furnish a bond. (CGS §16-50k(a) (2024))
79. Common financial mechanisms for solar facility decommissioning are:
  - a. Decommissioning provisions in land lease agreements;
  - b. Decommissioning trusts or escrow accounts and/or letters of credit; and
  - c. Removal or surety bonds.(Council Administrative Notice Item Nos. 89 and 90)
80. It is industry standard to require a decommissioning clause in a solar facility site lease agreement. (Council Administrative Notice Item No. 38, Docket 522 Record – Finding of Fact #83)
81. It is generally recognized in the industry that a solar facility is comprised of components that will remain valuable at the time of decommissioning. GCE expects there would be salvage value of the solar facility components at the end of the Project's useful life. (GCE1, Appendix D; Council Administrative Notice Item No. 38, Docket 522 Record – Finding of Fact #84)
82. PA 23-163 applies to the restoration of prime farmland soil. It does not differentiate between restoration of prime farmland soil currently used to support agricultural activities from those that are not used to support agricultural activities. (CGS §16-50k(a) (2024))
83. Agricultural restoration includes, but is not limited to, reclamation of grown-over pastures and meadows, installation of fences to manage wildlife and livestock outside of restoration areas, and climate-smart agriculture. (CGS §22-6d (2024))
84. DOAG does not regulate soil testing for the sufficiency of livestock grazing. (Council Administrative Notice Item No. 38, Docket 522 Record - Finding of Fact #88)
85. DOAG does not know the current estimated cost to restore an acre of prime farmland soil and does not know what inflationary mechanism should be used to determine the cost of an acre of prime farmland

- soil 30 years from now. (Council Administrative Notice Item No. 38, Docket 522 Record - Finding of Fact #89)
86. DOAG does not have the authority to reimburse costs to farmers to restore agricultural land. (Council Administrative Notice Item No. 38, Docket 522 Record - Finding of Fact #90)
87. DOAG receives bonds from milk processors to secure payments due to milk producers, but it does not have authority to issue bonds. (Council Administrative Notice Item No. 38, Docket 522 Record - Finding of Fact #91)
88. GCE developed a Decommissioning Plan for restoration of the site at the end of the Project's useful life in accordance with the terms of the site lease. (GCE 1, Appendix D; GCE 3, response 75)
89. Under the terms of the site lease, GCE has six months to remove the solar facility and to restore the site to conditions similar to pre-construction. (GCE 3, response 16)
90. The Council does not have jurisdiction or authority over any portion of the host parcel beyond the boundaries of the Project "site." This includes portions of the parcel retained by the property owner and portions of the parcel the property owner may lease to third parties. Once a facility is decommissioned, the Council no longer has jurisdiction or authority over the Project "site." (CGS §16-50x (2024)).
91. DOAG has no authority to dictate the use of a solar electric generating facility site. (CGS §16-50x (2024); Council Administrative Notice Item No. 38, Docket 522 Record - Finding of Fact #96)
92. DOAG has no enforcement authority over any conditions imposed by the Council in a final decision on an application for a Certificate. (Council Administrative Notice Item No. 38, Docket 522 Record – Finding of Fact #97)

#### **State of Connecticut Planning and Energy Policy**

93. Section 51 of PA 11-80 requires that DEEP prepare a Comprehensive Energy Strategy (CES) every three years that reflects the legislative findings and policy stated in CGS §16a-35k. As such, this statute consolidated Connecticut's energy planning for the first time. The state's inaugural CES was published on February 19, 2013 (2013 CES). It advocated smaller, more diversified generation projects using renewable fuels, as well as smaller, more innovative transmission projects emphasizing reliability. (CGS §16a-3d (2024))
94. The CES examines future energy needs and identifies opportunities to reduce ratepayer costs, ensure reliable energy availability, and mitigate public health and environmental impacts. CES Strategy No. 3 is "Grow and sustain renewable and zero-carbon generation in the state and region." The state Integrated Resource Plan assesses the state's future electric needs and a plan to meet those future needs, including, but not limited to, pathways to achieve a 100 percent zero carbon electric supply by 2040. (Council Administrative Notice Item Nos. 50 and 51)
95. The proposed facility will contribute to fulfilling the State's Renewable Portfolio Standard and Global Warming Solutions Act as a zero emission Class I renewable energy source. (Council Administrative Notice Item No. 50)
96. CGS §16-245a establishes Connecticut's *Renewable Portfolio Standards (RPS)*. RPS requires that 40 percent of Connecticut's electricity usage be obtained from Class I renewable resources by 2030. (CGS §16-245a)

97. The Global Warming Solutions Act (GWSA) sets a goal of reducing greenhouse gas (GHG) emissions by 80 percent by 2050. (CGS §22a-200 (2024))
98. Governor Lamont's Executive Order No. 3, issued in September 2019, established a 100 percent zero carbon emission goal for the electricity sector by 2040. (PA-22-5)
99. The proposed facility will contribute to fulfilling the State's RPS and GWSA as a zero emission Class I renewable energy source. (Council Administrative Notice Item No. 50)

### ***Competitive Energy Procurement***

100. Solar facilities of certain generating capacities are eligible to bid into statewide renewable energy programs established by PURA that include, but are not limited to, the Non-Residential Renewable Energy Solutions (NRES) Program and the SCEF Program. (PA 18-50; PA 19-35, Section 3(a); Council Administrative Notice Item Nos. 73 and 74)
101. The NRES Program is a competitive procurement process established by PURA in June 2021, that is administered by the state's electric distribution companies to develop the state's Class I renewable energy objectives and to encourage participation by customers in underserved and environmental justice communities. The NRES Program is a successor program to the Low Emission Renewable Energy Credit and Zero Emission Renewable Energy Credit (LREC/ZREC) and Virtual Net Metering (VNM) programs. (PA 19-35, Section 3(a); Council Administrative Notice Item No. 74)
102. New or incremental Class I renewable generation projects ranging in size from 100 to 5,000 kW (AC) are eligible to bid into the NRES Program for a Tariff Terms Agreement (TTA) with a 20-year term. The electricity and renewable energy credits produced by the facility are sold to the electric distribution company in accordance with the TTA.

\*Projects selected during Year 1 ranged in size from 100 kW to 2,000 kW. The size limit was increased to 5,000 kW beginning in Year 2.

(PURA Dockets 21-08-03, 22-08-03, 23-08-3, record; PA 22-14)

103. The SCEF Program is a competitive procurement process established by PURA in December 2019 (Docket No. 19-07-01), that is administered by the state's electric distribution companies to develop utility scale renewable energy with capacity to be supplied to low-and-moderate-income customers, small business customers and other customers identified by the electric distribution companies that are eligible for enrollment. (PURA Docket No. 19-07-01, Administrative Notice Item No. 73)
104. New or incremental Class I renewable generation projects ranging in size from 100 to 5,000 kW AC are eligible to bid into the SCEF Program for a TTA with a 20-year term. The electricity and renewable energy credits produced by the facility are sold to the electric distribution company in accordance with the TTA. (PURA Docket No. 22-08-04, Administrative Notice Item No. 73; PA 22-15)
105. The NRES Program and the SCEF Years 1-4 procurements do not require integration of an agrivoltaics or dual-use for a solar electric generating facility site to qualify for a bid. (PURA Docket 23-08-3, record; PURA Docket No. 22-08-04, Administrative Notice Item Nos. 73 and 74)

106. PURA defines agrivoltaics as “the practice of dual use of farmland to integrate solar energy generation and farming on the same piece of land,” and defines dual use as “the construction of solar generating units while using land under and/or between panels for production agriculture of crops and livestock grazing.” (PURA Docket No. 23-08-04, Administrative Notice Item No. 73)
107. The Project bid into the statewide SCEF Program. The Project was selected and in accordance with SCEF Program requirements, has a contractual in-service date of June 7, 2026. (GCE 1, p. 3)
108. The electricity, capacity and renewable energy credits (RECs) produced by the facility would be sold to Eversource in accordance with the TTA. A REC certifies that one megawatt-hour of renewable electrical energy has been generated. (Council Administrative Notice Item No. 73)
109. Once the TTA expires, GCE may seek other revenue sources for the energy produced by the facility. (GCE 3, response 12)

### **Public Benefit**

110. Pursuant to CGS §16-50p(c), a public benefit exists when a facility is necessary for the reliability of the electric power supply of the state or for the development of a competitive market for electricity. Public benefit exists if the Council finds and determines a proposed electric generating facility contributes to forecasted generating capacity requirements, reduces dependence on imported energy resources, diversifies state energy supply mix and enhances reliability. (CGS §16-50p(c); *Preston v. Connecticut Siting Council*, 20 Conn. App. 474 (1990); *Preston v. Connecticut Siting Council*, 21 Conn. App. 85 (1990); Council Administrative Notice Item No. 37 – Docket No. 514, Finding of Fact #55)
111. Created by the Federal Energy Regulatory Commission (FERC) in 1997, ISO-NE is the independent, not-for-profit corporation responsible for the reliable operation of New England’s electric power generation and transmission system, overseeing and ensuring the fair administration of the region’s wholesale electricity markets, and managing comprehensive regional electric power planning. (Council Administrative Notice Item No. No. 37 – Docket No. 514, Finding of Fact #56)
112. ISO-NE operates the power system and the competitive wholesale electric markets so that the lowest cost resources are used first to meet consumer demand. However, ISO-NE’s primary responsibility is electric reliability. (Council Administrative Notice Item No. 37 – Docket No. 514, Finding of Fact #57)
113. ISO-NE is fuel and technology neutral and takes no position on any proposed energy projects. ISO-NE does not own any transmission or distribution lines or power plants. (Council Administrative Notice Item No. 37 – Docket No. 514, Finding of Fact #58)

### **Resource Adequacy**

114. ISO-NE holds an annual forward capacity market auction (FCA) to acquire the power system resources needed to meet projected demand for the New England region in three years’ time. The FCA is held approximately three years before each capacity commitment period to provide time for new resources to be developed. Capacity resources can include traditional power plants, renewable generation, imports, and demand-side resources, such as load management and energy efficiency measures. Resources clearing in the auction will receive a monthly payment during the delivery year in exchange for their commitment to provide power or curtail demand when called on by ISO-NE. (Council Administrative Notice Item No. 37 – Docket No. 514, Finding of Fact #59)

