PETITION NO. 1609 – TRITEC Americas, LLC notice of election to waive exclusion from Connecticut Siting Council jurisdiction, pursuant to Connecticut General Statutes §16-50k(e), and petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 0.999-megawatt AC solar photovoltaic electric generating facility located at 250 Carter Street, Manchester, Connecticut, and associated electrical interconnection.	}	Connecticut
	}	Siting
	}	Council
		October 4, 2024

DRAFT Findings of Fact

Introduction

1. On January 26, 2024, TRITEC Americas, LLC (TRITEC) submitted notice of election to waive exclusion from Connecticut Siting Council (Council) jurisdiction, pursuant to Connecticut General Statutes (CGS) §16-50k(e) and a petition to the Council, pursuant to (CGS) §16-50k and §4-176, for a declaratory ruling for the construction, maintenance, and operation of a 0.999-megawatt AC solar photovoltaic electric generating facility located at 250 Carter Street, Manchester, Connecticut, and associated electrical interconnection (Petition or Project). (TRITEC 1, p. 1)

2. CGS §16-50k(e) states, "Any person intending to construct a facility excluded from one or more provisions of this chapter may, to the extent permitted by law, elect to waive such exclusion by delivering notice of such waiver to the council. Such provisions shall thereafter apply to each facility identified in such notice from the date of its receipt by the council." Under CGS §16-50i(a)(3), the Council has jurisdiction over electric generating facilities utilizing renewable energy sources with a generating capacity of *more than one megawatt*. (CGS §16-50k (2023) (Emphasis added).

3. Pursuant to CGS §16-50k(a), the Council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling any distributed resources facility with a capacity of not more than 65 MW unless the Council finds a substantial adverse environmental effect. (CGS §16-50k (2023)).

4. TRITEC is a limited liability company with its principal place of business in La Jolla, California. It is a developer and operator of solar generating facilities. The Project was designed by Solli Engineering of Monroe, Connecticut. (TRITEC 1, pp. 2-3, Attachment B; TRITEC 4, p. 2; Tr. 4, p. 344)

5. The parties to this proceeding are TRITEC, Town of Manchester (Town), and Raymond Welnicki (Welnicki). (Record)

6. The Intervenors to this proceeding are Rachel Schnabel and Dana Schnabel (Schnabels) and the Manchester Advocates for Responsible Solar Development (MARSD). (Record)

7. Under the Uniform Administrative Procedure Act (UAPA), an intervenor's participation in a proceeding may be limited to designated issues in which the intervenor has a particular interest and, at the discretion of the Presiding Officer, may be restricted, including the rights to inspect and copy records, to introduce evidence and cross-examine, so as to promote the orderly conduct of the proceedings. (C.G.S. §4-177a (2023); Record)

8. On April 4, 2024, Welnicki requested party status. On April 17, 2024, Schnabels and MARSD requested intervenor status. (Record)

9. On April 25, 2024, the Council grouped the following parties and intervenors with the same interests as the Grouped Resident Parties and Intervenors, pursuant to CGS §16-50n(c): Welnicki and Schnabels. (Record)

10. On April 30, 2024, the Council received correspondence from Welnicki pursuant to CGS §16-50n(c) withdrawing from the Grouped Resident Parties and Intervenors to appear individually. On April 30, 2024, the Council acknowledged the withdrawal. (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 (2023))

12. There are no Connecticut Environmental Protection Act (CEPA) Intervenors in this proceeding. (Record)

13. Pursuant to RCSA §16-50j-40, on November 5, 2023, TRITEC provided notice of the Petition and notice of election to waive exclusion from Council jurisdiction and the proposed Project to all abutting property owners by certified mail and to all federal, state and local officials and agencies listed in CGS §16-50*l* (b). (TRITEC 1, p. 3, Exhibit A).

14. TRITEC has a 21-year lease for the proposed site with the option to extend it for two one-year periods and two five-year periods. The host parcel is owned by Wells Jacobson Trust and Margret Jacobson Trust. TRITEC would own the proposed facility. (TRITEC 1, Exhibit B; TRITEC 2, response 13; TRITEC 12, response 12)

15. If TRITEC transfers the solar facility to another entity in the future, TRITEC would provide a written agreement as to the entity responsible for any outstanding conditions of the declaratory ruling 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. (TRITEC 2, response 11)

16. The proposed Project would be a "grid-side distributed resources" facility under CGS § 16-1(a)(37). (CGS § 16-1(a)(37)(2023)

17. 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)(2023); TRITEC 1, p. 4)

18. 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)

19. Pursuant to CGS §16-50k(e) and §16-50x, the Council has exclusive jurisdiction over the construction, maintenance and operation of the proposed solar photovoltaic electric generating facility. (CGS §16-50x (2023))

Procedural Matters

20. Upon receipt of the Petition, on January 29, 2024, the Council sent a letter to the Town and the Town of Bolton, which is located within 2,500 feet of the proposed facility site, as notification that the Petition was received and is being processed, in accordance with CGS §16-50k(a), and invited the municipalities to contact the Council with any questions or comments by February 25, 2024. (Record)

21. 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 (2023))

22. On February 1, 2024, the Council on Environmental Quality (CEQ) requested an extension of the state agency comment deadline. On the same date, the Council extended the state agency and public comment deadline to March 7, 2024. (Record)

23. Between February 22 and March 8, 2024, the Town, Town of Bolton, State Representatives Jason Doucette and Steve Weir and 27 members of the public submitted requests for a public hearing. (Record)

24. During a public meeting held on March 14, 2024, the Council granted the requests for a public hearing. (Record)

25. On March 28, 2024, during a public meeting, the Council approved a public hearing schedule. This extended the public comment period to 30 days following the close of the evidentiary record. The evidentiary record closed on August 27, 2024. The public comment record closed on September 26, 2024. (Record)

26. 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 (2023); CGS §1-200, *et seq*. (2023))

27. 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 (2023))

28. Pursuant to CGS §16-50m, on March 28, 2024, the Council sent a letter to the Town and the Town of Bolton to provide notification of the scheduled public hearing via Zoom remote conferencing. (Record)

29. Pursuant to CGS §16-50m, the Council published legal notice of the date and time of the public hearing via Zoom remote conferencing in the Journal Inquirer on March 30, 2024. (Record; Transcript 1 – May 2, 2024 – 2:00 p.m. [Tr. 1], p. 5; Transcript 2 – May 2, 2024 – 6:30 p.m. [Tr. 2], p. 4)

30. 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 March 28, 2024; Council Administrative Notice Item No.

66 – *Manor Development Corp. v. Conservation Comm. of Simsbury,* 180 Conn. 692, 701 (1980); Council Administrative Notice Item No. 67 – *Grimes v. Conservation Comm. of Litchfield,* 243 Conn. 266, 278 (1997))

31. In lieu of an in-person field review of the proposed site, TRITEC submitted photographic documentation of site-specific features into the record intended to serve as a "virtual" field review of the proposed site. (TRITEC 1, Exhibit H)

32. Pursuant to CGS §16-50p(g), the Council shall in no way be limited by TRITEC already having acquired land or an interest therein for the purpose of constructing the proposed facility. (CGS §16-50p(g) (2023); Council Administrative Notice Item No. 70 - *Corcoran v. Conn. Siting Council*, *284 Conn. 455 (2007)*)

33. 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 (2023); *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)

34. On April 10, 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. TRITEC, the Town, Welnicki, Schnabels and Rosemary Carroll on behalf of MARSD participated in the pre-hearing conference. Procedures for the public hearing via Zoom remote conferencing were also discussed. (Council Pre-Remote Hearing Conference Memorandum, dated April 3, 2024)

35. In compliance with RCSA §16-50j-21, TRITEC installed a four-foot by six-foot sign in the vicinity of the proposed access drive to the site. The sign presented information about the proposed solar facility, the public hearing date and contact information for the Council. (Council Pre-Remote Hearing Conference Memorandum, dated April 3, 2024; TRITEC 8; Tr. 1, pp. 5-6; Tr. 2, pp. 4-5)

36. Pursuant to CGS §16-50m, the Council gave due notice of a public hearing on May 2, 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 March 28, 2024; Tr. 1, p. 5)

37. 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. (Tr. 1, pp. 7-8; Tr. 2, pp. 5-6; CGS §16-50n(f) (2023))

38. During the public comment session of the Council's hearing held on May 2, 2024, eight persons made oral limited appearance statements about the proposed facility. (Tr. 2)

39. The Council scheduled continued evidentiary hearing sessions on May 21, July 23 and August 27, 2024, with each session beginning at 2:00 p.m. (Council's Continued Hearing Memoranda dated May 3, May 22 and July 24, 2024; Tr. 2, p. 27; Transcript 3 – May 21, 2024 - 2:00 p.m. [Tr. 3] pp. 130, 240; Transcript 4 – July 23, 2024 - 2:00 p.m. [Tr. 4] pp. 247, 363)

40. In compliance with CGS §1-225a:
    a) The public had the ability to view and listen to the remote public hearing(s) in real-time, by computer, smartphone, tablet or telephone;
    b) The remote public hearing was recorded and transcribed, and such recordings and transcripts were posted on the Council's website on May 2, May 21, July 24, August 27, and May 9, June 5, August 7, and September 11, 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 remote 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 remote public hearing.

    (Hearing Notice dated March 28, 2024; Tr. 1; Tr. 2; Tr.3; Tr. 4; Transcript 5 – August 27, 2024 - 2:00 p.m. [Tr. 5], Record)

41. 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 (2023))

42. 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 (2023); *Dore v. Commissioner of Motor Vehicles*, 62 Conn. App. 604 (2001); R.C.S.A. §16-50j-25 (2023))

43. On April 24, 2024, the Council requested an extension of time to render a final decision on the Project to October 22, 2024. On April 24, 2024, TRITEC granted the Council's request. (Record)

44. Pursuant to CGS §16-50n(f), at the conclusion of the evidentiary hearing session held on August 27, 2024, the Council closed the evidentiary record for Petition 1609 and established September 19, 2024 as the deadline for the submission of briefs and proposed findings of fact. (Tr. 5, p. 458)

45. Welnicki and MARSD submitted post hearing briefs on September 16, 2024. (Record)

46. Schnabels and the Town submitted proposed findings of fact and post hearing briefs on September 19, 2024. (Record)

47. TRITEC submitted a post hearing brief and a Motion to Strike the Town's post hearing brief on September 19, 2024. (Record)

48. 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))

State Agency Comments

49. Pursuant to RCSA §16-50j-40, on January 29, 2024 and March 28, 2024, the following state agencies were requested to submit written comments regarding the proposed facility: DEEP; Department of Agriculture (DOAG); Department of Public Health (DPH); 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); and the State Historic Preservation Office (SHPO). (Record)

50. On February 29, 2024, the Council received comments from CEQ[1] related to core forest, wetland and erosion and sedimentation control, and groundwater and spill Prevention. Core forest, wetland and erosion and sedimentation control, and groundwater and spill Prevention, among other environmental concerns, are addressed in the Environmental Effects and Mitigation Measures section of this document, pursuant to CGS §16-50p. (Record; CGS §16-50p (2023)

51. 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. 70, *Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007))

Municipal Consultation

52. On November 14, 2023, TRITEC discussed the Project with the Town via video conference. Concerns included noise, tree clearing, visibility, and wetland impacts. (TRITEC 1, p. 3; TRITEC 2, response 2)

53. On November 16, 2023, TRITEC conducted a video conference with four abutting property owners in attendance. Concerns included noise, tree clearing, visibility, and wetland impacts. (TRITEC 1, p. 3; TRITEC 2, response 3)

State of Connecticut Planning and Energy Policy

54. Section 51 of Public Act (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 (2023))

55. 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. 43 and 44)

[1] https://portal.ct.gov/-/media/csc/3_petitions-medialibrary/petitions_medialibrary/mediapetitionnos1601-1700/pe1609/stateagencycomments/pe1609_ceqcommentsrecd_a.pdf

56. 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. 42)

57. CGS §16-245a establishes Connecticut's *Renewable Portfolio Standards* (*RPS*). Currently, RPS requires that 26 percent of Connecticut's electricity usage be obtained from Class I renewable resources by 2024. This percentage increases annually and reaches 40 percent by 2030. (CGS §16-245a (2023))

58. The Global Warming Solutions Act (GWSA) sets a goal of reducing greenhouse gas (GHG) emissions by 80 percent by 2050. (CGS §22a-200 (2023))

59. 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. 43)

Competitive Energy Procurement

60. The Project bid into the statewide Non-Residential Renewable Energy Solutions (NRES) Program, which is a competitive procurement process established by PURA in June 2021 and 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. (Council Administrative Notice Item No. 64; TRITEC 1, p. 11)

61. 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 would be sold to Eversource in accordance with the TTA. (Council Administrative Notice Item No. 64; TRITEC 11, response 33)

62. Under the TTA, Eversource would own the energy, capacity rights, and renewable energy credits of the facility. Thus, TRITEC would not participate in an ISO-New England, Inc. (ISO-NE) Forward Capacity Auction during the term of the TTA. (Tr. 1, pp. 113-114; TRITEC 11, response 33)

Public Benefit

63. 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. (CGS §16-50p (2023))

64. The Project would be a distributed energy resource facility as defined in CGS §16-1(a)(49). CGS §16a-35k establishes the State's energy policy, including the goal to "develop and utilize renewable energy resources, such as solar and wind energy, to the maximum practicable extent." (CGS §16-1(a)(49) (2023); CGS §16a-35k (2023))

65. PA 05-1, An Act Concerning Energy Independence, established a rebuttable presumption that there is a public benefit for electric generating facilities selected by the Department of Public Utility Control (DPUC, now known as PURA) in a Request for Proposals. (PA 05-1; CGS§16-50k (2023))

66. If the NRES bid is accepted, the Project energy and capacity would be supplied to the NRES program. The energy, although supplied to the local distribution system, would be credited to the Town of Plymouth and the City of Meriden as participating NRES customers. If the bid is not accepted, TRITEC would rebid into the program. (TRITEC 1, pp. 11-12; TRITEC 2, response 8, response 9; Tr. 1, pp. 33-4, 113-114)

Public Act 17-218

67. Public Act (PA) 17-218 requires, "for a solar photovoltaic facility with a capacity of two or more megawatts, to be located on prime farmland or forestland, excluding any such facility that was selected by DEEP in any solicitation issued prior to July 1, 2017, pursuant to section 16a-3f, 16a-3g or 16a-3j, the DOAG represents, in writing, to the Council that such project will not materially affect the status of such land as prime farmland or DEEP represents, in writing, to the Council that such project will not materially affect the status of such land as core forest." (Record; CGS §16-50k(a) and §16a-3k (2023))

68. The proposed solar facility has a generating capacity of 0.999 MW; therefore, it is exempt from the provisions of PA 17-218. (TRITEC 1, pp. 1-2)

69. The lease agreement with the property owner does not contain provisions for agricultural co-uses at the site. (TRITEC 2, response 14, response 15)

70. PA 17-218 does not confer the Council's exclusive jurisdiction upon DOAG or DEEP nor does it 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 and 16-50x (2023); Tr. 3, p. 123)

71. PA 17-218 also requires that the Council not find a substantial adverse environmental effect in its exercise of jurisdiction over facilities eligible to be approved by declaratory ruling under CGS §16-50k. There are no exemptions from this provision of PA 17-218. (CGS §16-50k (2023))

72. PA 23-163 relating to a decommissioning bond and agricultural site restoration requirement does not apply to the proposed solar facility as it was submitted to the Council as a Petition for a Declaratory Ruling rather than an Application for a Certificate. (CGS §16-50k (2023))

73. TRITEC developed a Decommissioning Plan for restoration of the site at the end of the Project's useful life in accordance with the lease. All Project components would be removed excluding foundations below two feet below grade, and the access drive and stormwater basin fencing unless the property owner requests their removal. Disturbed areas would be seeded to create meadow-type vegetative cover. (TRITEC 2, response 14; Tr. 1, pp. 34-36)

Site Selection

74. TRITEC selected the host parcel for the solar facility site based on availability, suitability, environmental compatibility, topography, and proximity to electrical utilities for interconnection. (TRITEC 1, p. 5; Tr. 1, pp. 93-94; Tr. 5, pp. 396-399)

75. TRITEC investigated other site locations in the vicinity of the proposed site, but did not pursue them due to issues including, but not limited to, interconnection, wetlands, and proximity to residential areas. (TRITEC 2, response 6)

76. 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. 77 - *Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007))

Proposed Site

77. 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)(2023))

78. The Council does not have jurisdiction or authority over any portion of the host parcel beyond the boundaries of the facility "site." This includes portions of the host parcel retained by the property owner and portions of the host parcel the property owner may lease to third parties. Once a facility is decommissioned, the Council no longer has jurisdiction or authority over the facility "site." (CGS §16-50p(g) (2023))

79. 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 (2023); *Woodbridge Newton Neighborhood Env't Trust, et al v. Conn. Siting Council*, 2024 Conn. LEXIS 163 (2024))

80. Pursuant to a lease agreement with the property owner, TRITEC proposes to construct the solar facility on an approximate 7.8-acre site on an approximate 41.1-acre host parcel at 250 Carter Street, Manchester. (TRITEC 2, response 5; TRITEC 14g)

81. The host parcel is zoned rural residence (RR) and fronts Carter Street to the north. It contains vacant land, woodlands, and wetlands. An underground natural gas pipeline within an easement extends north-south across the western portion of the parcel. (TRITEC 1, p. 5, Exhibit B)

82. The Town's zoning regulations to do not permit grid-side ground-mounted solar arrays in any zone district. A zoning variance would be required for such a facility if it is subject to the local review process. (Tr. 3, pp. 230-232)

83. The Town's Plan of Conservation and development identifies the site as within a "Limited Growth" area which is defined "Areas developed with low- to medium-density neighborhoods that should remain "as is." These neighborhoods are defined by conventional suburban development patterns of primarily detached single-family houses, with some single-family attached houses, small multi-family, commercial, educational, and civic uses. There may be some limited opportunities for infill in this sector, which should be at a scale and character compatible with surrounding development". (Town 4e, pp. 175,178)

84. The property owner uses the host parcel to collect sap for maple syrup production. (TRITEC 1, p. 12; TRITEC 2, response 17)

85. Land use surrounding the site consists of residential and woodland. Surrounding properties are zoned RR and RR-cluster. (TRITEC 1, Exhibit B; Town 5b, p. 3)

86. The site generally slopes to the west at a gradient of 7 to 9 percent. Ground elevations range from approximately 660 feet above mean sea level (amsl) in the southeast portion to approximately 605 feet amsl in the northwest portion. (TRITEC 1, Exhibit C, TRITEC 14g)