115. According to ISO-NE's 2023 Regional System Plan (2023 RSP), "Sufficient resources to meet the resource adequacy planning criterion are projected for New England through the 10-year planning horizon, assuming no additional retirements, the successful commercialization of all new resources that have cleared the Forward Capacity Market (FCM) in Forward Capacity Auction 17, and the installation of Sponsored Policy Resources. However, it is important to note that the pending Resource Capacity Accreditation project could significantly change how the New England resource mix's contribution toward resource adequacy is assessed. This planning analysis accounts for new resource additions that have responded to market improvements and state policies, and resource retirements. The ISO is committed to procuring adequate demand and supply resources through the FCM and expects the region to install adequate resources to meet the physical capacity needs for future years." (Council Administrative Notice Item No. 21 – 2023 RSP, p. 117)

*Generating Capacity Retirements in New England*

116. ISO-NE estimated that more than 5,200 MW of oil, coal and nuclear power plants retired during 2013-2022 and anticipates another 5,000 MW of remaining coal and oil generators are at risk of retirement. (GCE 3, response 5)

*New England Reliability*

117. New England's electric power grid is planned and operated as a unified system of transmission owners and market participants. The New England system integrates resources with the transmission system to serve all regional load regardless of state boundaries. Most of the transmission lines are relatively short and networked as a grid. The electrical performance in one part of the system affects all areas of the system. Thus, Connecticut and the rest of the ISO-NE region are inextricably interconnected and rely on each other for a reliable electricity system. (Council Administrative Notice Item No. 37 – Docket No. 514, Finding of Fact #62)
118. In addition to ISO-NE's winter energy concerns, system reliability is comprised of two aspects: resource adequacy and transmission security. Resource adequacy means having sufficient resources to meet load at all times. Transmission security means having a system that can withstand contingencies such as the loss of a transmission line, or successive losses of multiple transmission lines, or the loss of a major generating plant, during a time of high system load. (Council Administrative Notice Item No. 37 – Docket No. 514, Finding of Fact #63)

*Solar Facility Benefit*

*GCE's FCA Participation*

119. Under the TTA, Eversource would own the energy, capacity rights, and renewable energy credits of the facility. Thus, GCE would not participate in an ISO-NE FCA during the term of the TTA. (Council Administrative Notice Item No. 73; GCE 3, response 31)

*Competitive Markets Benefit*

120. The SCEF program is a competitive bid program whereby the renewable energy projects with the lowest costs are selected. The Project is therefore necessary to ensure a competitive renewable electricity generation market. (GCE 3, response 5)

*Forecast Capacity Benefit*

121. ISO-NE forecasts a significant need for the development of additional renewable electric generating capacity. The facility would contribute to ISO-NE's forecasted renewable generating capacity requirements. (GCE 3, response 5)

*Domestic Energy Supply Benefit*

122. The proposed Project would reduce dependence on imported energy resources because it would utilize solar energy, and no imported energy resources would be required. (GCE 3, response 5)

*Fuel Diversity Benefit*

123. The proposed facility will assist in diversifying the state's energy supply mix. Currently, solar energy projects make up a small portion of the ISO-NE generator interconnection queue. (GCE 3, response 5)

*Electric Reliability Benefit*

124. The proposed facility would enhance reliability because it would generate the bulk of its electricity during times that are typically peak demand times in Connecticut, such as the late spring and summer months. (GCE 1, p. 12)

*Economic Benefit*

125. The proposed facility was selected in a competitive bidding program. The SCEF Program selects renewable energy projects with the lowest costs. (GCE 3, response 5)

**Alternative Sites**

126. GCE selected the host parcel for the solar facility site based on availability, suitability, environmental compatibility, and proximity to electrical utilities for interconnection. (GCE 1, p. 7)
127. GCE examined alternative locations including but not limited to, carports, landfills, and other parcels. Locations that were not pursued lacked suitable Project attributes such as viable electrical infrastructure. Other sites were pursued and bid into the competitive bid SCEF Program but were not selected. (GCE 3, responses 9 and 11)
128. Based on SCEF Program rules, specific bids for a specific site do not have alternative locations. (GCE 3, response 10)

**Proposed Site**

129. Pursuant to RCSA §16-50j-2a(29), "Site" means a contiguous parcel of property with specified boundaries, including, but not limited to, the leased area, right-of-way, access and easements on which a facility and associated equipment is located, shall be located or is proposed to be located. (RCSA §16-50j-2a(29)(2024))
130. Under CGS §16-50p, the Council's evaluation criteria does not include the evaluation and/or determination of rights under any lease with the property owner of the proposed site nor does it include the evaluation of property values. (CGS §16-50p (2024) *Woodbridge Newton Neighborhood Env't Trust, et al v. Conn. Siting Council*, 2024 Conn. LEXIS 163 (2024))

131. Pursuant to CGS §16-50p(g), the Council has no authority to compel a parcel owner to sell or lease property, or portions thereof, for the purpose of siting a facility. (Council Administrative Notice Item No. 80 - *Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007))
132. Pursuant to a lease agreement with the property owner, GCE proposes to construct the solar facility on an approximate 28-acre site on 72.3-acre host parcel at Lantern Hill Road (Parcel No. 169-1-4), Stonington (refer to Figure 1). (GCE 1, p. 3)
133. The host parcel, owned by The Lantern Hill Farm Inc., is zoned residential (Greenbelt Residential Zone GBR-130). (GCE 1, pp. 3- 4)
134. The host parcel is located north and east of Lantern Hill Road. The parcel is accessed by an existing gravel drive extending north from Lantern Hill Road. (GCE 1, Appendix A)
135. The existing gravel access drive extends to an abutting parcel owned by the Aquarion Water Company (AWC) through a non-exclusive access easement. (GCE 1, Appendix A; GCE 3, response 49)
136. Most of the host parcel consists of open fields. A forested area is in the northeast portion (refer to Figure 2). (GCE 1, Figure 2)
137. The proposed facility site is located in a field in the north and western portion of the parcel and west of the existing gravel drive. (GCE 1, Attachment A)
138. The site is generally flat with ground elevations ranging from approximately 59 feet to 45 feet above mean sea level (amsl). (GCE 1, Appendix A)
139. Land use in the surrounding area consists of undeveloped land and farm fields to the south, forest and an AWC pump station to the north, residential to the southeast and east, and Whitford Brook to the west. (GCE 1, Figure 2)

### **Proposed Facility and Associated Equipment**

#### ***Solar Array***

140. The proposed Project consists of 11,908 photovoltaic panels rated at 540 Watts (refer to Figures 3 and 4). (GCE 1, Appendix M)
141. The panels would be installed on a single axis tracking system supported by posts. The tracker system would include 169 motors to enable solar panel rotation. The motors would be powered through a grid-side connection at the electrical pads. (GCE 1, Appendix A; GCE 3, response 28)
142. The expected maximum angle for the tracking system rotation is 60 degrees. The panels would be approximately 10.5 feet above grade at the highest point and 2 feet above grade at the lowest point. The height of the panels may vary slightly based on potential agricultural activities at the site by GCE. (GCE 1, Appendix A; GCE 3, response 59)
143. The panels would be arranged in linear rows in a north-south direction, separated by 11.5-foot wide vegetated aisles. (GCE 1, p. 7, Appendix A)

- 144. Two 12-foot by 25-foot concrete pads would be installed; one in the northeastern and one in the north-central section of the site. The pads would support two transformers, switchgear, and meter/monitoring equipment. A gravel area next to each pad would support inverters installed on posts (40 total). (GCE 1, pp. 7-8, Appendix A)
- 145. Panel row wiring would generally extend along the racking system within protective covers to reduce potential damage from weather events, maintenance activities, or animals. In areas where wiring is not run along the racking, it would be installed within underground conduit. (GCE 1, Appendix N; GCE 3, response 26)
- 146. The Project would be enclosed by a 7-foot agricultural style perimeter fence. (GCE 1, p. 8; Tr. 1, pp. 47-48)
- 147. The nearest property line to the solar facility perimeter fence is approximately 102 feet to the south, an agricultural property at Parcel No. 168-1-4. (GCE 3, response 24)
- 148. The nearest residence to the solar facility perimeter fence is approximately 137 feet to the southeast at 209 Lantern Hill Road. (GCE 3, response 24)

#### *Site Access*

- 149. The Project would be accessed using the existing gravel drive extending north from Lantern Hill Road. The southern portion of the access drive abuts a residential property at 227 Lantern Hill Road. (GCE 1, Appendix A)
- 150. GCE would construct a new 15-foot wide, 5,100-foot long gravel drive extending west from the existing drive to access the solar array, electrical equipment, and stormwater detention basins. (GCE 1, p. 10, Appendix A)

#### *Electrical Interconnection*

- 151. The Project is comprised of one metered system with a design capacity of approximately 4.99 MW AC. It would interconnect to an Eversource electric distribution circuit on Lantern Hill Road. The existing 13.8-kV circuit connects to Eversource's Mystic 13K Substation. (GCE 1, pp. 10-11)
- 152. The facility interconnection would require five, 35-foot tall utility poles along the existing access drive near the intersection with Lantern Hill Road. Three customer side poles (meter, recloser and a GOAB poles) and two utility side poles (meter and recloser poles) would be installed. (GCE 1, Appendix N)
- 153. GCE is consulting with Eversource regarding the potential to reduce the number of customer side poles from three to two, and relocating the customer side poles farther north, away from Lantern Hill Road. (Tr. 1, pp. 51-53, 83- 84)
- 154. Eversource is conducting a facility interconnection impact study and an ISO-NE cluster study. The cluster study examines multiple projects at once to determine potential impacts to the transmission system. (GCE 3, response 35; Tr. 1, pp. 84-85)
- 155. The projected capacity factor of the proposed solar facility is 18.9 percent, accounting for losses from wiring, inverters, switchgear, transformer, and other protective equipment. The power output would decline by approximately 0.5 percent on an annual basis. (GCE 3, response 31, response 32)

156. GCE has no plans to incorporate a battery energy storage system at the site at this time. (GCE 3, response 29)

### **Cost**

157. The estimated construction cost of the Project is \$9.2 million. (GCE 3, response 7)
158. Neither the Project nor any portion thereof is proposed to be undertaken by state departments, institutions or agencies, or to be funded in whole or in part by the state through any contract or grant. GCE is a private entity. (GCE 3, response 8)

### **Public Health and Safety**

159. The proposed facility would be designed to comply with the current Connecticut State Building Code, National Electrical Code, the National Electrical Safety Code (NESC), and the National Fire Protection Association Code. (GCE 1, p. 8, Appendix M)
160. In the event of a fire or other emergency, the facility can be disconnected from AC power through circuit breakers and switches. (GCE 1, Appendix C; GCE 3, response 38)
161. Emergency responders would be provided access to the site via a universal key box at the facility access gate. (GCE 3, response 41)
162. Prior to commencement of operation, GCE would meet with local emergency responders and provide training and information regarding facility operations and equipment. Access and the types of equipment required to respond to an emergency would also be discussed. (GCE 3, responses 38 and 39; Tr. 1, pp. 51-52)
163. A solar panel/electrical component fire would be contained using methods prescribed by the fire department. Typically, fires are allowed to burn out while keeping the fire from spreading to adjacent areas. (GCE 3, response 39)
164. The nearest fire hydrant is on Lantern Hill Road, approximately 550 feet from the perimeter fence. The fire department may also have to utilize tanker trucks to bring water to the site, if necessary. GCE would discuss water supplies with the Town fire department. (GCE 3, response 40; Tr. 1, pp. 74-75)
165. The facility would be remotely monitored 24/7 by a data acquisition system, including but not limited to, site operation and performance and local weather conditions. Remote monitoring is conducted by a third-party vendor. (GCE 1, p. 11, Appendix C)
166. No permanent lighting of the facility is proposed. (GCE 1, Appendix A)
167. The northern portion of the site is within a mapped Federal Emergency Management Agency (FEMA)-designated 100-year flood zone associated with Whitford Brook, abutting the site to the west. However, FEMA has not established base flood elevations for this area to determine the extent of the floodplain. (GCE 1, Appendix K; Tr. 1, pp. 64-66)
168. Due to the lack of baseline flood elevations, GCE performed a hydrological analysis of the site and determined the site is not located within a 100-year flood zone. (GCE 1, Appendix K; Tr. 1, pp. 65-68)

169. Based on the hydrological analysis, GCE would request a Letter of Map Revision from FEMA to adjust the floodplain delineation. (GCE 1, p. 18)
170. GCE is performing additional studies of the Whitford Brook corridor, and once those are complete, would file the hydrological analysis with FEMA as part of the request for floodplain revision. (Tr. 1, pp. 65-68)
171. GCE would ensure the electrical equipment pad is not within a delineated flood plain. Equipment within a flood plain would be a liability to the Project. (Tr. 1, pp. 68-70)
172. The Federal Aviation Administration (FAA) requires a glare analysis for on-airport solar development at federally-obligated airports. Federally obligated airports are airports that receive federal funding. (Council Administrative Notice Item Nos. 17 and 18)
173. The nearest federally-obligated airport is Groton-New London Airport, approximately 7.3 miles southwest of the proposed site. The proposed facility would not be a hazard to air navigation. A glare analysis is not required. (GCE 1, Appendix J; GCE 3, response 43, response 44)
174. The Project transformers would be insulated with mineral oil, seed oil, or silicone oil depending on the manufacturer at the time of transformer procurement. The ability for oil level monitoring would be determined by the specific manufacturer. GCE would be willing to install a remote leak detection alarm. (GCE 3, response 42; Tr. 1, pp. 53-54, 62-63)
175. To protect against lightning strikes, the facility would be grounded in compliance with the National Electrical Code and installation best management practices. (GCE 3, response 44)

### *Noise*

176. Noise emissions from the solar facility would be from the daytime operation of the 40 inverters, 2 transformers and 169 tracking motors. The facility would not operate at night. (GCE 1, Appendix O)
177. A noise analysis determined the operation of the facility would produce a sound level of 41.2 dBA at the nearest property line from the northeastern electrical pad, the AWC pump station parcel 229 Lantern Hill Road, approximately 200 feet north of the electrical pad. Sound levels would be less than 40 dBA at all other property lines. The Project would be in compliance with state standards. (GCE 1, Appendix A, Appendix N)
178. Construction noise is exempt from DEEP Noise Control Standards. (RCSA §22a-69-108(g))

### **Electric and Magnetic Fields**

179. Electric fields (EF) and magnetic fields (MF) are two forms of energy that surround an electrical device. Transmission lines, for example, are a source of both EF and MF. (Council Administrative Notice Item No. 30- Petition 754)
180. EF is produced whenever voltage is applied to electrical conductors and equipment. Electric fields are typically measured in units of kilovolts/meter. As the weight of scientific evidence indicates that exposure to electric fields, beyond levels traditionally established for safety, does not cause adverse health effects, and as safety concerns for electric fields are sufficiently addressed by adherence to the

NESC, as amended, health concerns regarding EMF focus on MF rather than EF. (Council Administrative Notice Item No. 30- Petition 754)

181. MF is produced by the flow of electric currents. The magnetic field at any point depends on the characteristics of the source, the arrangement of conductors, the amount of current flow through the source, and the distance between the source and the point of measurement. Magnetic fields are typically measured in units of milligauss (mG). (Council Administrative Notice Item No. 30- Petition 754)
182. International health and safety agencies, including the World Health Organization, the International Agency for Research on Cancer (IARC), and the International Commission on Non-Ionizing Radiation Protection (ICNIRP), have studied the scientific evidence regarding possible health effects from MF produced by non-ionizing, low-frequency 60-Hertz alternating currents in transmission lines. Two of these agencies attempted to advise on quantitative guidelines for mG limits protective of health, but were able to do so only by extrapolation from research not directly related to health: by this method, the maximum exposure advised by the International Commission on Electromagnetic Safety (ICES, part of IARC) is 9,040 mG, and the maximum exposure advised by the ICNIRP is 2,000 mG. Otherwise, no quantitative exposure standards based on demonstrated health effects have been set world-wide for 60-Hertz MF, nor are there any such state or federal standards in the U.S. (Council Administrative Notice Item No. 30- Petition 754)
183. Operation of the Project would produce EMF from the solar panels, cables connecting the panels to the inverters, the inverters, and transformers. None of this equipment is expected to increase pre-existing EMF levels outside the site boundaries. (GCE 1, pp. 20-21)
184. All equipment producing EMF for the project would be a minimum 127 feet from the host parcel property line. EMF produced by the equipment would decline to background levels within a few feet. All EMF levels at the property lines would be well below ICNIRP and IARC recommended public exposure levels. (GCE 1, pp. 20-21, Appendix A)
185. The proposed Project is designed to interconnect to the existing distribution system rather than a higher voltage transmission system and therefore, the Council's EMF Best Management Practices for the Construction of Electric Transmission Lines in Connecticut and the ICES and ICNIRP MF guidelines would not apply. (Council Administrative Notice Item No. 30- Petition 754)

### **Environmental Effects and Mitigation Measures**

#### ***Air Quality***

186. The proposed Project would meet DEEP air quality standards and would not produce air emissions of regulated air pollutants or GHG. (GCE 1, p. 16)
187. During construction of the proposed Project, air emissions from the operation of machinery would be temporary in nature. Dust resulting from construction activities would be controlled through the use water. Equipment air emissions can be reduced by limiting idling times and proper maintenance. (GCE 1, p. 16)

#### ***Water Quality***

188. As applicable to any proposed jurisdictional facility site, the Council's Application Guide for an Electric Generating Facility requires the submission of plans for erosion and sedimentation control

consistent with the *Connecticut Guidelines for Erosion and Sediment Control* (E&S Guidelines); Water consumption and discharge rate; FEMA Flood Zone information and associated flood mitigation plans; Proximity to DEEP Aquifer Protection Areas; DEEP groundwater classification underlying the site; Wetland and Watercourse Analysis Report and map, and associated Wetland and Watercourse Impact Mitigation Plan; Vernal Pool Analysis Report and Map, and associated Vernal Pool Impact Mitigation Plan. (Record)

189. Water would not be used during operation of the facility. (GCE 1, p. 21, Appendix A)
190. The northeastern portion of the site is located within the DEEP-designated Lantern Hill Aquifer Protection Area. (GCE 1, p. 14, Figures 10 & 11)
191. The entire site is located within a Town-designated Aquifer Protection Zone. (GCE 1 bulk file, Town Plan of Conservation and Development p. 40; Tr. 1, pp. 60-61)
192. GCE would employ measures to protect subsurface water quality in accordance with RCSA Section 22a-354i-9, including, but not limited to impermeable containers, implementation of an emergency response plan and a stormwater management plan. GCE would not store hazardous materials within the area and would refuel vehicles off site or within a specific area with appropriate measures. (GCE 3, response 47; Tr. 1, pp. 35-36, 61-62)
193. A Spill Prevention and Materials Storage Plan has been developed for the Project to protect groundwater and other resources. It includes, but is not limited to, measures for prevention, containment, cleanup and reporting. (GCE 3, response 51)
194. Transformer oil would be composed of nontoxic substances. (GCE 3, response 47)
195. During initial consultations, the Town expressed concern regarding PFAS within the solar modules. GCE contacted the manufacturer and determined PFAS were not used in the selected panels. Due to subsequent project design changes which specify a different panel, GCE is consulting with the panel manufacturer regarding PFAS. (GCE 3, response 48; Tr. 1, pp. 35-36)
196. Groundwater at the site is classified as GA defined as, "...existing private and potential public or private supplies of water suitable for drinking without treatment...". Installation of the racking posts is not anticipated to have an impact on groundwater and private water wells that may be present in the surrounding area. (GCE 1, Figure 12; GCE 3, response 46)