Proposed Facility

Solar Array

87. The proposed Project consists of 2,590 photovoltaic panels rated at 540 Watts. (TRITEC 1, Exhibit G, p. 3; TRITEC 14g)

88. The panels would be installed on a single-axis tracker system supported by posts. At maximum tilt, the panels would be approximately 6 feet above grade at the highest point and 3 feet at the lowest point. (TRITEC 1, Exhibit G, p. 3)

89. The tracker posts would be driven into the ground to an approximate depth of 9-12 feet. (TRITEC 2, response 21)

90. The tracker system would rotate east to west and would have a maximum angle of 60 degrees. The tracker motors do not continuously operate. They would move at intervals of 10 degrees based on the location of the sun. (TRITEC 1, p. 6; Tr. 1, p. 118)

91. Approximately 25-30 tracker motors are proposed, powered through an electrical connection at the transformer pad. (TRITEC 2, response 21)

92. The panels would be arranged in linear rows in a north-south direction, separated by a 9-foot vegetated aisle. (TRITEC 1, Exhibit C)

93. Two side by side equipment pads (20-feet by 60-feet and 20-feet by 30-feet) would be installed in the northwest section of the site, within the array area, to support two 2,000 kV transformers, switchgear and 8 inverters. (TRITEC 14g; Tr. 1, p. 82)

94. The inverters would be installed on a frame racking system supported by posts. (Tr. 5 p. 403)

95. The Project would be enclosed by a 7-foot tall chain link perimeter fence. (TRITEC 14g)

96. The nearest property line to the solar facility perimeter fence is 66 feet to the east at 274 Blue Ridge Drive. (TRITEC 1, Exhibit G, p. 3)

97. The nearest residence to the solar facility perimeter fence is 213 feet to the east at 274 Blue Ridge Drive. (TRITEC 1, Exhibit G, p. 3)

Site Access

98. The Project would be accessed by a new a 12-foot wide, 740-foot long gravel road extending from Carter Street. The access drive would extend across a wetland, then turn west, terminating at the electrical pads in the northwest portion of the site. (TRITEC 1, Exhibit G, p. 2; TRITEC 14g)

99. A 26-foot wide vehicle access gate would be installed at the northeast corner of the solar array. (TRITEC 1, Exhibit G, p. 2; TRITEC 14g)

100. The nearest property line to the proposed access drive is approximately 43 feet to the north at 225 Carter Street. (TRITEC 1, Exhibit G, p. 3)

101. A sight line analysis of the driveway entrance on Carter Street was not performed. Additional tree cutting may be necessary to improve sight lines. (TRITEC 10, response 5; Schnabels 2, pp. 4-5)

Electrical Interconnection

102. The Project is comprised of one metered system with a design capacity of approximately 0.999 MW AC. It would interconnect to an Eversource 23-kV overhead electric distribution line on Carter Street. (Tr. 1, pp. 112-113, 115)

103. From the electrical pad, the interconnection line would extend underground along the access drive, then transition overhead, supported by five new utility poles. The overhead line would connect to an existing Eversource electric distribution line on the north side of Carter Street. (TRITEC 2, response 31; Tr. 1, pp. 27, 50-51, 62)

104. The height of the new utility poles would be approximately 43 feet above grade. (TRITEC 10, response 13)

105. Three of the proposed utility poles that are closest to Carter Street would be owned by Eversource to support a manual disconnect switch, recloser and primary meter, and a customer-side gang operated air brake switch and recloser. The other two utility poles would be owned by TRITEC to support a gang operated air brake switch and recloser. (TRITEC 2, response 32; Tr. 1, pp. 37, 103)

106. The proposed interconnection is a standard design using separate poles for reclosers, switches and meter. Consolidation of equipment onto fewer poles would not adhere to safety requirements. Eversource does not pad-mount equipment as part of their interconnection design for solar projects. (Tr. 1. pp. 37-38, 86-87)

107. The facility interconnection is under review by Eversource. A preliminary result indicates the proposed Project can connect to the Manchester 3A substation via the 23kV 3A03 feeder and new three-phase service. The substation is approximately five miles from the site. (TRITEC 2, response 27; TRITEC 4, p. 4)

108. The interconnection would require an extension of existing 23-kV distribution circuit from Carter Street to the site. The cost of the extension is borne by TRITEC. Eversource committed to extending the distribution circuit, if the Project is approved. (Tr. 1, pp. 79-80, 112-113)

109. The proposed Project is a distributed generation facility that serves as a local source of generation, thereby reducing the amount of electricity needed to be transmitted from other locations. (TRITEC 4, p. 4)

110. The Project interconnection does not require a review from ISO-NE. (TRITEC 2, response 29)

111. The projected capacity factor of the proposed solar facility is 24.5 percent. The power output would decline by approximately 0.5 percent on an annual basis. (TRITEC 1, p. 8)

112. The Project would not be designed to support a battery energy storage system. (TRITEC 1, p. 7)

Cost

113. The estimated construction cost of the Project is $3.22 million. (TRITEC 1, p. 10)

Public Health and Safety

114. 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. (TRITEC 1, pp. 10-11)

115. The facility would be remotely monitored 24/7 by a data acquisition system, including but not limited to weather conditions, site operation and fault detection. Maintenance personnel would be dispatched to the site in the event of a fault or abnormal operation. (TRITEC 1, pp. 9-10)

116. In the event of a fire or other emergency, the facility can be disconnected remotely or by manual switches. (TRITEC 2, response 36, response 37)

117. Electronic monitoring can detect abnormal operation, such as that caused by a fire, and remotely shut down the system. (Tr. 4, p. 37)

118. Electrical fires are typically allowed to burn out, with water being used only to prevent the spread of any fire beyond the affected area. (TRITEC 2, response 37, response 40; Tr. 3, p. 223)

119. The nearest fire hydrant is approximately 0.25 miles northwest of the proposed site entrance. The fire department would determine what equipment to use to transport water to the site. To use the hydrant, one or two trucks would be required to pump water uphill to the site. A tanker truck shuttle could also be used. (TRITEC 2, response 38; Tr. 4, pp. 264-265)

120. The Project would be designed to meet applicable electrical codes, including lightning mitigation. (TRITEC 10, response 21)

121. The site is near an underground natural gas pipeline on the host parcel. All development will occur outside of the natural gas easement. Consultation with the natural gas pipeline operator is not required. (TRITEC 12, response 49)

122. Emergency responders would be provided access to the site via a universal key box at the site access gate. (TRITEC 1, Exhibit G, p. 2)

123. TRITEC has not met with the Town Fire Marshall to discuss the Project. Prior to commencement of operation, TRITEC would meet with local emergency responders to provide training and information regarding facility operations, and equipment. (TRITEC 2, response 35; TRITEC 10, response 17, response 18)

124. The proposed access drive would be designed to support the weight of emergency vehicles and equipment. (TRITEC 10, response 19)

125. No permanent lighting of the facility or gravel drive is proposed. (TRITEC 1, Exhibit G, p. 19; TRITEC 11, response 31)

126. The site is not within a Federal Emergency Management Agency (FEMA)-designated flood zone. (TRITEC 1, Exhibit G, p. 8)

127. 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 & 18)

128. The nearest federally-obligated airport from the facility is Hartford-Brainard Airport, located approximately 9 miles west of the site. Construction of the Project would have no effect on the airport or aviation safety. A glare analysis is not required. (TRITEC 1, Exhibit G, p. 19; TRITEC 11, response 41)

129. The proposed transformers would contain mineral oil. If oil leaked from a transformer, a fault detection system would shut the system down. A remotely monitored alarm system that can detect abnormal oil levels is not standard monitoring equipment for mineral oil type transformers. According to the Material Data Safety Sheet specific to the mineral oil to be used was not provided. Some mineral oils used in transformer contain substances that can be lethal to fish and other organisms as well as contaminate soil and groundwater. (TRITEC 1, p. 9; TRITEC 11, response 40; Schnabels 2, p. 4, E1; Tr 1, pp. 83-85)

Noise

130. Noise emissions from the solar facility would be from the operation of inverters, transformers, and tracker motors during daytime operational hours. The facility would not operate at night nor during times of bright moonlight. (TRITEC 14b; Tr. 4, p. 356)

131. The inverters have an optional night function; however, TRITEC would not use this feature. (TRITEC 10, response 6; Tr. 4, pp. 355-356)

132. The primary source of noise would be from the two transformers and eight inverters. Operational noise information from the tracker motors was not available but the motors are expected to contribute a negligible amount of cumulative noise from the facility due to limited daily operation (30 seconds every 15 minutes). (TRITEC 14b; Tr. 1, pp. 117-118; Tr. 4, pp. 360-361)

133. Existing ambient noise levels have not been measured. (Tr. 1, pp. 105-106)

134. A noise analysis using the inverse square law determined the operation of the facility inverters and transformers would produce an approximate sound level of 29 dBA at the nearest property line to this equipment, approximately 400 feet to the east at 262 Blue Ridge Drive, in compliance with state standards. The equipment to be installed at the site may vary based on availability and projected noise levels may change. (TRITEC 10, response 22; TRITEC 11, response 24; TRITEC 14b)

135. Noise from the proposed Project differs from a Council approved facility at 341 East Road in East Windsor (Petition 1426 -East Windsor Solar One) in that the distance to the inverters to the nearest residential property line is greater (400 feet vs 125 feet). (Council Administrative Notice Item No. 39; TRITEC 14b)