#### *Stormwater*

197. Pursuant to CGS Section 22a-430b, DEEP retains final jurisdiction over stormwater management and administers permit programs to regulate stormwater discharges. DEEP regulations and guidelines set forth standards for erosion and sedimentation control, stormwater pollution control and best engineering practices. (CGS §22a-430b; DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. (DEEP-WPED-GP-015))
198. The DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (General Permit) requires implementation of a Stormwater Pollution Control Plan (SWPCP) to prevent the movement of sediments off construction sites into nearby water bodies and to address the impacts of stormwater discharges from a proposed project after construction is complete. In its discretion, DEEP could require an Individual Permit for discharges and hold a public

- hearing prior to approving or denying any General or Individual Permit (Stormwater Permit) application. (CGS §22a-430b; CGS §2a-430(b))
199. The SWPCP incorporates project designs consistent with the E&S Guidelines and the *Connecticut Stormwater Quality Manual* (Stormwater Manual). Both of these documents were updated, effective March 30, 2024. (DEEP-WPED-GP-015)
  200. DEEP has the authority to enforce proposed project compliance with its Individual or General Permit and the SWPCP, including, but not limited to, the installation of site-specific water quality protection measures in accordance with the E&S Guidelines and Stormwater Manual. (CGS §22a-430b (2024))
  201. The Council may impose a condition that requires subsequent compliance with DEEP standards and regulations. (Council Administrative Notice Item No. 80 – *FairwindCT, Inc. v. Conn. Siting Council*)
  202. The Project would require a DEEP-issued Stormwater Permit prior to commencement of construction activities as defined in the General Permit. (CGS §22a-430b)
  203. The General Permit requires the designing qualified professional to conduct the SWPCP Implementation Inspection that confirms compliance with the General Permit and the initial implementation of all SWPCP control measures for the initial phase of construction. The SWPCP also requires a qualified inspector to inspect the work areas at least once per week and within 24-hours after a rain event that meets certain permit criteria. The qualified soil erosion and sediment control professional or a qualified professional engineer would inspect the area and confirm stabilization and compliance with the post-construction stormwater management requirements. (DEEP-WPED-GP-015)
  204. Per the Stormwater Permit, the contractor has the responsibility to follow the SWPCP and conduct inspections. The Project engineer has the obligation to perform regular inspections of the site and prepare inspection reports. A separate DEEP-approved E&S control inspector will conduct weekly inspections of the site. The regional conservation district would also conduct inspections of the site and document its findings. (DEEP-WPED-GP-015; GCE 1, Appendix A)
  205. GCE met with the DEEP Stormwater Division on June 21, 2021 to discuss the proposed stormwater management design and E&S control plans for the facility. DEEP did not have any comments on the stormwater design. (GCE 3, response 63)
  206. GCE prepared a stormwater analysis for the Project that concluded six temporary sediment trap stormwater detention basins are necessary to manage construction peak stormwater flows. Predevelopment drainage patterns would be maintained to the extent feasible. (GCE 1, Appendix E)
  207. GCE intends to convert the temporary traps into permanent basins even though stormwater calculations determined permanent basins were not necessary. The permanent basins would serve to attenuate peak flows, enhance water quality, and prevent water channelization as it leaves the site. (Tr. 1, pp. 18-20, 56-57)
  208. The stormwater analysis was prepared in accordance with the requirements of DEEP's Stormwater Permit, revised in 2022. The permit requires the analysis of drainage areas and soil types, existing and proposed site conditions, and site runoff rates for the 2-, 25-, 50-, and 100-year storms over a 24-hour period. Rainfall rates used in the analysis were obtained from National Oceanic and Atmospheric Administration data. (GCE 1, Appendix E)

209. The Project has been designed to comply with DEEP General Permit Appendix I. (GCE 1, Appendix E)
210. The emergency outfalls for the three southern stormwater basins about the south property line. GCE would examine the feasibility of relocating the basins and related outfall structures to create a buffer to the property line. (GCE 1, Appendix E; Tr. 1, pp. 20-21, 58-60)

*Wetlands and Watercourses*

211. The Inland Wetlands and Watercourses Act (IWWA), CGS §22a-36, *et seq.*, contains a specific legislative finding that the inland wetlands and watercourses of the state are an indispensable and irreplaceable but fragile natural resource with which the citizens of the state have been endowed, and the preservation and protection of the wetlands and watercourses from random, unnecessary, undesirable and unregulated uses, disturbance or destruction is in the public interest and is essential to the health, welfare and safety of the citizens of the state. (CGS §22a-36, *et seq.* (2024))
212. The IWWA grants regulatory agencies with the authority to regulate upland review areas in its discretion if it finds such regulations necessary to protect wetlands or watercourses from activity that will likely affect those areas. (CGS §22a-42a (2024))
213. The IWWA forbids regulatory agencies from issuing a permit for a regulated activity unless it finds on the basis of the record that a feasible and prudent alternative does not exist. (CGS §22a-41 (2024))
214. Under the IWWA:
- a) “Wetlands” means land, which consists of any of the soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey, as may be amended from time to time, of the Natural Resources Conservation Service of the United States Department of Agriculture;
  - b) “Watercourses” means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private, which are contained within, flow through or border the state; and
  - c) Intermittent watercourses are delineated by a defined permanent channel and bank and the occurrence of two or more of the following characteristics: (A) Evidence of scour or deposits of recent alluvium or detritus, (B) the presence of standing or flowing water for a duration longer than a particular storm incident, and (C) the presence of hydrophytic vegetation. (CGS §22a-36, *et seq.* (2024))
215. A wetland inspection of the site and adjacent areas was performed in June 2019 (refer to Figure 5). A riparian wetland associated with Whitford Brook is along the western and northern boundary of the site (Wetland 1). Two wetlands located in forest and field areas are on either side of the access drive (Wetlands 2 & 3). A fourth wetland is in the northeast corner of the site (Wetland 4). (GCE 1, Figure 8, Appendix G)
216. The construction limit of disturbance (LOD) for the solar array development area would be a minimum 50 feet from Wetland 1 for the construction of two stormwater detention basins. The LOD for the solar array fence line and a third stormwater basin would be within 100 feet of Wetlands 3 & 4. (GCE 1 Appendix A)
217. In accordance with the DEEP stormwater Permit Appendix I, solar panels and stormwater detention basins would be a minimum 100 feet and 50 feet, respectively, from wetlands. (Council Administrative Notice Item No. 57; GCE 1 Appendix A)

218. To avoid disturbing the wetlands on either side of the existing access drive, GCE intends to install the underground feeder cable to the proposed interconnection poles within the access drive. (Tr. 1, pp. 52-53)

*Vernal Pools*

219. A potential vernal pool (PVP) was identified in Wetland 1 during the June 2019 wetland survey. (GCE 1, Appendix G)
220. The PVP was surveyed in April 2021 and it was determined it did not function as a vernal pool. (GCE 1, Appendix G)

*Forests and Parks*

221. Development of the Project would require a minor amount of brush/tree clearing in the southeast corner of the site to install a sediment trap. GCE would examine the feasibility of relocating the southeast sediment traps away from the vegetation drip line. (GCE 1, Appendix A; GCE 3 response 66- Photo 9; Tr. 1, pp. 59-60)
222. Development of the Project would not materially affect the status of core forest. (GCE 1, p. 21; July 8, 2024 DEEP CGS §16-50k No Material Affect to Status of Core Forest Determination Letter)
223. There are no state parks or forests within one mile of the site. (Council Administrative Notice Item No. 106)

*Scenic, Historic and Recreational Values*

224. GCE performed a Phase 1A historic resource survey of the site in March 2021 that identified five locations with the potential for moderate to high sensitivity for archaeological resources. (GCE 1, p. 17)
225. A Phase 1B survey was subsequently conducted and identified significant archaeological deposits in the northwest portion of the site. The area is eligible for listing on the National Register of Historic Places. (GCE 1, p. 17)
226. To protect the identified archeological resource area GCE redesigned the site to establish a 50-foot buffer for the Project LOD from the resource area. SHPO submitted correspondence to GCE on September 30, 2024, stating that the proposed Project, as redesigned, would not affect historic or archeological resources. (GCE 3, response 55)
227. The site may be visible year-round and seasonally from four residential properties to the south at 227, 221, 216 and 209 Lantern Hill Road. Due to intervening vegetation views of the facility would vary from these properties. (GCE 1, Appendix A; GCE 3, responses 65 and 66; Tr. 1, pp. 36-39)
228. GCE would consult with the property owner at 209 Lantern Hill Road regarding potential visual mitigation measures. (GCE 3, response 2; Tr. 1, p. 33)
229. GCE would be willing to install landscaping along the southeast perimeter fence, from Stormwater Basin 2C to the access drive (near 221 and 227 Lantern Hill Road) as long as plantings to do not create shading issues within the array. (GCE 1, Appendix A; Tr. 1, pp. 54-55)

- 230. There are no “blue-blazed” hiking trails maintained by the Connecticut Forest and Park Association within one mile of the site. (Council Administrative Notice No. 101)
- 231. No state designated scenic roads are located within one mile of the site. Lantern Hill Road south and east of the site is a Town designated scenic road. Intervening wooded areas between the scenic road and the host parcel limit views of the facility. GCE would examine the feasibility of installing evergreens to screen open views of the site from the road. (GCE 1 bulk file, Town Plan of Conservation and Development; GCE 3, response 16)
- 232. No comments were received from OPM, DEEP or the municipalities regarding impact to scenic quality or resources. (Record)
- 233. The Project would be consistent with the State Plan of Conservation and Development as it would be a Class I renewable zero emissions electric generation facility that is compatible with state goals for environmental protection and minimization of potential impacts to historic, agricultural and scenic resources. (Council Administrative Notice No. 64, p. 15)

#### ***Fish, Aquaculture and Wildlife***

- 234. There are no DEEP-designated cold-water habitat resources near the site. (Council Administrative Notice No. 59)
- 235. DEEP Natural Diversity Database (NDDDB) maps show approximate locations of state-listed endangered, threatened, and special concern species and are used to find areas of potential conservation concern. (Council Administrative Notice Item No. 97)
- 236. On October 20, 2023, DEEP issued a NDDDB Determination Letter for the proposed facility, identifying one special concern species (spotted turtle) as potentially occurring in the area of the site. The turtle is associated with wetlands and vernal pools and may travel over upland forest and fields between multiple wetlands. (GCE 1, Appendix H)
- 237. GCE assessed the site and determined it does not contain habitat favored by the turtle. Suitable nesting habitat may occur within the agricultural fields in areas closer to the wetlands. (GCE 3, response 58)
- 238. DEEP recommends the implementation of spotted turtle protective measures during construction that include, but are not limited to, performing initial ground disturbance work from November 1- March 31. For work between April 1 through October 1, recommended protective measures include isolation barriers, work area sweeps, and vehicle parking restrictions. For post-construction work, DEEP recommended avoiding mowing or vehicular traffic during the turtle’s active season, from May 15- September 15. (GCE 1, Appendix H; Tr. 1, pp. 63-64)
- 239. GCE would adhere to DEEP’s recommended spotted turtle protection measures. (Tr. 1, pp. 63-64)
- 240. The northern long-eared bat (NLEB), a federally-listed and state-listed Endangered Species occurs in Connecticut. However, there are no known NLEB hibernacula or maternity roost trees in Stonington. Additionally, with the exception of a small area of brush, no trees would be removed. (GCE 3, response 57; Council Administrative Notice Item No, 40- Docket 525 Record- Findings of Fact #242)

#### ***Agriculture***

241. Agricultural land is an economic resource. The terms “agriculture” and “farming” are defined under CGS §1-1q. Agriculture and farming activities are exempt from certain statutes and regulations, including, but not limited to, provisions related to wetlands and nuisance. (CGS §1-1q (2024); CGS §19a-341(2024)(commonly known as “the Right to Farm Law”); CGS §22a-19 (2024); CGS §22a-40 (2024); CGS §7-131d (2024); *Red Hill Coalition, Inc. v. Town Plan & Zoning Comm’n*, 212 Conn. 727 (1989); *Indian Spring Land Co. v. Inland Wetlands & Watercourse Agency of Greenwich*, 322 Conn. 1 (2016))
242. Agriculture in Connecticut is likely to be adversely impacted by climate change. It is most affected by changes in temperature and both the abundance and lack of precipitation. The top five most imperiled agricultural products are maple syrup, dairy, warm weather produce, shellfish and apple and pear production, but there are opportunities for production expansion with the future climate, including, but not limited to, biofuel crops, witch hazel and grapes. (Council Administrative Notice Item No. 68 – Climate Change Preparedness Plan)
243. Adaptation strategies for climate change impacts to agriculture include promotion of policies to reduce energy use, conserve water and encourage sustainability. (Council Administrative Notice Item No. 68 – Climate Change Preparedness Plan)
244. In 2012, the Governor’s Council for Agricultural Development (GCAD) recommended DOAG create a statewide plan for an agriculture-friendly energy policy that includes, but is not limited to, on-farm energy production to reduce costs and supplement farm income, agricultural net metering for power production and transmission, and qualification of agricultural anaerobic digestion projects for zero-emissions renewable energy credits. (Public Act 11-189; GCAD First Annual Report December 2012)
245. DOAG does not develop, oversee or envision the implementation of farm-related energy plans. DOAG refers farmers to federal agencies for farm-related energy plans. (Council Administrative Notice Item No. 38, Docket 522 Record- Findings of Fact #244)
246. DOAG administers the Statewide Program for the Preservation of Agricultural Land (SPPAL), a voluntary program to establish a land resource base consisting mainly of prime and important farmland soils. A permanent restriction on non-agricultural uses is placed on the deed of participating properties, but the farms remain in private ownership and continue to pay local property taxes. (CGS §22-26aa, et seq.)
247. The host parcel is not enrolled in this program. (GCE 3, response 23)
248. A solar electric generating facility is not a permitted use on land preserved under the SPPAL. (Council Administrative Notice Item No. 38, Docket 522 Record- Findings of Fact #247)
249. DOAG has authority to ensure the integrity of the soils will be retained during public utility construction on land enrolled in the SPPAL. (Council Administrative Notice Item No. 38, Docket 522 Record- Findings of Fact #248)
250. DOAG has no authority to require public utilities to implement agricultural activities, furnish a bond and/or restore facility sites to prime farmland soils except for land that is enrolled in the SPPAL. Council Administrative Notice Item No. 38, Docket 522 Record- Findings of Fact #249)
251. PA 490 is Connecticut’s Land Use Value Assessment Law for Farm Land, Forest Land and Open Space Land that allows land to be assessed at its use value rather than its fair market or highest and best use value for purposes of local property taxation. (CGS §12-107a through 107-f (2024))

252. The host parcel is currently enrolled in the PA 490 Program for agricultural land tax abatement. It is anticipated construction of the solar facility would not change the PA 490 use classification (7120 Tillable C). The parcel is in the Greenbelt Residential GBR-130 land use classification, where more intensive uses such as lumbering, bottling of agricultural products and golf courses are allowed. (GCE 3, response 22)

*Soils*

253. Existing soils at the site consist of sandy silty, and fine sandy loams, with moderate to very slow infiltration rates. (GCE 1, Figure 13)
254. Approximately 26.5 acres of prime farmland soil are located within the 28-acre LOD (refer to Figure 6). (GCE 1, Figure 7; GCE 3, response 62)
255. Prime Farmland Soils are defined by the United States Department of Agriculture (USDA) National Resources Conservation Service (NRCS) as the most suitable land for producing food, feed, fiber, forage, and oilseed crops. (Council Administrative Notice Item No. 14 – USDA Soil Survey Manual)
256. Statewide Important Farmland Soils do not meet all of the physical and chemical requirements to be considered Prime Farmland Soils, but they are equally as important in the production of food, feed, forage or fiber crops. (Council Administrative Notice Item No. 14 – USDA Soil Survey Manual; 7 C.F.R. §657.5 (2016) – Identification of Important Farmlands)
257. Local Important Farmland Soils do not meet the physical or chemical requirements of either Prime Farmland Soils or Statewide Important Farmland Soils, but they are still used for the production of food or fiber crops and support the local economy due to their productivity. (Council Administrative Notice Item No. 14 – USDA Soil Survey Manual; 7 C.F.R. §657.5 (2016) – Identification of Important Farmlands)
258. 2023 USDA NRCS figures indicate that there are approximately 507,236 acres of prime farmland soil in Connecticut. 2022 USDA census data indicates that there are approximately 372,014 acres of land being farmed that includes prime farmland soils, statewide important farmland soils and local important farmland soils. (Council Administrative Notice Item No. 38, Docket 522 Record- Findings of Fact #255)
259. After the implementation of CGS §16-50k(a) in 2017, DOAG has reviewed numerous projects with an estimated impact to a total of 350 acres of prime farmland soil (up to August 2024). Some projects contained prime farmland soils that were not used to support agricultural activities. (Council Administrative Notice Item No. 38, Docket 522 Record- Findings of Fact #256)
260. DOAG does not track or hold a registry of farms or acreage in agricultural production throughout the state. (Council Administrative Notice Item No. 38, Docket 522 Record- Findings of Fact #257)
261. DOAG does not maintain a database of the number of prime farmland soils throughout the state that are currently occupied with solar facilities without agricultural activities. (Council Administrative Notice Item No. 38, Docket 522 Record- Findings of Fact #258)
262. DOAG does not maintain a database of the number of acres of prime farmland soils throughout the state that are currently occupied by solar facilities with agricultural activities. (Council Administrative Notice Item No. 38, Docket 522 Record- Findings of Fact #259)

*Proposed Agricultural Activity*

- 263. The host property has been used to grow feed corn through informal agreements with area farmers. (GCE 3, response 20)
- 264. GCE may implement crop production or rotational sheep grazing at the site. (GCE 1, pp. 8-9, 11-12, Appendix O; Tr. 1, pp. 45-46, 70-71)
- 265. The primary use of the site is for the construction, maintenance and operation of a solar electric generating facility that is under the exclusive jurisdiction of the Council. Any other uses within the boundaries of the solar facility site, such as an agricultural activity, would be secondary and subject to the discretion of the Council. (CGS §16-50x (2024); CGS §16-50p (2024); Connecticut Supreme Court, *Indian Spring Land Co. v. Inland Wetlands & Watercourse Agency of Greenwich*, 322 Conn. 1 (2016); Final Decision, Petition 1586)<sup>3</sup>
- 266. GCE is not required to implement an agricultural activity at the site. (PA 17-218; PA 23-163; Council Administrative Notice Item No. 73)
- 267. Crop production, if implemented, would require the low end of the solar panels to be approximately 3.5 feet above grade, depending on topography. (GCE 1, Appendix P)
- 268. An increase in solar panel height beyond typical installations would increase project costs by requiring additional project engineering and additional structural support of the solar racking/post system. (GCE 3, response 59)
- 269. Crop production, if implemented, would be performed by a third-party farmer. (GCE 1, p. 9)
- 270. If an agricultural activity is not implemented at the site or portions of the site, GCE would seed the area with a solar farm seed mix that contains a component beneficial to pollinating insects. (GCE 1, p. 13; Tr. 1, pp. 70-71)
- 271. Sheep grazing, if implemented, would be conducted in accordance with DOAG's Requirements for Solar Grazing Properties, April 2023 document. (GCE 1, Appendix P; Council Administrative Notice 37- Docket 514 Record- Finding of Fact #207 - Requirements for Solar Grazing Properties document)
- 272. DOAG considers livestock grazing an acceptable agricultural activity at solar electric generating facility sites. (Council Administrative Notice Item No. 38, Docket 522 Record - Findings of Fact #268)
- 273. DOAG does not track the acreage used for livestock grazing in Connecticut. (Council Administrative Notice Item No. 38, Docket 522 Record - Findings of Fact #269)
- 274. Livestock farmers do not have to be certified by, or registered with, DOAG or any other entity. (Council Administrative Notice Item No. 38, Docket 522 Record - Findings of Fact #270)
- 275. GCE does not anticipate the need to purchase additional insurance if an agricultural activity was implemented at the site. (GCE 3, response 52)