136. Construction noise is exempt from DEEP Noise Control Standards. (RCSA §22a-69-108(g))

Environmental Effects and Mitigation Measures

Air and Water Quality

137. The proposed Project would meet DEEP air quality standards and would not produce air emissions of regulated air pollutants or GHG. (TRITEC 1, Exhibit G, p. 5)

138. 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 of water and limited idle times. (TRITEC 1, Exhibit G, p. 5)

139. As applicable to any proposed jurisdictional facility site, the Council's Filing Guide for a Petition for a Declaratory Ruling for a Renewable Energy 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)

140. Water would not be used during operation of the facility. (TRITEC 1, Exhibit G, p. 8)

141. The site is not located within a DEEP-designated Aquifer Protection Area or public water supply watershed. (TRITEC 1, Exhibit G, p. 8)

142. 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…" (TRITEC 1, Exhibit G, p. 8)

143. Residential areas south of the site (downgradient) are served by a community public water system. Residential areas north, east and south of the site are served by private wells. (TRITEC 1, Exhibit B, Exhibit G, pp. 8-9, Figure 5; TRITEC 2, response 43; TRITEC 12, response 55)

144. Installation of racking posts is not expected to impact the water quality of nearby wells. (TRITEC 2, response 43; TRITEC 12, response 55)

145. TRITEC developed a preliminary Spill Response and Prevention Plan that includes, but is not limited to, measures for fuel storage and spill prevention, containment, cleanup and reporting. A copy of the plan would be kept in the project construction trailer. (TRITEC 14c; Tr. 4, p. 361)

Stormwater

146. 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)

147. 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 Section 22a430b; CGS Section 22a-430(b))

148. The SWPCP incorporates project designs consistent with the current E&S Guidelines and the *Connecticut Stormwater Quality Manual* (Stormwater Manual). (DEEP-WPED-GP-015; TRITEC 12, response 47)

149. 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 Section 22a-430b (2023))

150. The Council may impose a condition that requires subsequent compliance with DEEP standards and regulations. (Council Administrative Notice Item No. 68 – *FairwindCT, Inc. v. Conn. Siting Council*)

151. The Project would require a DEEP-issued Stormwater Permit prior to commencement of construction activities as defined in the General Permit. (CGS Section 22a-430b; TRITEC 1, Attachment C; Tr. 1, p. 8)

152. 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)

153. Per the Stormwater Permit, the contractor has the responsibility to follow the SWPCP. The Project engineer has the obligation to perform 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; TRITEC 14g; Tr. 1, pp. 57-60)

154. On December 12, 2023, TRITEC met with the DEEP Stormwater Division to discuss the proposed stormwater management design and E&S control plans for the facility. (TRITEC 1, pp. 7-8)

155. TRITEC would file for a Stormwater Permit if the Project is approved by the Council. (TRITEC 2, response 57)

156. TRITEC prepared a stormwater analysis for the Project that concluded one permanent stormwater detention basin is necessary to manage post-construction peak stormwater flows. The basin would be located in the northwest corner of the site, in the area with the lowest elevation. (TRITEC 1, Attachment C; Tr. 1, pp. 90-91)

157. In compliance with the Stormwater Permit, post-development peak discharges from the site for 2-, 25-, 50-, and 100- year storm events would be less than the pre-development peak discharges. The calculations used to determine the size of the stormwater basin did not include any rate of infiltration in order to be conservative when calculating peak discharge rates. (TRITEC 1, Attachment C; Tr. 1, pp. 52-54, 90-91)

158. No effect to groundwater from construction of the Project is anticipated. In accordance with Stormwater Permit criteria, a change in land cover from forest to meadow was included in the stormwater design calculations to account for an increase of stormwater across the array area. (Town 9, response 6; TRITEC 12, response 58, response 59; Tr. 4, pp. 333-334; Tr. 5, 388-389)

159. The perennial groundwater at the site would not be affected. Shallow groundwater, caused by a hardpan soil layer two to three feet below the ground surface, results in seepage areas. These perched groundwater seepage areas would be intercepted by a drainage swale and stormwater detention basin. There would be no effect to Amanda Drive west of the site due to the design of the stormwater management system. (TRITEC 9, response 2; Tr. 4, pp. 333-334; Tr. 5, pp. 385-387)

160. The Project has been designed to comply with DEEP Stormwater Permit Appendix I, Stormwater Management at Solar Array Construction Projects. (TRITEC 2, Exhibit F; Tr. 5, pp. 382-383)

161. Pre-existing overland stormwater flows would be collected and those that do not infiltrate would be directed to the stormwater basin. The basin would have a single discharge point. Stormwater outflows from the site would be concentrated at this point rather than the pre-existing sheet flow conditions. (TRITEC 2, Exhibit F; Tr, 3, p. 261; Tr. 5, pp. 384-388)

162. The outlet structure would discharge stormwater overland through a forest, towards a wetland, 50 feet west of from the outlet structure. (TRITEC 1, Attachment C; Tr. 1, pp. 53-54; Tr. 5, p. 389)

163. Stormwater outflows from the detention basin would be controlled by the size of the outlet structure, designed in accordance with Stormwater Permit criteria to reduce flow volumes over pre-existing conditions. (TRITEC 2, Exhibit F; Tr. 1, pp. 53-54; Tr. 4, pp. 332-333)

164. Installing a basin and associated outlet to direct flows to the north is not feasible due to natural topography which directs existing overland flows primarily to the west. (TRITEC 1, Exhibit B; Tr. 1, pp. 116-117)

165. The stormwater basin would include a forebay to allow for sediment carried by stormwater to settle out before reaching the detention basin. (TRITEC 14g; Tr. 1, p. 53)

166. After the Petition was filed with the Council, TRITEC revised the stormwater management system based on comments from the Town engineering department. The revisions included the extension of a swale on the west side of the site to intercept more overland flow from the array, and the expansion of the stormwater basin to account for the additional volume of water directed into the basin from the swale. (TRITEC 2, Exhibit B, Exhibit F; Tr. 1, pp. 50-51)

167. The revised stormwater management system meets Town engineering and DEEP Stormwater Permit requirements. (TRITEC 2, Exhibit F; Tr. 1, pp. 50-51)

168. Several properties on Amanda Drive, abutting the host parcel to the west, are subject to groundwater and stormwater discharge from a forested seep/watercourse located in the west central portion of the parcel (Wetland 3). The discharge may be related to ground disruptions caused by construction of the residences on Amanda Drive. (Town 5b, p. 9; MARSD 4; Welnicki 5: Tr. 3, pp. 145-146, 148)

169. The Welnicki residence at 121 Amanda Drive experiences 1,000 gallons of exfiltrated ground water at the base of the hill at the rear of the house at various times of the year. A French drain designed for this outflow was installed in 2014, diverting water away from the backyard. It is unknown whether the French drain can handle additional inflow. (Welnicki 5)

170. The sidewalk in the area of 141 and 161 Amanda Drive is subject to continual inundation from groundwater interception. The Town has not examined the feasibility of raising the sidewalk and installing a drain within the town right-of way in this area. The Town cannot mitigate seep and water flow problems originating on private property. (Town 5b, p. 9; Welnicki 5; Tr. 3, pp. 145-146, 148, 225-226)

171. The Project would be constructed in two main phases:
    a) Phase 1 includes the installation of the access drive and wetland crossing, tree clearing for the establishment of perimeter erosion and sediment controls, and construction of the stormwater management system, followed by stabilization of disturbed areas.
    b) Phase 2 includes the installation of remaining tree clearing and grubbing, installation of the solar array infrastructure followed by site stabilization and cleaning of the stormwater management system of post-construction use.

    (TRITEC 14g)

172. If there was a failure in the E&S controls and sediment was released, DEEP would be notified in accordance with DEEP Stormwater Permit requirements. Remediation measures would be undertaken upon consultation with DEEP and the local conservation district. For Town-approved projects subject to a DEEP stormwater permit, the Town would certify that there are adequate response measures in the Stormwater permit to address sediment releases from work area. (Town 5c, p. 5; Tr. 1, p. 60; Tr. 3, pp. 141-143)

173. 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*. (2023))

174. 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 (2023))

175. 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 (2023))

176. 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*. (2023))

177. A wetland inspection of the site and adjacent areas was performed on July 26 and July 27, 2023. Four wetlands/watercourses were identified on the host parcel as follows;
   a) Wetland 1 is a forested wetland with a semi-permanent watercourse running generally parallel to Carter Street;
   b) Wetland 2 is a forested seep/watercourse system located in the northwestern portion of the parcel;
   c) Wetland 3 is a forested seep/watercourse located in the west central portion of the parcel; and
   d) Wetland 4 is a forested seep/watercourse located in the southwest corner of the parcel.