---

<sup>3</sup> available at [https://portal.ct.gov/-/media/csc/3\\_petitions-medialibrary/petitions\\_medialibrary/mediapetitionnos1501-1600/pe1586/decisionstaffreport/pe1586\\_dcltr\\_a.pdf?rev=5f242cbb6e5e4ac99a9f7c7e73a9ef06&hash=768E20A6ADF33CE3C64FB527DDD8F5F](https://portal.ct.gov/-/media/csc/3_petitions-medialibrary/petitions_medialibrary/mediapetitionnos1501-1600/pe1586/decisionstaffreport/pe1586_dcltr_a.pdf?rev=5f242cbb6e5e4ac99a9f7c7e73a9ef06&hash=768E20A6ADF33CE3C64FB527DDD8F5F)

- 276. GCE would be the managing authority for any agricultural uses at the site and would be responsible for responding to concerns/complaints. (GCE 3, response 19)
- 277. A contact sign would be installed in a central location at the site. DOAG does not require contact signs to be posted at livestock grazing operations. (GCE 3, response 19; Council Administrative Notice No. 38, Docket 522 Record- Findings of Fact #278)
- 278. DOAG responds to complaints regarding livestock animal welfare. (Council Administrative Notice No. 28, Docket 522 Record- Findings of Fact #280)

### **Facility Construction**

- 279. If the Project is approved by the Council, the following permits would be required for construction and operation:
  - a) DEEP Stormwater Permit;
  - b) Eversource Interconnection Agreement;
  - c) Town Building Permit; and
  - d) Town Electrical Permit(GCE 3, response 6; Tr. 1, pp. 33-34)
- 280. The construction LOD is approximately 28 acres. (GCE 3, p. 15)
- 281. Construction of the site would maintain existing grades, except for the installation of the access drive, stormwater detention basins, and concrete pads. (GCE 1, p. 17, Appendix A, Appendix P)
- 282. GCE would install the access drive on prepared subgrades. The gravel surface on the access drive would match existing, adjacent grades to the extent feasible. (GCE 1, p. 10)
- 283. Site construction would result in a net cut of 3,500 cubic yards, primarily from excavation of the stormwater basins. Excess soil would be either stockpiled or spread across the site, depending on upon consultation with the landowner. (GCE 3, response 25; Tr. 1, pp. 56-57)
- 284. Blasting to construct the site is not anticipated. (GCE 3, response 69)
- 285. Racking support posts would be driven into the ground to a depth of 7 to 12 feet. If ledge is encountered, support posts would be installed using rock screws. (GCE 3, response 68)
- 286. The Project would be constructed in two main phases:
  - a) Phase 1 includes clearing necessary for installation of perimeter erosion and sediment controls and construction of stormwater basins, followed by stabilization; and
  - b) Phase 2 includes the installation of fencing, solar array infrastructure, site stabilization, and the cleaning of the stormwater basins for post-construction use.(GCE 1, Appendix A)
- 287. A geotechnical investigation of the site has been completed. (GCE 3, response 67)
- 288. Site construction is anticipated to begin by spring 2026 with construction occurring over an 8 to 10-month period. (Tr. 1, pp. 27-28)
- 289. Construction hours would be Monday through Friday from 7:00 AM to 5:00 PM. (Tr. 1, p. 27)

290. The Town would be notified of the commencement of construction. (GCE 1, Appendix A)

### ***Traffic***

291. Construction vehicles would access the site from Lantern Hill Road using the existing access drive. (GCE 1, Appendix A)
292. Construction vehicles would include worker vehicles, standard construction trucks, small earth moving equipment, and all-terrain forklift equipment, as well as flatbed trucks delivering solar racking, solar panels, electrical equipment, and fencing. (GCE 1, p. 16)
293. Larger trucks may be used to deliver earth moving equipment and larger orders of equipment. GCE would ensure there is adequate turn radius for delivery vehicles. (Tr. 1, pp. 30-31)
294. Once operational, the site would be accessed periodically by maintenance personnel. (GCE 1, Appendix C)

### **Facility Operations and Maintenance**

295. GCE provided a post-construction Operations and Maintenance (O&M) Plan that includes, but is not limited to, provisions for remote monitoring, equipment maintenance, vegetation management and site safety and security. (GCE 1, Appendix C)
296. Site vegetation would be controlled by mechanical methods 2-3 times per year (if not under crop production) or by livestock operations. (GCE 1, Appendix C, Appendix P)
297. The inverters have a 10-15 year lifespan and would be replaced when necessary. (GCE 3, response 73)
298. The solar panels have a lifespan of 25 years. Replacement panels would not be stored on-site. (GCE, 1, Appendix B; GCE 3, response 73)
299. After installation, equipment would be checked periodically by thermal imagery and physical inspection. (GCE 1, Appendix C)
300. O&M activities would be conducted by a third-party contractor. (GCE 1, Appendix C)
301. GCE is responsible for access drive snow removal. Snow would not be removed from the panels. (GCE 3, responses 17 and 74)

### **Decommissioning**

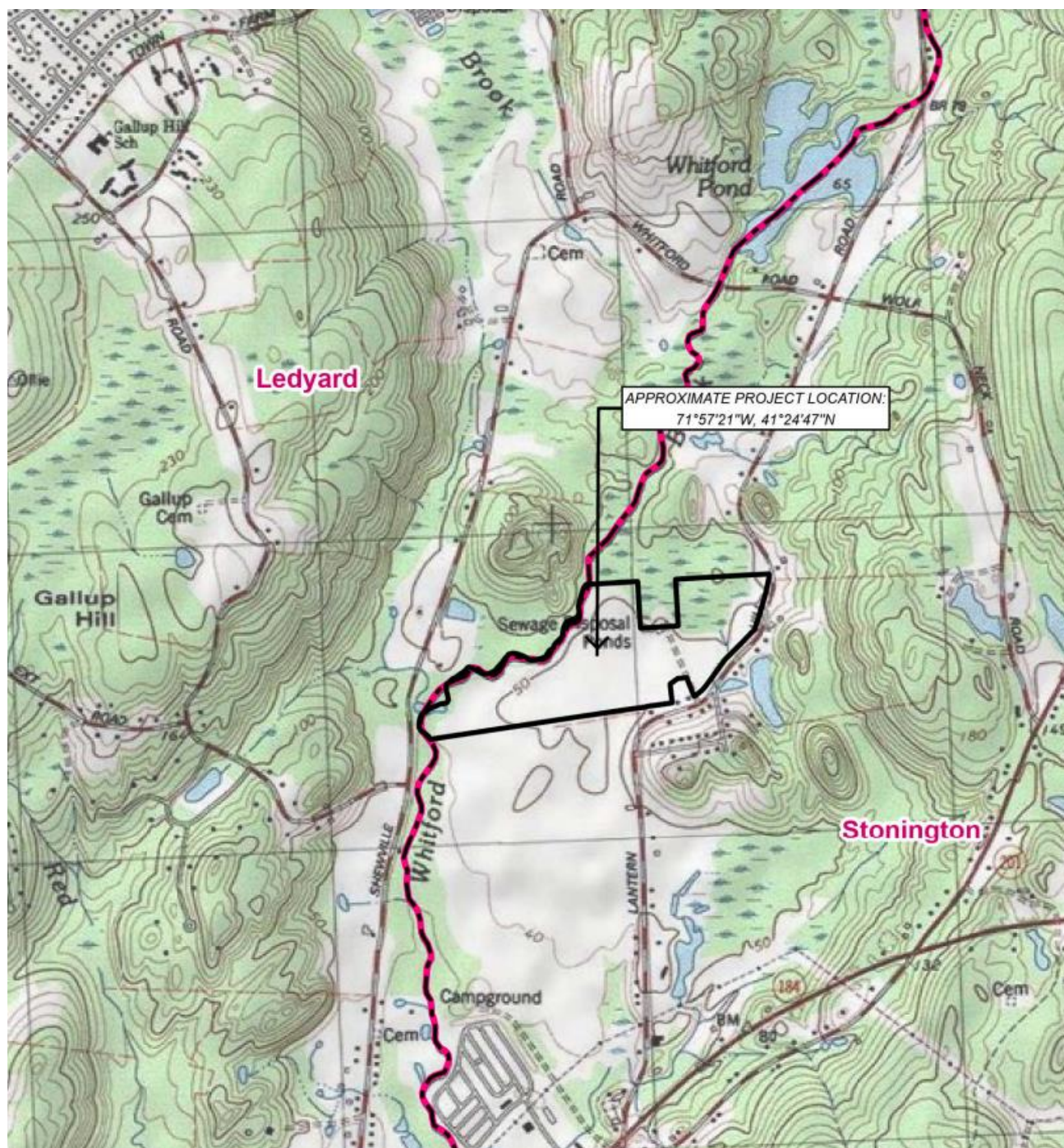
302. The facility has an anticipated life of 20 -30 years. (GCE 3, response 27)
303. At the end of the Project's lifespan, it will be decommissioned and removed from the host parcel within six months after the end of commercial operation. (GCE 3, response 16)
304. GCE intends to recycle all Project materials, including solar panels, steel and concrete to the maximum extent practicable. (GCE 1, Appendix D)