   The watercourses associated with the forested seeps are intermittent in nature and have channels ranging from one to six feet wide.
   (TRITEC 1, Exhibit G, pp. 2, 5-7)

178. No potential vernal pools were identified. (TRITEC 9, response 1)

179. The proposed access drive would traverse the narrowest point of Wetland 1 where the stream briefly channelizes. (TRITEC 2, Exhibit B)

180. The crossing consists of 40 linear feet of a 42-inch diameter high-density polyethylene pipe (HDPE) embedded 12 inches into the streambed. (TRITEC 2, Exhibit B)

181. The stream crossing would result in approximately 1,100 square feet of permanent wetland impact. (TRITEC 1, Exhibit G, pp. 7, 12; TRITEC 2, Exhibit B)

182. The stream crossing was designed with a 3:1 downstream side slope to reduce the potential for erosion. Upon request of the Council during the proceeding, TRITEC submitted an alternative design with a 1.5:1 side slope, reducing the length of HDPE within the streambed to 30 feet and reducing permanent wetland impact to 1,050 square feet. (TRITEC 2, Exhibit B; TRITEC 14g; Tr. 1, pp. 98-99)

183. The crossing is subject to US Army Corp of Engineers (USACE) permitting through the USACE Programmatic General Permit State of Connecticut. Additional field work related to the USACE permitting requirements was performed on September 19, 2023. (TRITEC 1, Appendix G, Exhibit G, p. 7)

184. TRITEC designed the HDPE with an openness ratio of 0.25. Per the USACE permit, an openness ratio of 0.82 is recommended; however, TRITEC anticipates the USACE will approve the proposed design without modification. (TRITEC 14f)

185. The drainage area at the proposed stream crossing is less than 1 square mile (0.017 square mile). The proposed HDPE has been designed to pass the 50-year flood frequency per USACE requirements for drainage areas less 1 square mile. (TRITEC 2, response 46, response 48)

186. The proposed HDPE stream crossing is designed in conformance with the DEEP Inland Fisheries Division Stream Crossing guidelines by installing the pipe with 12 inches of embedment within the streambed and providing a natural bottom substrate within the pipe. (TRITEC 2, response 48)

Forests and Parks

187. The host parcel contains approximately 41 acres of forest. The forest is classified as a Red Oak Sugar Maple Transition Forest with a varying density allowing for dense shrub layers in areas. The forest contains invasives such as multifloral rose, garlic mustard, barberry, and bittersweet. (TRITEC 1, Exhibit G, pp. 9-10; Tr. 3, pp 205-206)

188. Development of the Project would require approximately 7.8 acres of forest clearing. (TRITEC 2, Exhibit B)

189. The host parcel contains approximately 13.5-acres of core forest. Development of the site would clear 4.4 acres of core forest and reclassify 7.3 acres of core forest as edge forest. Approximately 2.2 acres of core forest would remain on the parcel. (TRITEC 14d; Tr. 1, pp. 120-122)

190. UCONN's Center for Land Use Education and Research defines "core forest" as interior forested areas that are surrounded by other forested areas and are classified as small core forest, medium core forest or large core forest. Small core forest is comprised of core forest patches that are less than 250 acres. Medium core forest is comprised of core forest patches that are between 250-500 acres. Large core forest is comprised of core forest patches that are greater than 500 acres and are the most important ecologically. Forestland that that does not meet the definition of core forest is considered "edge forest". Edge forest is a forested area extending up to 300 feet from a non-forest feature such as a road. (Council Administrative Notice Item No. 94)

191. The core forest on the host parcel is identified within the DEEP 2020 Forest Action Plan as a small core forest, erroneously shown as approximately 23 acres in size (the actual measurement is 13.5 acres). The action plan has a priority ranking system from 1 to 7 to assist in focusing protective resources, with higher scores having more core forest attributes than lower scores. The small core forest on the parcel has a priority score of 1 and 2. (Council Administrative Notice Item No. 94; TRITEC 1, Exhibit G, p. 10; TRITEC 14d; Tr. 1, pp. 118-122)

192. DEEP maintains a Forestland Habitat Impact Map tool to determine core forest impacts for proposed solar projects 2.0 MW or greater under the jurisdiction of the Council. It is a spatial screening layer with shading that identifies "prime continuous and connected core forestland blocks" and unshaded areas representing "developed areas". The mapping tool states that if a "project area is confined to the developed areas, it may be determined to not materially affect the core forestland in this area". The small core forest on the host parcel is not within a shaded area. (TRITEC Administrative Notice Item No. 1; Tr. 1, pp. 118-122)

193. There are no state parks or forests within 1.0 mile of the site. (Council Administrative Notice Item No. 93)

Scenic, Historic and Recreational Values

194. SHPO submitted correspondence to TRITEC on March 22, 2024, stating that the proposed Project would not affect any historic or archeological resources. (TRITEC 2, Exhibit D)

195. The Case Brothers-Highland Park Historic District is approximately 0.2 miles west of the host parcel. The historic district is mostly forested and does not contain any outlooks towards the proposed site. (Schnabel 2, pp. 2-3 B-4; Tr. 4, pp. 254-255)

196. Visibility of the site would be confined to the host parcel to the north, west and south sides. Seasonal visibility of the site would be possible to the abutting properties to the east along Blue Ridge Drive. A forest buffer, varying in width from approximately 52 feet to 86 feet, would remain on the host parcel between the abutting property lines to the cleared area surrounding the proposed array. (TRITEC 1, Appendix A; TRITEC 11, response 25; TRITEC 14; Tr. 1, pp. 69-73)

197. TRITEC proposes to install a single row of American holly (14 count) and eastern red cedar (30 count) at heights of 7-8 feet to screen the facility from the residences to the east. The vegetation would be planted with enough spacing to allow for sufficient growth. These species are anticipated to reach a mature height of 20-25 feet in 8 to 10 years. (TRITEC 14g; Tr. 1, pp. 70-73)

198. To enhance screening to the abutting properties to the east, TRITEC would be willing to install a second row of landscaping and privacy slats within the fence. (Tr. 1, pp. 72-74)

199. The residences along Blue Ridge Drive are approximately 30 feet higher in elevation than the solar array. The array may be visible to the residences through the remaining forest buffer until the landscape plantings reach a height of approximately 30 feet. (Town 5b, p. 8; TRITEC 14h)

200. The nearest public recreation area is Yules Park, approximately 1,500 feet southwest of the host parcel. The site would not be visible from the park. (TRITEC 1, Exhibit G, p. 18, Appendix A)

201. The "blue-blazed" Shenipsit Trail, a regional hiking trail maintained by the Connecticut Forest and Park Association (CFPA), traverses the host parcel mostly along the existing, cleared natural gas pipeline right-of-way. The trail would be approximately 100 feet south of the proposed facility at its closest point. The trail is located on the host parcel through an agreement between the property owner and the CFPA. There are no easements recorded on the land records establishing a hiking trail right-of-way. (Council Administrative Notice No. 88; TRITEC 1, Exhibit G, p. 18; Tr. 3, pp. 140-141, 183-184)

202. The proposed facility would not be visible from the hiking trail in the summer months due to intervening vegetation. It may be visible during leaf off conditions. (Tr. 1, pp. 74-75)

203. There are no scenic roads within one-mile of the site. (TRITEC 1, Appendix A)

204. No comments were received from OPM or DEEP regarding impact to scenic quality or resources. The Town stated that development of the Project would be disruptive to the Shenipsit Trail and the visual quality of the environment in a residential area. (Record; Town 3; Town 5c, p. 4)

205. 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. 56, p. 15)

Fish, Aquaculture and Wildlife

206. The site is within a DEEP-designated cold-water habitat area watershed associated with Birch Mountain Brook. The brook, containing wild brook trout, is approximately 0.23 miles west of the site. (Council Administrative Notice Item No. 52; Schnabel 2, G-1, G-2)

207. The watercourses on the host parcel are considered cold-water watercourses but are too shallow to host fish. The watercourses are within the watershed of Birch Mountain Brook. (TRITEC 1, Exhibit G, p. 12; Tr. 4, pp. 258-259)

208. Under the DEEP General Permit effective December 31, 2020, construction projects within a Cold Water Stream Habitat as defined in the General Permit, must maintain a 100-foot undisturbed buffer between any construction activity and any stream, river, or tributary included within the habitat. If the 100-foot buffer cannot be maintained, an individual stormwater permit may be filed or a waiver through

other state permitting mechanisms and/or in coordination with the DEEP Fisheries Division may be obtained. (Schnabel 2, G-3; Tr. 4, pp. 258-260)

209. The site is within the range of the northern long-eared bat (NLEB), a federally-listed and state-listed endangered species. There are no known NLEB hibernacula or known maternity roost trees within 0.25 miles and 150-feet, respectively, of the proposed site. By letter dated November 29, 2023 the U.S. Fish and Wildlife Service (USFWS) determined that the Project would not likely have an adverse effect on the NLEB, and no additional action is necessary. (TRITEC 1, Exhibit G, p. 17)

210. DEEP Natural Diversity Database (NDDB) 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. 84)

211. On August 16, 2023, DEEP issued a NDDB Determination letter for the proposed facility, identifying one special concern species (eastern box turtle) as potentially occurring in the general area of the site. A box turtle was identified at the south end of Amanda Drive. (TRITEC 1, Appendix C; MARSD 3, Exhibit A; Tr. 4, p. 289)

212. DEEP recommended the implementation of protective measures for the box turtle during and after construction. DEEP protective measures to be implemented during construction have been incorporated into the site plans including, but not be limited to, contractor education, site inspections, isolation barriers, and tree clearing restrictions. (TRITEC 1, Appendix C; TRITEC 14g; Tr. 1, p. 68)

213. The proposed chain-link perimeter fence would feature a 6-inch gap on the bottom to allow for the passage of small wildlife. (TRITEC 9, response 7; Tr. 3, p. 180)

Agriculture

214. Existing soils at the site consist of sandy loams, very stony sandy loams and extremely stony sandy loams. The soils are in the hydrologic soil group C and D which have a slow to very slow infiltration rate. (TRITEC 1, Exhibit G, p. 17; TRITEC 2, Exhibit F)

215. The statutory mission of the Governor's Council for Agricultural Development (GCAD) is to develop a statewide plan for Connecticut agriculture. In 2012, GCAD recommended DOAG create 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)

216. 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. 60 – Climate Change Preparedness Plan)

217. 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. 60 – Climate Change Preparedness Plan)

218. Pursuant to CGS §22-26aa, *et seq.,* DOAG administers the Statewide Program for the Preservation of Agricultural Land, 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. The host parcel is not enrolled in this program. (CGS §22-26aa, et seq.; TRITEC 1, p. 6)

219. Public Act 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 (2023))

220. The host parcel is not enrolled in the Public Act 490 Program for agricultural land tax abatement. (TRITEC 1, p. 6)

221. The host parcel is currently used for maple syrup production by the property owner. These activities would continue in the forested areas outside of the site. (TRITEC 1, p. 12; TRITEC 2, response 15; Tr. 1, p. 80)

222. TRITEC has no current plan to implement an agricultural co-use at the site. (Tr. 1, p. 36)

223. Prime farmland soils are defined by the United States Department of Agriculture National Resources Conservation Service as the most suitable land for producing food, feed, fiber, forage, and oilseed crops. (Council Administrative Notice Item No. 14)

224. No prime farmland soils occur at the site. (TRITEC 1, response 55)

Facility Construction

225. If the Project is approved by the Council, the following permits would be required for construction and operation:
    a) DEEP Stormwater Permit;
    b) Town Building Permit; and
    c) Electrical Permit

(TRITEC 1, p. 6)

226. Construction of the site would maintain existing grades throughout the site to the extent possible. Tree clearing would require grubbing and the removal of stumps. Grades will be significantly altered to construct the access drive, and stormwater management system. (TRITEC 14g; Tr. 4, p. 326)

227. Approximately 1,250 cubic yards of material would be imported into the site mainly to construct the access drive, and stormwater management system. (TRITEC 2, response 62)

228. Site construction would disturb an approximate 7.8-acre area. (TRITEC 2, response 5)

229. The tracker support posts would be driven to a depth of 9 to 12 feet. If bedrock is encountered, the posts would be installed using a rock drill. (TRITEC 2, response 21; Tr. 1, pp. 62-63)

230. Construction of the facility is expected to occur over 6 - 9 months. Initial site preparation and earthwork would occur of 2-3 months followed by installation of the solar array equipment and fencing. (TRITEC 6, p. 2)

231. Construction hours would be Monday through Friday from 7:00 AM to 3:30 PM. (TRITEC 6, p. 5)

232. The solar array would be seeded with the ERNST Buzz and Fuzz seed mix, consisting of approximately 70 percent non-native grasses. Twenty seven percent of the plant species would have wildlife value. The stormwater detention basin and swales would be seeded with a stormwater specific plant mix. (TRITEC 14g; Town 5b, p. 6)

233. TRITEC would be willing to consider incorporating additional native species within the seed. (Tr. 1, p. 104)

Traffic

234. Construction vehicles would access the site from the proposed access drive on Carter Street. A tracking pad would be established at the entrance to reduce the amount of dirt and debris from being tracked onto Carter Street. (TRITEC 6, p. 3)

235. Construction traffic would be minimized by coordinating the delivery of major equipment (panels, racks, inverters). (TRITEC 6, p. 3)

236. Flatbed trailers would be used for the delivery of the racking system. Approximately 12-15 deliveries are expected. (Tr. 1, pp. 64-65)

237. TRITEC does not anticipate the need for traffic control measures during construction. TRITEC would use a flagger if requested by the Town. (Tr. 1, p. 64)

238. Construction personnel vehicles would park at the site. (TRITEC 6, p. 3)

Facility Operations and Maintenance

239. TRITEC provided a post-construction O&M Plan that includes, but is not limited to, provisions for equipment maintenance, reporting and vegetation maintenance. (TRITEC 1, Exhibit D)

240. Vegetation at the site would be managed by mechanical methods on a quarterly basis. Trimming of adjacent edge forest areas may be required to prevent project shading. (TRITEC 6, p. 7; Tr. 1, pp. 36-37)

241. Herbicides may be used in limited areas to control vines such as poison ivy or bittersweet. (Tr. 1, pp. 47-48; Tr. 3, pp. 206-207)

242. If necessary, the solar panels would be washed using water and a nontoxic soap and bristle brooms. No chemicals would be used. (TRITEC 2, response 64)

243. The inverters have a lifespan of approximately 10 years and would be replaced as necessary. (TRITEC 1, p. 8)

244. The tracker motors have a lifespan of approximately 30 years. (TRITEC 2, response 21)

245. Spare panels would not be stored on-site. (TRITEC 1, p. 9)

246. Manual snow removal from the panels is not anticipated. The tracker system can orient the panels at a steep angle to reduce snow accumulation. (TRITEC 1, p. 10)

247. Mowing restrictions related to the eastern box turtle would be within the Project specific maintenance manual. Signage indicating the presence of the turtle may be placed on the site perimeter fence if deemed appropriate by the third-party environmental monitor. (Tr. 1, pp. 68-69)

248. A sign with Project contact information would be installed at the site. (Tr. 4, p. 379)

Decommissioning

249. The facility has an anticipated life of 30 years. (TRITEC 1, p. 8)

250. At the end of the Project's lifespan, it will be decommissioned and removed from the property. The site would be regraded and disturbed areas re-vegetated. (TRITEC 1, Exhibit E)

251. TRITEC intends to recycle Project materials, including solar panels, to the maximum extent practicable. Project materials that cannot be recycled would be removed from the site and disposed of at a licensed disposal facility. (TRITEC 1, Exhibit E)

252. The lease agreement with the property owner includes provisions related to decommissioning and site restoration at the end of the Project's useful life. (TRITEC 2, response 14)

253. In accordance with the lease agreement with the property owner, underground materials would be removed to a depth of two feet. Tracker posts would be pulled out, or in the alternative, cut at depth of two feet. (TRITEC 2, response 14; Tr. 1, pp. 104-15)

254. The access drive and stormwater management system may remain in place after decommissioning, depending on the landowner's preference. Maintenance of the stormwater management basin would be the responsibility of the property owner after Project decommissioning. (Tr. 1, pp. 35-36; Tr. 5, pp. 390-391)

255. 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 the soils to prime farmland status or returning the land to a forested condition. (CGS §16-50p(g) (2023))

256. After decommissioning, the site would be revegetated to a meadow condition. (Tr. 1, pp. 35-36)

257. TRITEC has selected solar panels for the Project that meet current Toxicity Characteristic Leaching Procedure (TCLP) criteria[2] for characterization as nonhazardous waste in the event the solar panels are not recycled at the end of the Project's life. (TRITEC 1, p. 8, Appendix E)

Neighborhood Concerns

258. Based on neighborhood concerns regarding potential visibility of the facility, TRITEC would be willing to install a second row of landscaping and privacy fence slats along the east side of the facility, abutting the residential properties on Blue Ridge Drive. In response to stormwater flow, TRITEC revised the stormwater management system to capture more of the overland sheet flow west of the site, in accordance with Town standards. As for landcover, TRITEC would be willing to incorporate more native vegetation into the solar array seed mix. (Tr. 1, pp. 50-51, 72-74, 104)

[2] https://www.ecfr.gov/current/title-40/chapter-I/subchapter-I/part-261/subpart-C/section-261.24

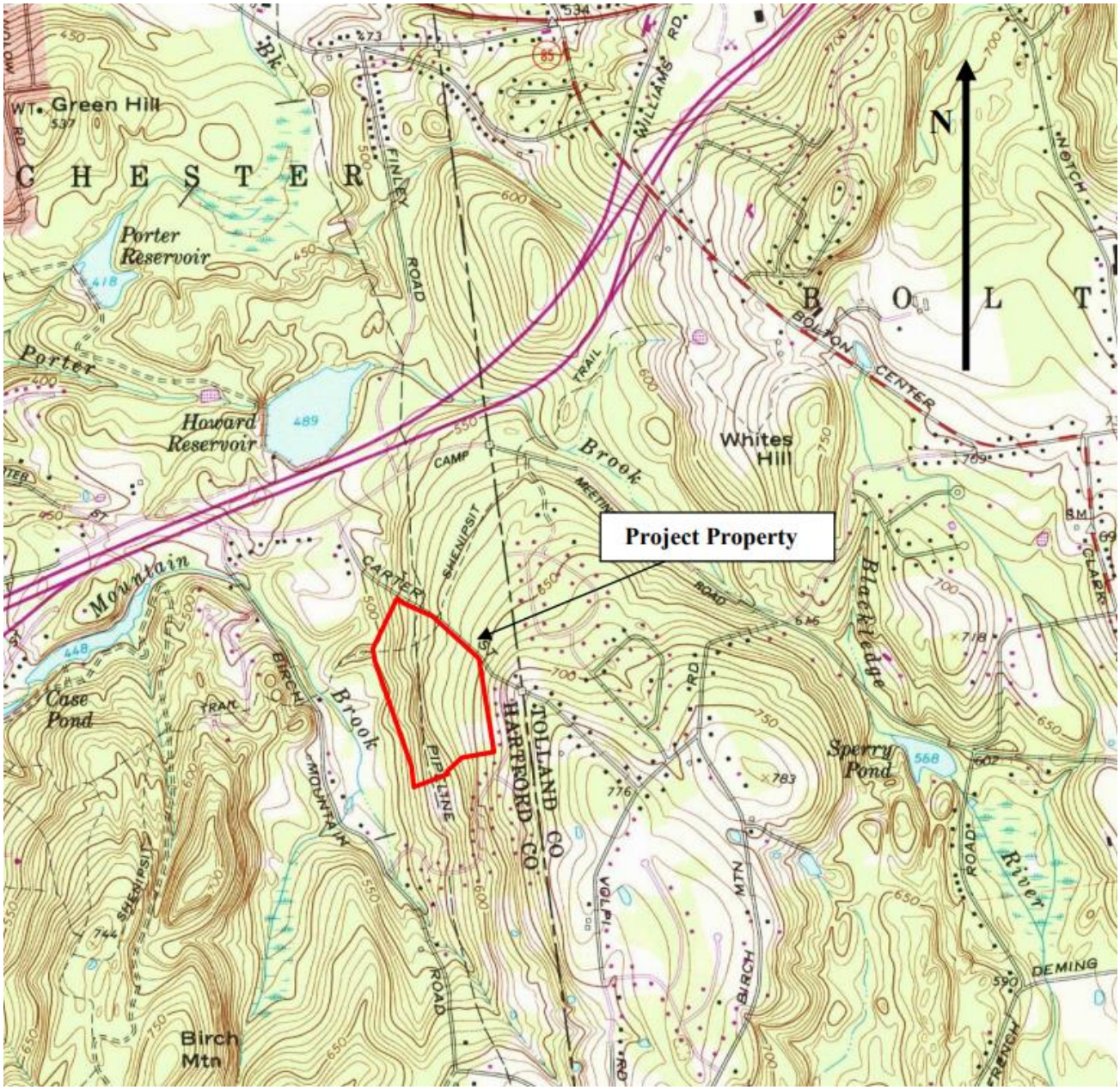
259. TRITEC, if it gained control of the host parcel, offered to enter the remaining 33 acres of the property outside of the solar facility site into a conservation easement to prevent future development. The Town was not amenable to such a conservation conveyance, indicating the disruption of the forest on the parcel outweighs the benefits of a conservation easement. (Tr. 3, pp. 186-189, 240; Town 6)