- 305. The stormwater basins and site fencing may remain in place upon consultation with the property owner. (GCE 3, responses 17 and 77)
- 306. Subsurface installations would be removed to a depth of three feet. (GCE 3, response 17)
- 307. Decommissioning also includes restoration of the site, including re-grading where necessary, and site re-vegetation to minimize erosion. Disturbed areas would be seeded with a perennial grass. (GCE 1, Appendix D; GCE 3, response 76)
- 308. Pursuant to CGS §16-50p(g), the Council has no authority to evaluate, amend and/or determine rights under any lease with the property owner of the proposed site, including, but limited to, the restoration of soils to prime farmland status. (CGS §16-50p(g) (2024))
- 309. The lease agreement with the property owner includes provisions related to decommissioning and site restoration at the end of the Project's useful life. (GCE 3, response 17)
- 310. GCE selected solar panels (Heliene 144HC M10 Bifacial Modules) for the Project that meet current Toxicity Characteristic Leaching Procedure (TCLP) criteria<sup>4</sup> for characterization as nonhazardous waste in the event the solar panels are not recycled at the end of the Project's life. (GCE 1, Appendix B; Council Petition 1541, Record –Appendix B)
- 311. The solar panels selected for the Project may change by the time construction commences. If there is a change in the specified panel, GCE would submit a panel TCLP analysis to the Council prior to installation. (GCE 3, response 77)

---

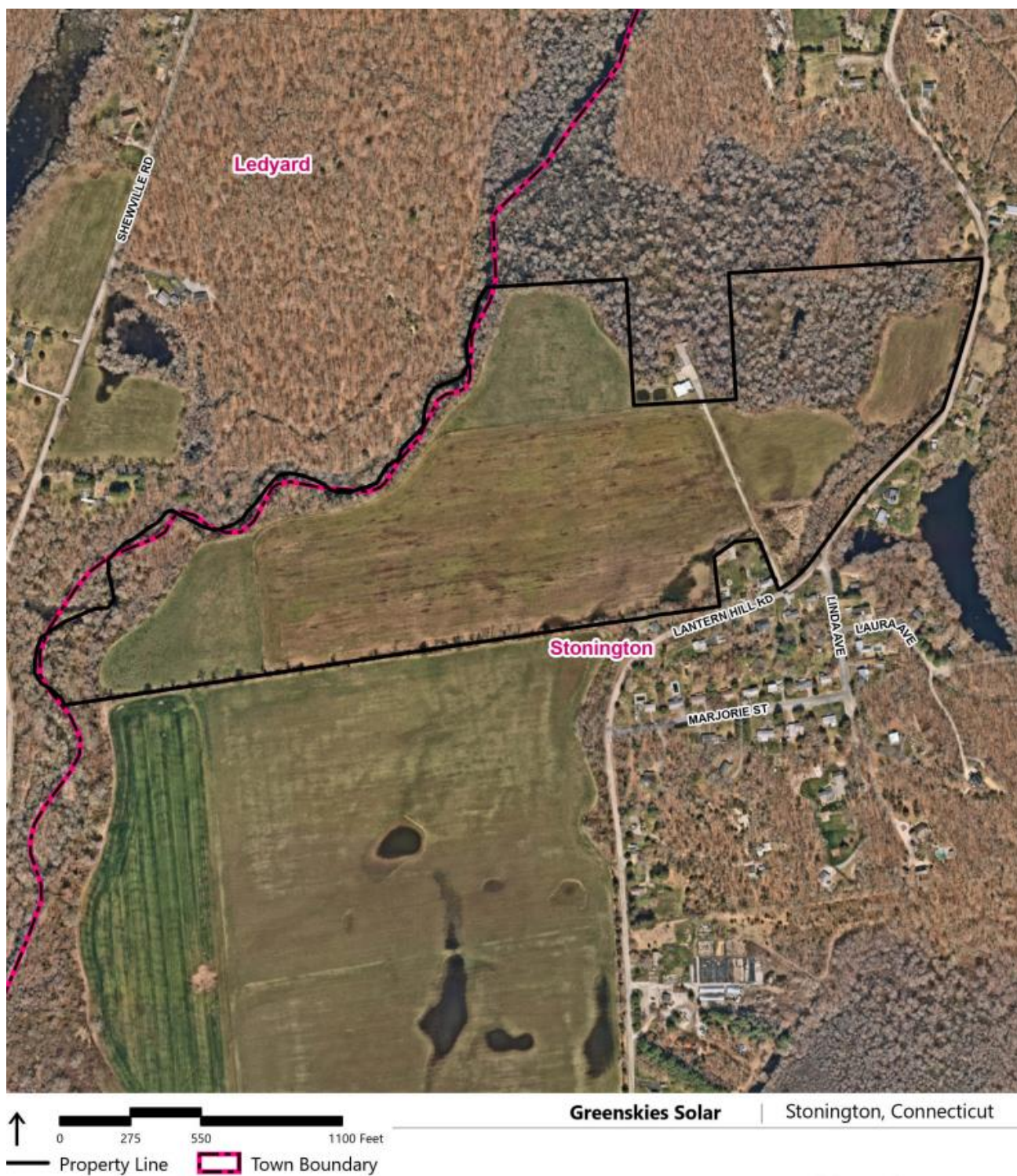
<sup>4</sup> <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-I/part-261/subpart-C/section-261.24>

**Figure 1 – Site Location**



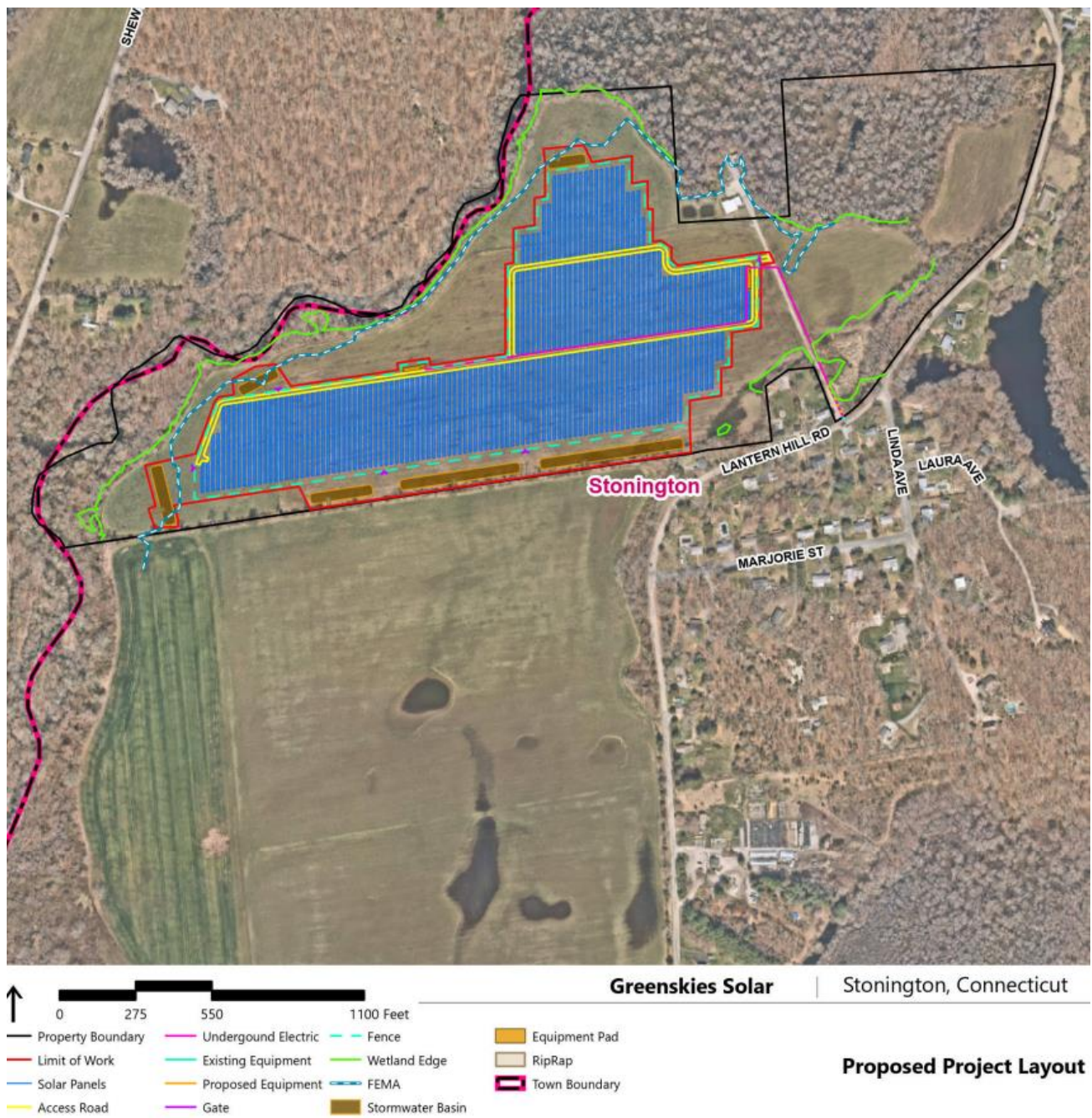
(GCE 1, Figure 1)