260. Pursuant to CGS § 16-50m, the Council, after giving due notice thereof, held a public comment session on May 2, 2024 at 6:30 p.m. via Zoom remote conferencing. (Record; Tr. 2, p. 5)

261. During the public comment session, State Representative Jason Doucette, First Selectperson Rodney Fournier and six members of the public made oral limited appearance statements about the proposed facility. Concerns include, but are not limited to, the following: noise, safety, wildlife, recreational resources, stormwater, forest clearing, local jurisdiction, and location. (Record; Tr. 2, pp. 8-27)

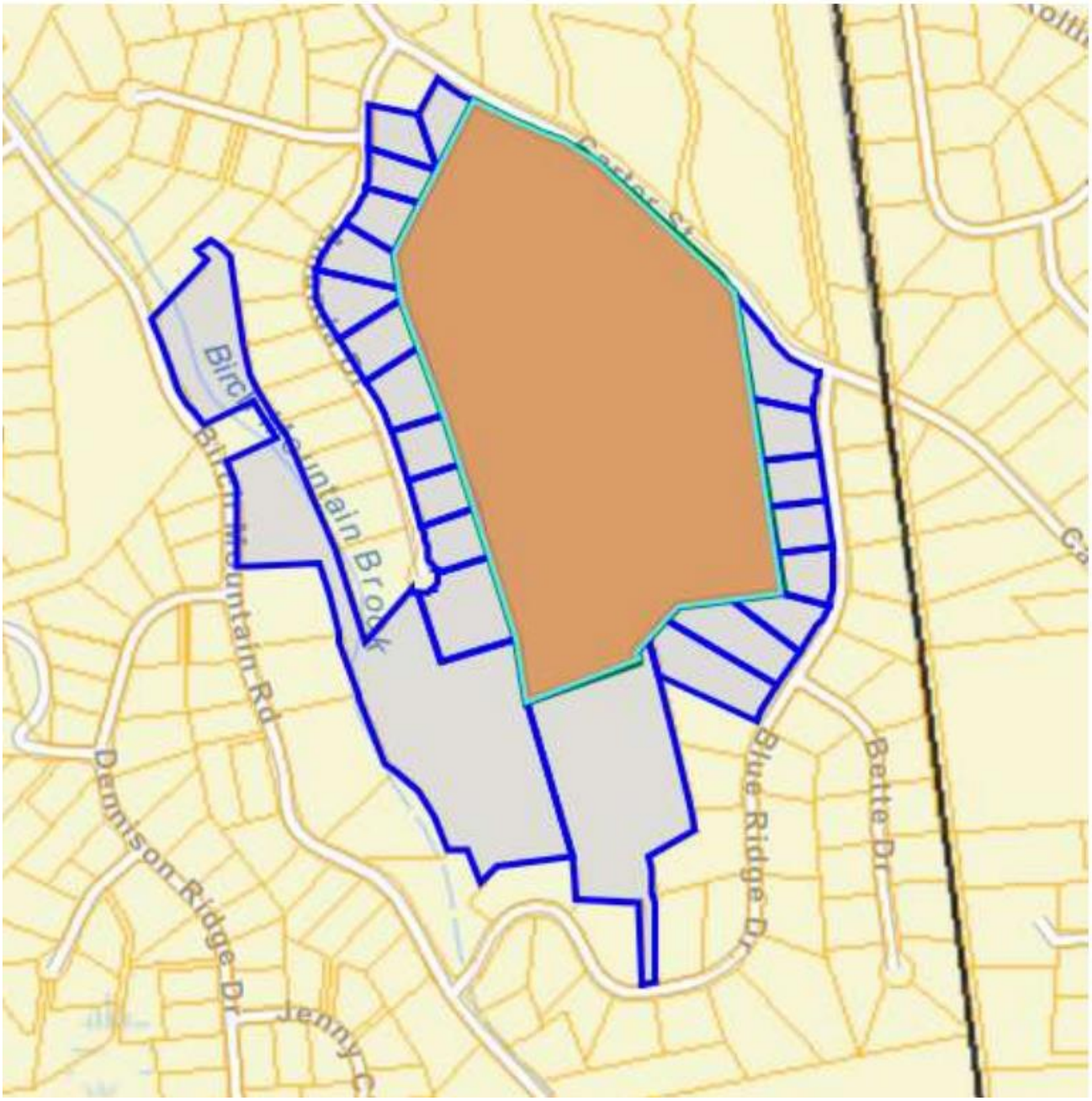
262. The Council received 72 written limited appearance statements regarding the proposed facility. (Record)

Figure 1 – Site Location



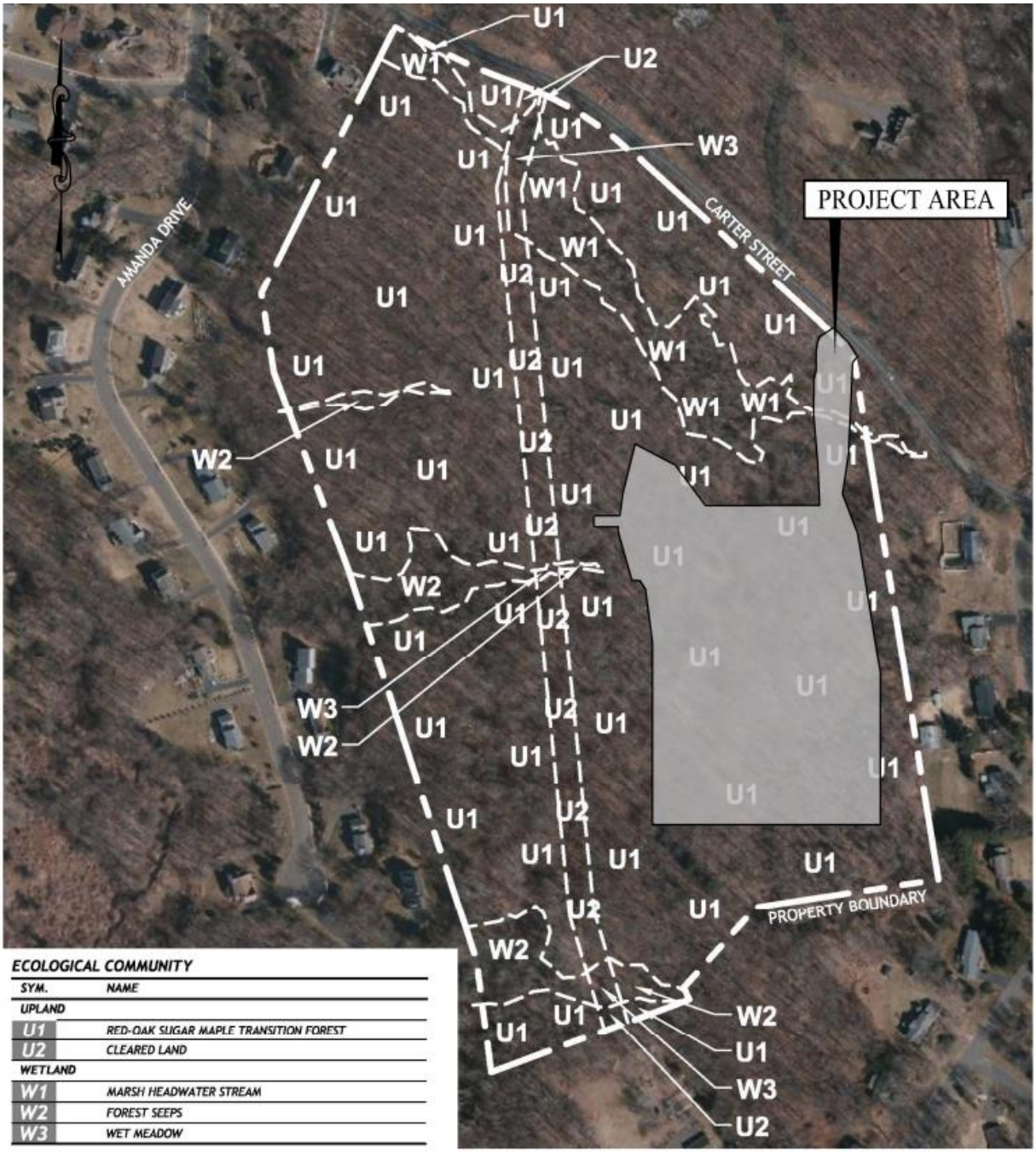
(TRITEC 1, Appendix D)

Figure 2 - Abutters Map



(TRITEC 1, Exhibit A)

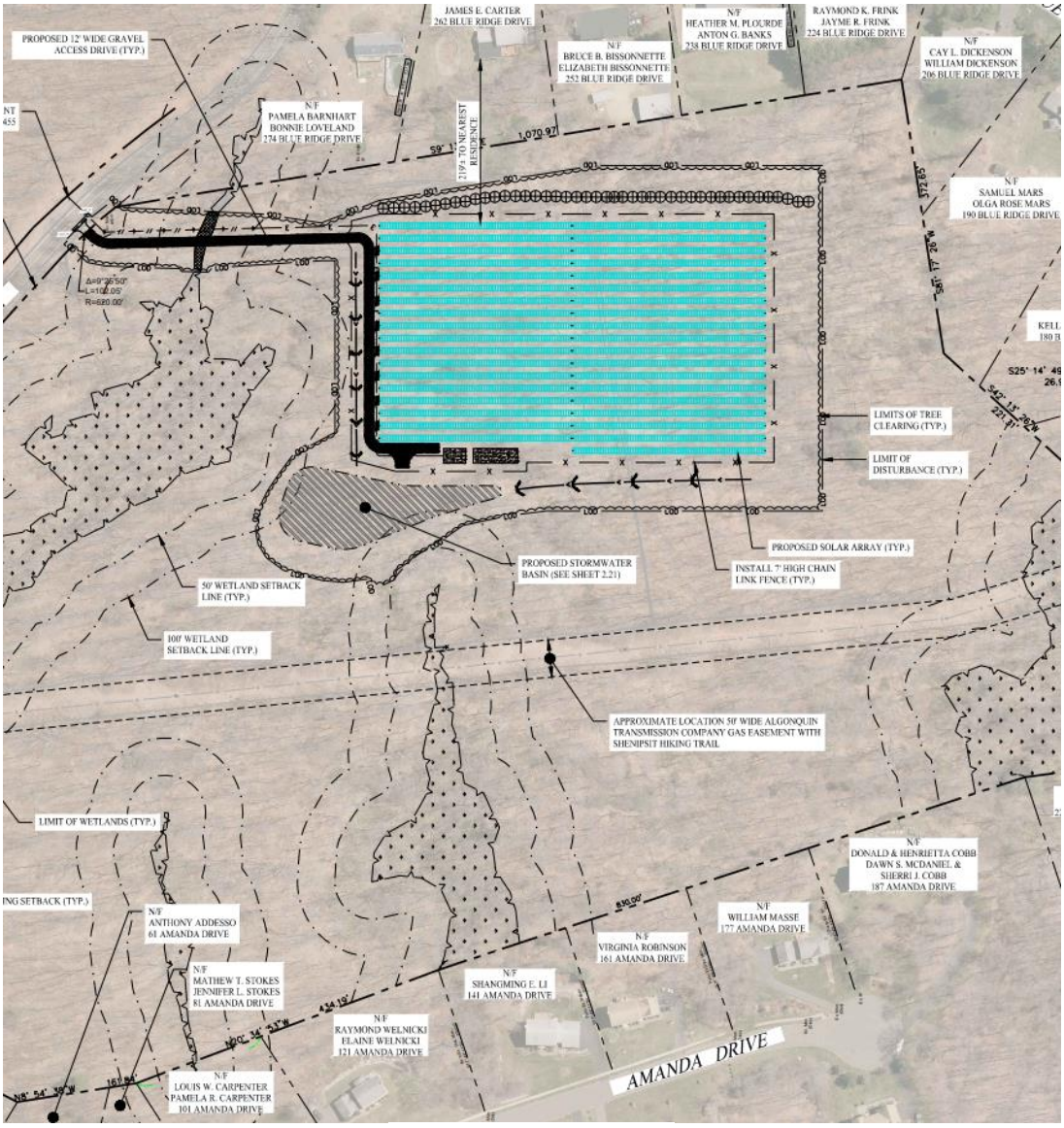
Figure 3- Existing Site Conditions



NOTE: BASE MAP INFORMATION TAKEN FROM ECOLOGICAL COMMUNITIES MAP PREPARED BY WILLIAM KENNY ASSOCIATES

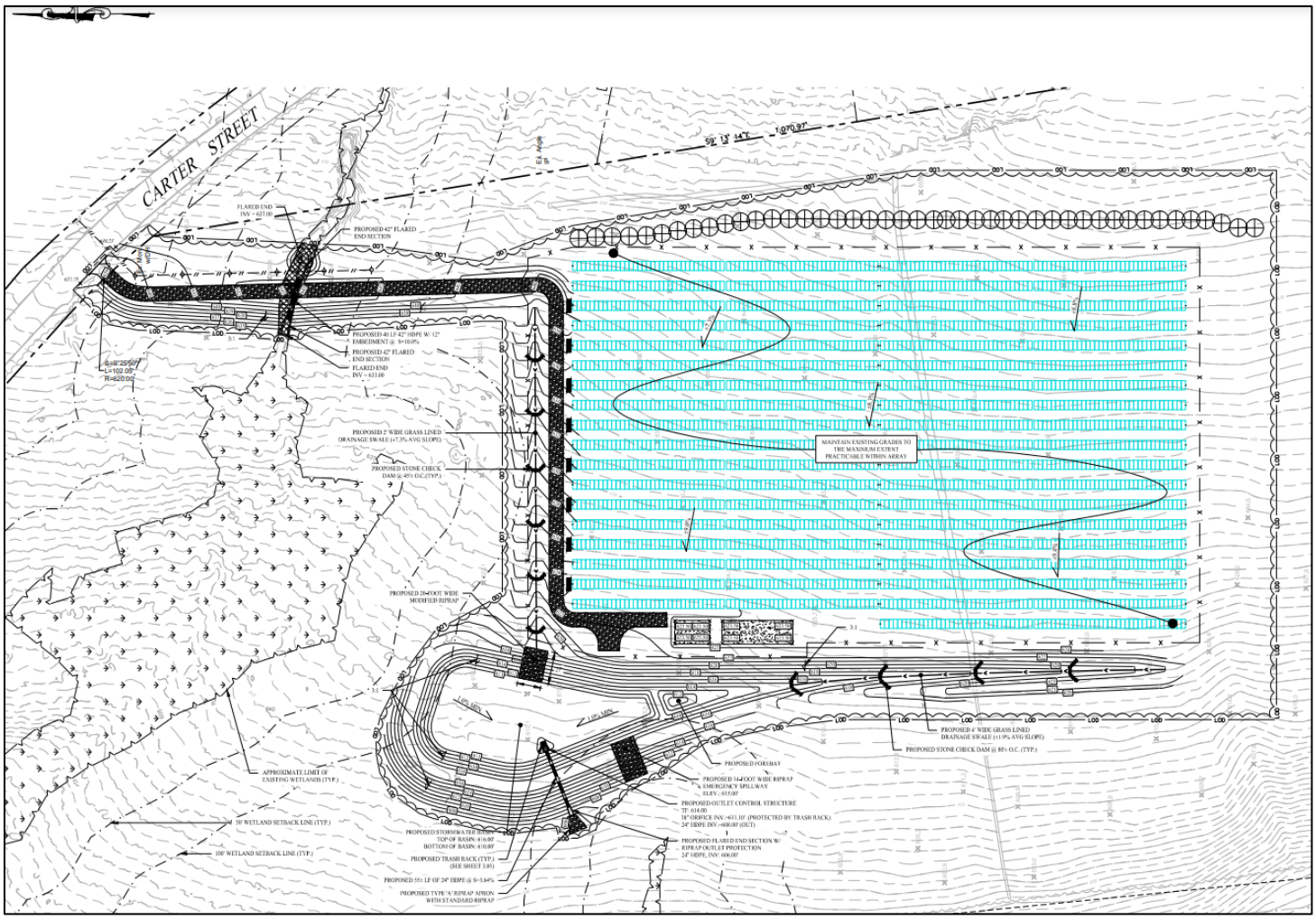
(TRITEC 1, Appendix A)

Figure 4 – Proposed Facility Layout



(TRITEC 2, Exhibit B)

Figure 5 – Proposed Site Plan



LEGEND

- PROPERTY LINE
- 420 MAJOR CONTOURS
- 421 MINOR CONTOURS
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- 568.85 PROPOSED SPOT ELEVATION
- 568.85 EXISTING SPOT ELEVATION
- STORM DRAIN PIPE
- RIP RAP SPILLWAY
- OUTLET CONTROL STRUCTURE
- FLARED END SECTION
- RIPRAP OUTLET PROTECTION
- PERMANENT WETLAND DISTURBANCE AREA

(TRITEC 2, Exhibit B)