**Figure 2- Existing Site Conditions**



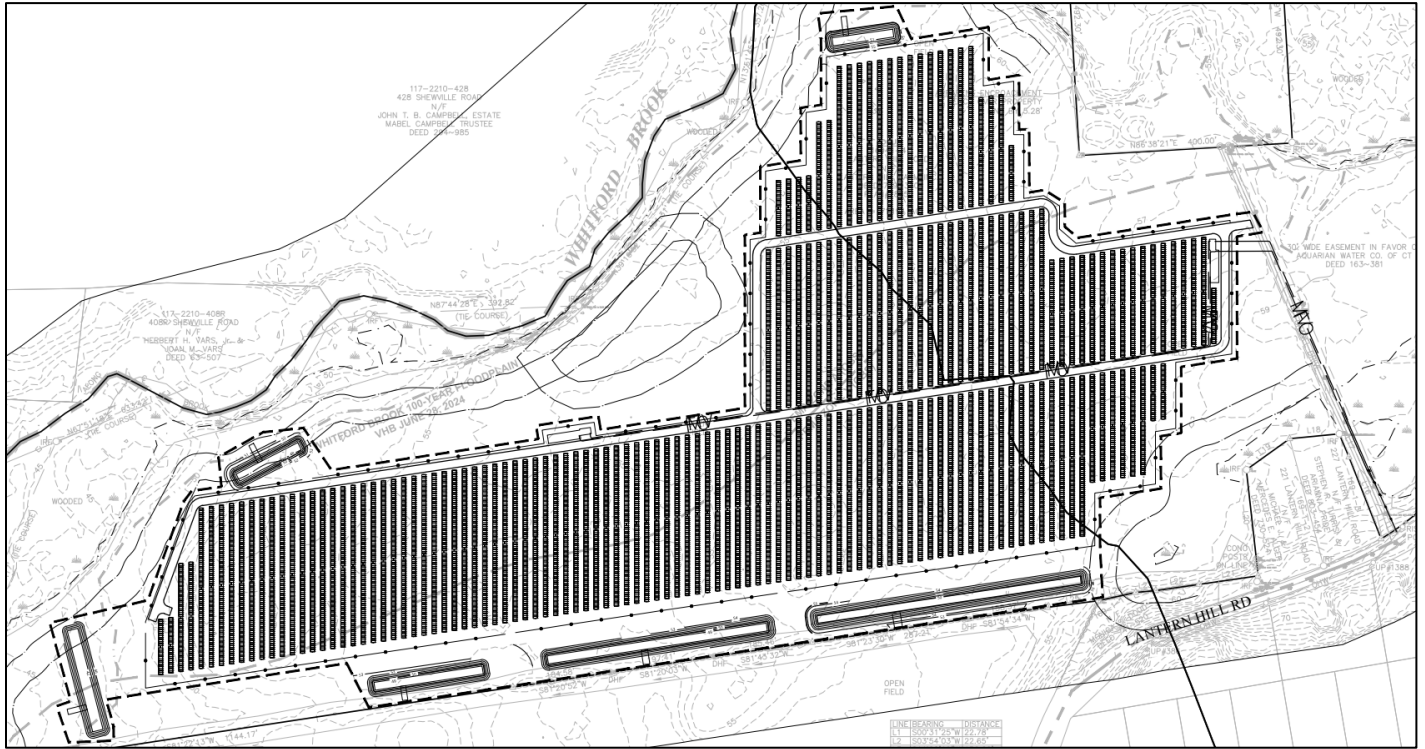
(GCE 1, Figure 2)

**Figure 3 – Proposed Facility Layout**



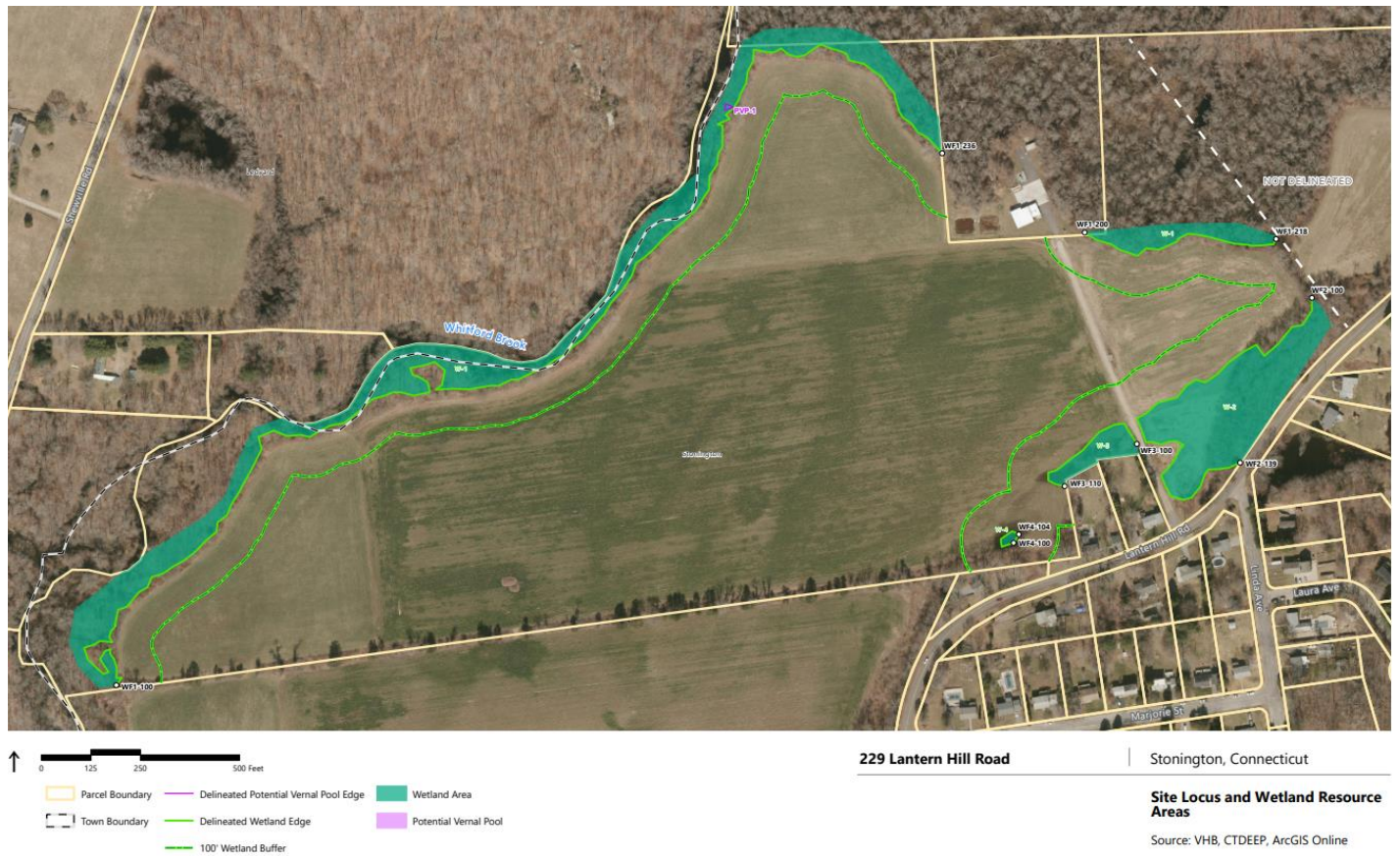
(GCE 1, Figure 6)

**Figure 4 – Proposed Site Plan**



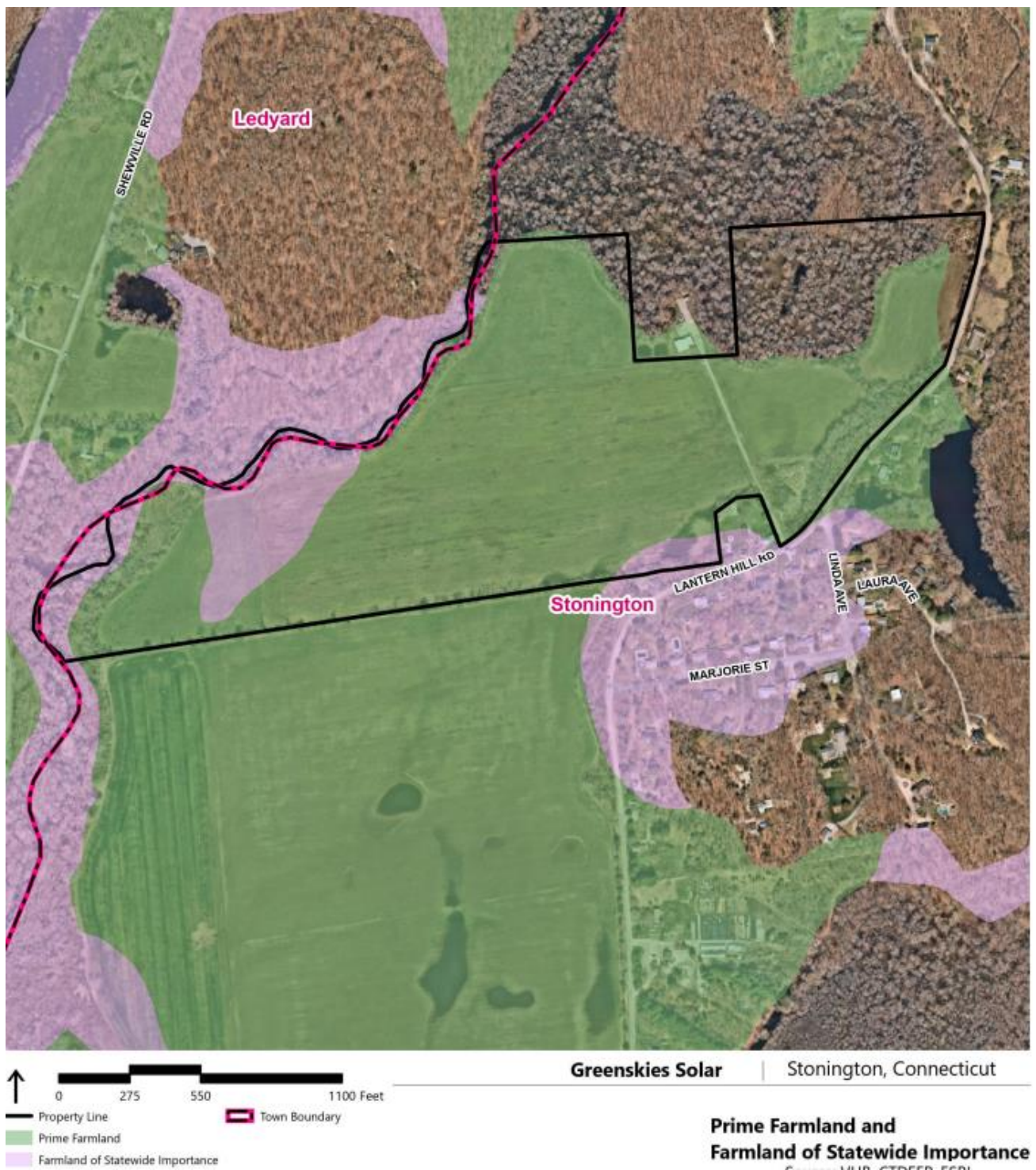
(GCE 1, Appendix A)

**Figure 5- Wetlands and Watercourses**



(GCE 1, Figure 8)

**Figure 6 – Farmland Soils Map**



(GCE 1, Figure 7)